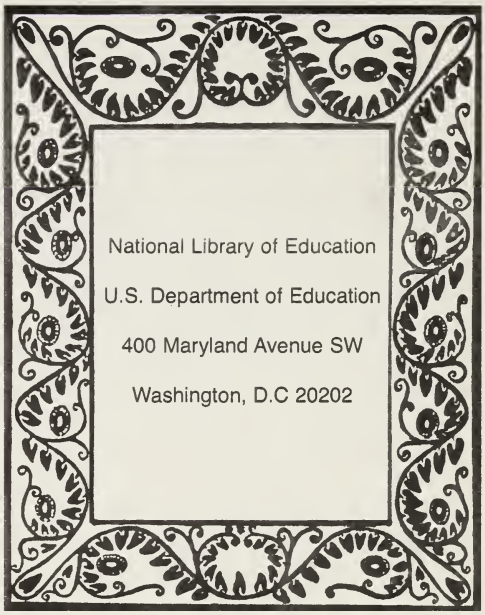

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CHAPTER I.

EDUCATION IN GREAT BRITAIN AND IRELAND.

By I. L. Kandel.

Contents.—Introduction—England: The schools during the war—Medical inspection of schools—Education of working boys and girls—Secondary education during the war—The position of science in the educational system—Position of modern languages—Tendencies in secondary education—Salaries and pensions—Adult education—Educational reconstruction and public opinion—Education Act, 1918. Scotland: The schools during the war—Teachers' salaries—The reform of education—The Scottish education bill. Ireland.

INTRODUCTION.

The educational movements that have been taking place in Great Britain during the past two or three years have aroused widespread interest among teachers and publicists in this country. The following report is an attempt to analyze these movements and to indicate their significance in the broader movement for reconstruction. The educational reforms that have already been introduced and the developments that are promised for the future are not merely the result of an emotional reaction induced by the war. Their meaning will be entirely lost unless their position in the wider program is realized. Nor are the mere details of the new acts of great significance in themselves, however striking the promised increase in educational expenditure, or the raising of the school age, or the increased supervision of adolescent welfare may be. For the student of education the feature that is of profound significance is the recognition that a sound educational system is the best foundation for the social and political reconstruction that must follow the war, and since the keynote of this reconstruction is the improvement of the position and opportunities of every man and woman as an individual and as a citizen, the educational reforms must be considered as a contribution toward the further development of the aspirations of democracy and humanity.

The present report aims accordingly to give in broad outline the general features of the developments of the past few years. It makes no attempt to deal exhaustively with the course of educational thought or progress during this time. In many cases this would be impossible. The influences of the war on education have not yet spent themselves, and to that extent it has not been deemed wise to deal with certain topics that will bear fruitful study at a later

date. It is premature, for example, to consider the effects of the war on university education. The universities have practically been depleted, and the energies of those who remained in them were devoted to war work in the main. It would be mere guesswork to attempt to predict their future course. The same arguments apply to the effects of the war on the education of women. To the extent that the educational reforms already considered aim to extend the opportunities for general education, to that extent the opportunities are open to boys and girls, to men and women equally. But what influence the increased participation of women in general public activities during the war will exercise on education, it would be premature to decide. Technical and vocational education in general will undoubtedly be profoundly affected both in their administration and in their underlying pedagogy by the new methods of training in which the demands of efficiency and speed had to be met. At present, however, any interpretation of the developments in training for war work must be postponed until sufficient data are at hand to warrant adequate conclusions or to afford reliable guidance for normal practice.

The following pages deal with the course of education and school medical inspection during the past few years, with the proposals for the reform of secondary education, with the various Government reports on different branches of education, and finally with the developments that led up to the passage of the education act in England and the significance of the act itself. A similar but briefer account is given of educational conditions in Scotland. Ireland is included, although her educational system is unlike those of England and Wales or Scotland, mainly because the stirrings for reform are noticeable there and are directly influenced by the events on the other side of the Channel. Indeed, no part of the British Empire will remain unaffected by the Fisher Act. Recent educational reports from Canada, Australia, and New Zealand indicate that attention had already been directed to England before the Fisher bill was placed on the statute book.

Much has been attributed to the education act that is not contained therein. The act must be read in connection with the act of 1902 to obtain a picture of the English educational system, but it must always be remembered that the Board of Education has the power to modify or extend the system by administrative regulations and that its annual codes have the effect of law when presented to Parliament. The system thus combines a legal minimum with the flexibility and elasticity that insure progress. In general the act of 1918 makes the following provisions:

1. Extension of the age of compulsory attendance, without exemption, to 14; or to 15 and even 16 by local by-laws.

2. Provision for medical inspection and treatment and physical welfare before and through school to 18.

3. Establishment of nursery schools for children between 2 and 5 or 6.

4. Establishment of compulsory continuation school attendance from 14 to 16 and ultimately to 18.

5. Promotion and support of poor but able pupils, with free tuition, scholarships, and maintenance grants.

6. Concentration of supervision over the activities and welfare of children and adolescents in the hands of educational authorities, e. g., child labor and employment, labor bureaus, recreation and health.

7. Inspection and supervision of private schools.

8. Preservation of the independence of local authorities, extension of their functions and powers, and insistence on minimum standards with encouragement through grants to advance as far as possible.

9. Equal distribution of the cost of education between local rates and national taxes.

The act does not define the character of advanced work in the elementary schools nor the nature of the work in the new continuation schools; it barely refers to secondary schools which are undergoing many changes through administrative regulations; teachers' salaries are only indirectly touched upon. The most serious omission not only in the act but in the general discussion of the educational needs of the time is the absence of all reference to the training of teachers. The only guaranty for the success of the reconstruction program is the teacher, and yet the means by which he is to be trained have not been discussed. Improved salaries and pensions will undoubtedly produce a large number of good candidates, but in themselves salaries and pensions can not make good teachers. The existing system of training was regarded as inadequate for the needs of the elementary schools; for the secondary schools a very small percentage of teachers had specific training for teaching; while for the new continuation schools a new type of teacher must be developed. Parliamentary procedure is not required for the reorganization of the whole system and methods of training teachers; it rests with the Board of Education, and it remains to be seen how these needs will be met.

For the American student peculiar interest attaches to the educational reforms of Great Britain. They represent a genuine attempt to realize the ideals for which the war has been fought. As a contribution toward a definition of democracy through the schools, they will command the attention of English-speaking educators the world over. But in the present crisis in American education, the principles on which these reforms are founded deserve particular attention. Whether they will be realized in the near future or not, the hopes of those who desire to see increasing participation of the Federal

Government in the educational procedure of the United States are inevitably bound up with the consideration of such questions of administration as Great Britain has already determined. Such problems as the relation of the central to local authorities in educational affairs, the reconciliation of centralized supervision with the promotion of local initiative and progress, the due apportionment of central and local expenditure for education, have been settled by that genius for compromise that characterizes the British Government. In this country these problems still call for decision within State boundaries, and have barely been hinted at in the larger program that is now before the public. Those who fear bureaucratic control, as well as those who apprehend local indifference as a consequence of external action, may study both the English and the Scottish systems with profit. In addition some of the concrete provisions of the English act, as analyzed above, afford an indication of some of the needs that still remain to be met in this country on a wider scale than at present. For the rest both British and American students can to-day cooperate in promoting the world cause of democracy by learning to understand each other, and by carefully observing the contribution that each is making through the education of future generations toward the common cause.

ENGLAND.

THE SCHOOLS DURING THE WAR.

The past two years will prove to be the most notable in the history of English education. They will bear testimony to the awakening on the part of the whole nation to the value of a comprehensive national organization of education. The enactment of a new educational law August, 1918, is but the culmination of a period of activity and thought in the field of education that is almost unparalleled in the annals of English history. The most striking feature of the movement is not the volume of literature or the number of reports by professional organizations and Government commissions on different phases of education, so much as the popular interest in the subject as reflected in the current press and magazines. For the first time, probably, a welcome has been given to the various discussions of education, hitherto reserved only for reports of scholarship and examination results or of speeches at prize distributions. Events have fully justified the statement in the Report of the Board of Education for 1915–1916 that:

> The war is giving new impetus and vigor to many movements for national reform and is enabling them to gain an amount of support which under normal conditions could only have been won after many years of slow progress; and

one of the most significant manifestations of its influence is the great development of public interest in education.

Public sentiment was aroused to the recognition that "a progressive improvement and development of public education is more than ever essential to the national welfare." The most hopeful sign of the present movement is that it is fundamentally a movement of the people. Without disparaging the efforts of the numerous professional bodies and other associations, it is not too much to claim that the representatives of labor and the Workers' Educational Association have played the most important part in stimulating public opinion, which only three months before the outbreak of the war received with very little interest the announcement of the Chancellor of the Exchequer that plans were being prepared for "a comprehensive and progressive improvement of the educational system." The movement is based on the profound conviction that the further development of democracy depends upon a more adequate education than has hitherto been provided. There is not associated with it primarily the purpose of improving the educational system to furnish better tools for economic competition at home or abroad. It is animated wholly by the aim of providing the best opportunities for equipping the individual with the physical, moral, and intellectual training that makes for good citizenship, that prepares for the freedom and responsibilities of adult life. Less conscious, but no less profound, is the patriotic motive to establish a memorial to those who have died that democracy might live, a national tribute to their self-sacrifice and devotion. Speaking at the conference on new ideals in education, in August, 1917, Mr. Fisher emphasized this conception and pointed to an interesting historical parallel. He said:

> I will conclude with one reflection, which you will pardon me for making because I make it in my character of the historical pedant. I remember in old days reading the story of the foundation of the University of Leyden. The University of Leyden was founded in the year 1574 by the Prince of Orange to commemorate the triumphant issue of the great and heroic siege of Leyden, when, as you will remember, the gallant burghers of that starving and beleaguered city managed to hold out against the overwhelming forces of Catholic Spain. The memorial of that heroic event was the foundation of a university, a university which in the course of a generation achieved for itself the renown of being one of the most famous centers of light and learning, the University of Scaliger and the University of Grotius, and I suggest to you, ladies and gentlemen, that our memorial of this war should be a great University of England, which should be the means of raising the whole population of this country to a higher level of learning and culture than has hitherto been possible.[1]

It is not claimed that what has been accomplished is either the most or the best that could have been achieved, but considering the

[1] Report of the Conference on New Ideals in Education, 1917, p. 13f.

conditions under which the progress has been made, and remembering the prewar attitude to education, there is little cause for criticism. The point that needs renewed emphasis is that public opinion in England has been changed and the history of the past two or three years furnishes a guarantee that whatever measures have been introduced to reorganize education represent but the foundations for a greater future. Education is but one of the many proposals contained in the broad reconstruction program, the realization of any one of which must necessarily and inevitably exercise a powerful influence on the others. What has been achieved so far is only a beginning of that self-conscious democracy which is the basis of any progressive system of education.

It is pertinent to review the course of English education in the four years between the outbreak of the war and the passing of the education act of 1918. The outbreak of the war found England wholly unprepared to meet the conditions arising out of the emergency. No provision existed for housing the new army, nor were there any plans for securing the large amount of civilian aid necessary to maintain the military services. A large share of the new burden fell upon the schools, many of which were commandeered by the Government for barracks or hospitals. Plans had to be improvised to take care of the dispossessed pupils at a time when numbers of teachers were either flocking to the colors or entering other civilian occupations that seemed to promise greater scope for national service and always carried larger remuneration than teaching. The situation, described in the Report of the United States Commissioner of Education for 1916,[1] remains unchanged and is thus summarized in the Report of the Board of Education for 1916–17:

> The continuance of the war has inevitably imposed an increased strain upon the public educational service. Further calls have been made upon the administrative and teaching staffs of local education authorities and school governing bodies for service in Your Majesty's forces, and an increased burden has been placed on those who have remained to carry on the work of the schools; difficulties of school accommodation have been intensified, owing to shortage of labor and materials; supplies of school equipment have had to be still more severely restricted; and in many other ways sacrifices have been required which are bound to react unfavorably upon the work of education. But the extent of these sacrifices only emphasizes the admirable spirit with which the school authorities, teachers, and children have cooperated to mitigate their ill effects.

The ease with which the schools have adjusted themselves to the new demands and the emergency conditions, constantly becoming more serious because of the decreasing supply of teachers, bears excellent testimony to the flexibility of the system and the initiative of the local authorities. The educational loss, except for those pupils

[1] Vol. I, pp. 552ff.

who by a misguided policy were released from school as early as the age of 11, has not been very great. Double sessions were introduced where the dislocation caused by the military occupation of schools was severe; nonessentials were eliminated from the curriculum; more organized games and plays under suitable supervision were added; and wherever opportunity permitted, classroom work was replaced by visits to museums, art galleries, and the country. Indeed, the readjustments may prove in the future to have been beneficial, if only because they have succeeded in breaking down some of the academic and bookish formalism in the schools.

But even if the pupils had wholly missed any part of the traditional curriculum, such a loss has been more than compensated for by their participation in national activities and by a quickened sense of patriotism resulting from their sacrifices in the common cause. The Report of the Board of Education, in giving emphasis to this aspect of the school progress in 1916–17, states that:

> The year has been noteworthy for its demonstration of the advantages which can be derived from enlisting the cooperation of the educational institutions of the country in the promotion of various national movements.

Not only have the pupils been stimulated by the part played in the war by alumni, or by their appearance in the school, but also by practical work that supplied some of the war needs. The boys, for example, have made splints, crutches, bed boards and rests, screens, rollers, and trays; the girls have knitted socks, mufflers, and gloves; both have cooperated in making up and sending parcels for soldiers and prisoners, and even in preparing sandbags and candles for the trenches. More significant even than this work done in the schools and by the pupils is the new position assumed by the schools as community centers. The schools have been found useful and convenient centers for distributing public notices, disseminating information on food conservation and war recipes, the promotion of thrift campaigns, and the sale of war loans. The Board of Education's Report cites a number of instances of the successful war-savings campaigns conducted by schools. One school of 1,400 pupils in three months purchased war certificates to the value of $2,925; another with 500 pupils joined the War-Saving Association and bought certificates to the value of $1,170; and still another with 400 pupils invested $7,785. Out of 35,000 war-savings associations in existence at the end of June, 1917, about one-third were connected with elementary schools. In promoting food economy the lessons imparted to the children have not been lost on the parents, especially when these lessons were practically demonstrated in the domestic economy classes; in some instances such classes were also conducted for parents and adults, and exhibitions have been held in cookery and housecraft. Not only have the schools proved to be effective agencies in inculcating the new economy in the matter of

food. but they have participated in no small degree in increasing the supply. School gardens and vacant lots have been developed in constantly increasing areas.

In the County of Durham the area of school gardens has increased by 40 acres, in Hertfordshire by 27, in Buckinghamshire and Lancashire by 16 and 10, respectively. The largest number of new school gardens known to have been worked during the year were 349 in the West Riding, 200 in Durham, 145 in Buckinghamshire, and 102 in Northumberland. The development of gardening in certain towns, where the conditions of climate and soil are often unfavorable, is equally striking; 26 of the 32 schools in Birkenhead now have gardens; and all the schools at Ilkeston and Kendal have taken up land; so have 11 out of the 14 public elementary schools at Southend, and 9 of the 11 at Winchester. More than half the schools in the county boroughs of Leicester and Nottingham have started gardens during the year; Manchester has 18 school gardens, Sheffield and Tottenham have each 12, while London has about 100 gardens with 3 acres of land in all.

In addition, older pupils in elementary and secondary schools have assisted with the harvests and in fruit-picking, and in the collection of horse-chestnuts for certain industrial processes conducted by the ministry of munitions.

The credit for this "quickened consciousness of personal and national ties, the keener sense of common sacrifice and common duty," is in no small part due to the teachers, who have risen in a remarkable manner to the great task of national service. More than 25,000 of the teachers joined the colors, and of these some 2,000 have already made the supreme sacrifice. Positions that were left vacant were filled in part by married women and teachers already retired from service. With an inadequate supply and the constant drain to other occupations where the desire for what appears to be more immediate service is satisfied and increased remuneration is offered, the burden made increasing demands on the energy and devotion of those who remained. By their service in and out of the schools teachers have assured themselves a position in the life of the nation that they have never enjoyed before.

When peace is restored the teachers of England need have no fear if anyone asks them what they did in the war. They offered themselves freely, and, whether they stayed in the schools or carried arms, they did their duty, and the service of education is richer for their own practice and exemplification of those principles of civic duty and patriotism which in times of peace they taught, and not in vain, by precept and exhortation.[1]

The repute and status achieved by the teaching profession will react both upon the general belief in education and on the efficiency of the public system of education. In concrete practice the awakening of the national conscience to the inadequate remuneration of teachers and the poor outlook offered to teaching as a career was slow to

[1] Board of Education, Report for 1914–15, p. 4.

manifest itself until the rising cost of living and the prospects in other occupations demanded drastic measures. Local action, dilatory at first, was stimulated by state grants, and the reports of the departmental committees for inquiring into the principles which should determine the construction of scales of salaries for teachers in both elementary, secondary and technical schools promise a new era and open up brighter prospects for the profession.[1] It is not without significance that the appearance of the first volume of the New Register of teachers issued by the Teachers' Registration Council, one of whose main purposes is to build up a unified national teaching profession with well-organized training, qualifications, and standards, should have coincided with the beginnings of this new movement.

Important as the developments in education have been during the past few years, and however bright the promise for the future, the war has had its bad effects, all of which were noted in the Report of the United States Commissioner of Education for 1916, pages 554 to 560. Conditions have remained practically unchanged in the matter of the military occupation of buildings both for elementary and secondary school purposes. The call on teachers for military service has also remained approximately the same. Owing to the suspension of the collection of statistics by the Board of Education, exact figures can not be given as to the number of children of school age absent from school for employment in agriculture and industry. The probability is that the number has been considerably reduced for a number of reasons: The Board of Education has strongly opposed the early withdrawal of children from school, and remonstrated against the abuse of the school attendance laws; the boards of trade and of agriculture have taken steps to meet the shortage of labor; wide publicity was given to the subject both before and during the consideration in Parliament of the Fisher bill, which aimed to raise the age of school attendance to 14 without any exemption. But the evil effects of the early release of some 600,000 children from school in the first three years of the war, some permanently, under the plea of war emergency, may only be realized in the future, for the new act is not retroactive, and many children will never again come under formal educative influences of any kind. The alarm aroused in 1916 by the great increase of juvenile delinquency during the war had the salutary effect of turning public attention to the problem. Whether the number of juvenile offenses has decreased or not, it is impossible to say, but the remedial and preventive measures have been increased. Wide publicity was given, for example, to the report of an unofficial cinema commission appointed by the National Council of Public Morals at the instance of

[1] See pp. 57ff.

a number of firms interested in the cinematograph or moving-picture business.[1] The report deals with the physical, mental, and moral effects of the moving-picture and recommends that:

> For its own protection, as well as for the insuring of its continued suitability to the Nation, the cinema should have the support and the official countenance of the State. We want to place it in a position of real dignity. We want it to be something more than a trade; in fact, we wish it to be one of the assets of our national entertainment and recreation. We are anxious that the cinema should be beyond all suspicion in the mind of the average member of the public.

To attain these objects the commission urges the establishment of a State censorship, but admits that much progress has been made within the trade for the improvement of films. The Board of Education, recognizing that much of the delinquency among school children is due to lack of parental control and discipline in cases where the adult male relatives may be at the front and the mothers engaged on war work, has taken steps to encourage the development of evening play and recreation centers for public elementary school children, along the lines successfully inaugurated in London by Mrs. Humphry Ward, by offering to pay a grant equal to 50 per cent of the cost of maintenance of such centers incurred either by the local authorities or by the voluntary agencies. During the session ending July 31, 1917, 71 such centers had been recognized for purposes of the grant. For older children who have already left school the Board of Education has, at the request of the Home Office, issued a circular urging upon local education authorities—

> the importance of getting into close touch with boys' and girls' clubs and brigades and similar organizations concerned with the welfare of children, and suggesting that they might offer to place schoolrooms at the disposal of such bodies in order to enable them to extend the scope of their work.

The Home Office also appointed a juvenile organizations committee to consider—

1. What steps can be taken to attract boys and girls to become members of brigades and clubs.
2. The possibility of transferring a boy or girl from one organization to another when this seems desirable.
3. The steps to be taken to prevent overlapping of work.
4. The strengthening of weaker units.
5. The difficulty of obtaining officers.
6. Difficulties in securing the use of school premises as clubrooms or play centers, and other matters relating to the effectiveness of brigades and clubs.

Another aspect of the problem was considered and a report issued by the departmental committee on juvenile education in relation to employment after the war, while considerable activity has been mani-

[1] Report of the Cinema Commission. London, Williams & Norgate, 1917.

fested by a number of local education authorities in establishing or reorganizing juvenile employment bureaus under the education (choice of employment) act of 1910. Here again public sentiment has been prepared by a revelation of the urgent need of some measures to safeguard the physical, moral, and intellectual welfare of adolescents and to accept the inclusion in the new act of the compulsory continuation school and the extra-curricular activities recommended in connection therewith.

In the absence of statistical reports it is impossible to measure the effect of the war on educational expenditures accurately. There was undoubtedly a tendency toward retrenchment in the first few months of the war, just as there was to a laxer administration of attendance laws, a weakening of discipline, and the premature release of children for wage-earning occupations. In 1916 the committee on retrenchment in the public expenditure stated in its report that:

> There is a special difficulty in economizing on educational expenditure, as there is a feeling in many quarters that educational economies are dangerous and may in the long run be unremunerative. But, nevertheless, we are strongly of the opinion that every step should be taken to effect such reductions as are possible without a material loss of educational efficiency, and we are glad to learn that many education authorities have already taken steps accordingly by postponing or reducing capital expenditure on new buildings or alterations (which might normally amount to as much as £3,000,000 a year) and expenditure on decorations, repairs, furniture, apparatus, stationery, etc. Similar steps should, in our opinion, be taken by all authorities without delay.

The committee's recommendation that children under 5 should be excluded from school, and that the age of entrance should be raised to 6, does not appear to have been effectual, since during the war more than ever before mothers who were compelled to enter some form of employment needed some place in which to leave their young children. The Board of Education and many local authorities suspended much of the clerical and statistical work, reduced the amount of inspection, and, wherever possible, prevented overlapping of functions between the central and local bodies. But with the best intentions it was inevitable that the cost of education should increase, owing to the necessity of increasing salaries partly to cope with the increased cost of living and partly to keep teachers within the profession. Evening schools and classes were closed, but the amount saved here was offset by the increased attendance in secondary schools and educational activities called for in connection with the war. For the present there are available only the figures showing the expenditure of the national treasury. These indicate a constant but unequal rise, and it may be safely concluded that the local authorities spent at least as much again on education.

National educational estimates in England and Wales.[1]

	1913–14	1914–15	1915–16 [2]	1916–17	1917–18	1918–19
Board of Education	$72,551,555	$73,653,105	$77,406,890	$75,943,660	$95,078,900	$96,033,525
Scientific investigation	489,540	503,485	577,910	508,355	500,030	271,205
Department of scientific and industrial research			125,000	200,000	5,190,250	741,750
Universities and colleges, Great Britain, and intermediate education, Wales	1,571,500	1,574,000	1,581,000	1,606,000	1,606,000	1,608,500
Universities and colleges, special grants			725,000			150,000
Total	74,621,595	75,730,590	80,415,800	78,258,015	102,375,180	98,804,980

[1] Based on the Statesman's Yearbook. Estimates have been chosen because they afford a better basis of comparison up to date than the incomplete reports of expenditures.
[2] Actual grants at the end of the year.

It will be noticed that the expenditures show a tendency to increase. The drop in 1916–17 was due to certain retrenchments in the administration of the Board of Education office, to the closing of some training colleges, to the reduction of evening schools and classes, to the decrease in the number of children receiving free meals, and to the suspension of the special grant to universities and colleges. The striking rise in the estimates for 1917–18 was due mainly to the addition of about $18,000,000 to the grants to be devoted primarily to the increase of teachers' salaries throughout the country. It is also partly accounted for by the extraordinary grant-in-aid of about $5,000,000 to the Department of Scientific and Industrial Research, which was not renewed in the estimates for 1918–19 and accounts for the decrease for that year. The finances here discussed do not as yet show the effect of the act passed in August, 1918, which may in time more than double the share of educational expenditure borne by the national treasury. Some of the new burdens assumed since the outbreak of the war, but as yet not exerting much influence, are as follows: Half the cost of maintaining adequate schemes for medical treatment; half the cost of evening play centers, schools for mothers, and nursery schools; half the cost of salaries for trained organizers and supervisors of physical training and games; increased grants to secondary schools for general purposes and for approved advanced courses; the increased cost of pensions to teachers already retired, which were raised in 1918 by almost 50 per cent; and the payment of the pensions granted under the superannuation act, 1918. The directions of future increase in the national expenditure for education are indicated by the promise of the new act. The Board of Education will pay grants equal to half of the local expenditure, which will show a rapid rise in numerous directions—the further expansion of medical inspection and treatment, the introduction of advanced work in elementary schools, increased provisions for secondary schools and higher education, the establishment of continuation schools, increased extra-curricular activities in connection with all types of

schools, and the adoption of new scales of salaries for teachers based on a minimum considerably higher than that which prevailed before the war, and a maximum from 50 per cent to 100 per cent higher than the present and within the reasonable reach of most teachers. Consideration has not yet been given to the extension of technical education, the improvement of the training of teachers, and the increasing needs of the universities. Mr. Lloyd George at least intimated to a deputation representing the interests of the University of Wales that the treasury would consider an increase of State aid to universities.

The vast and unproductive expenditure demanded for the conduct of the war has awakened the country to a realization of its tremendous financial strength. The solidarity essential to the war has developed a National and State consciousness that has perhaps lain dormant hitherto. The revelation of the extent of her social defects has turned the attention of the nation to the desirability of dedicating the financial strength of the State to the task of reconstruction. After the war England is likely to present to the world an example of a nation that fosters, encourages, and subsidizes local development in all directions without interfering with the initiative and variety of experimentation that are of the very essence of progress in a democracy. Standards will, of course, be maintained, but only the minimum will be insisted upon by the State; uniformity will no doubt be required in carrying out the minimum standards, but for the rest local authorities and private bodies will be allowed free scope for development. Nothing that has occurred during the war has shaken the English faith in the principle of freedom in local government; but the war has had the effect of arousing that sense of responsibility and the social conscience that are the corollaries of freedom. No better illustration of this can be found than the history of the Fisher bill, which began its career in Parliament in August, 1917.

MEDICAL INSPECTION OF SCHOOLS.[1]

In an admirable report, which like its predecessors may well serve as a model of what a public educational report should be, the chief medical officer of the Board of Education presents an account of the progress of the school medical service during 1916, and continues to emphasize the importance of this work, not merely for the physical and intellectual welfare of the children concerned, but as the foundation for social progress. While the war has interfered in no small degree with the complete working of medical inspection and treatment, it has had the effect of emphasizing the importance of the child as a national asset.

[1] Annual Report for 1916 of the Chief Medical Officer of the Board of Education. (Cd. 8746.) London. 1917.

The future and strength of the nation unquestionably depend upon the vitality of the child, upon his health and development, and upon his education and equipment for citizenship. Great and far-reaching issues have their origin and some of their inspiration in him. Yet in a certain though narrow sense everything depends upon his physique. If that be sound, we have the rock upon which a nation and a race may be built; if that be impaired, we lack that foundation and build on the sand. It would be difficult to overestimate the volume of national inefficiency, of unfitness and suffering, of unnecessary expenditure, and of industrial unrest and unemployability to which this country consents because of its relative failure to rear and to educate a healthy, virile, and well-equipped race of children and young people. There is no investment comparable to this, no national economy so fundamental; there is also no waste so irretrievable as that of a nation which is careless of its rising generation. And the goal is not an industrial machine, a technical workman, a "hand," available merely for the increase of material output, and the acquisition of a wage at the earliest moment, but a human personality, well grown and ready in body and mind, able to work, able to play, a good citizen, the healthy parent of a future generation. If these things be true, as I believe they are, no reconstruction of the State can wisely ignore the claims of the child.

The national belief in the value of school medical inspection and treatment is best indicated by the efforts to maintain them in spite of the inroads made by the war emergency on the supply of doctors and nurses. The result of an experience of less than 10 years since the system was established as part of the school system is summarized in the following statements:

To-day hundreds of thousands of children are healthier, better, and brighter for its labors. In large towns and small country villages there has arisen something of a new understanding of the child. He is coming steadily into his kingdom, into his individual birthright of health and well-being. Even in time of war, when the preoccupation and exigencies of the military situation have made exceptional demands upon the staff of persons, officials or voluntary, who have devoted themselves hitherto to the welfare of the child, the claims of the school medical service have been sufficiently valid and obvious to secure the maintenance of an irreducible minimum of its working.

So great is the value attached to school medical inspection that its extension voluntarily to secondary schools has been encouraged in recent years and has been assured by the new act both for secondary and continuation schools.

The full operation of the act and regulations bearing on medical inspection requires four inspections of children—at entrance, in the third and the sixth year of school life, and at the time of leaving school. Owing to the curtailment resulting from the war, provision was made in 1915 and 1916 only for the inspection and treatment of children who appeared to be ailing and for the maintenance of any treatment already undertaken. Of the 5,306,411 children in average attendance, 1,446,448 were medically examined in 1916, instead of the two millions who would normally have received attention. In spite of this decrease the total expenditure on the school medical service amounted to $2,089,350, an increase of 28 per cent over the

expenditure for 1913–14. Approximately half of the cost was met by grants from the central authority. The scope of the work is indicated in the employment of 772 school medical officers and assistants and 441 medical officers employed on such special work as ophthalmic surgery, aural surgery, dental surgery, X-ray work, and administration of anesthetics. The medical officers were assisted by 1,527 school nurses, and in a number of areas arrangements were made with local nursing associations for the services of their nurses. Since the work was limited to ailing children, the burden of discovering children who appeared to need medical attention fell upon the teachers, who have always cooperated heartily in the work since its establishment, and in a number of areas memoranda were issued by the school medical officers for their guidance. The following outline, drawn up by Dr. J. T. C. Nash, of Norfolk, should be of service to teachers interested in school hygiene:

Routine school medical inspection being in abeyance, the following notes have been drawn up by the school medical officer to guide teachers in detecting some defects, which should secure amelioration. The attention of the local care committee should be called to any cases discovered, so that they may be "followed up"; particulars should also be sent to this office:

I. Defective eyesight may be suspected when a child—
  (1) In a back row can not read what is written on the blackboard.
  (2) Can not tell the time by the clock at a little distance.
  (3) Fails to keep to the lines when writing.
  (4) Misses small words when reading.
  (5) Habitually holds a book nearer to the eyes than 12 inches when reading.
  (6) Complains that the letters run into one another.
  (7) Squints, even if only occasionally.
  (8) Complains of tiredness of the eyes or of frontal headache after reading or sewing.

II. Defective hearing is often present when a child—
  (1) Is a mouth breather.
  (2) Has a "running" ear.
  (3) Looks stupid and does not answer questions addressed in an ordinary voice, though otherwise intelligent.

  Such a child should be tested for deafness by a forced whisper, beginning at 20 feet and gradually lessening the distance until the "forced whisper" is heard. Report the distance at which this is heard.

III. Inflammation of the eyelids, with scabs or discharge from the eyes, should receive attention from a doctor.

IV. Earache. This should always receive attention from a doctor.

V. Gumboils. These should receive attention from a qualified dentist.

VI. Enlarged tonsils and adenoids may be suspected when a child—
  (1) Is stated to snore or breathes noisily during sleep or when eating.
  (2) Is a mouth breather—open mouth.
  (3) Is frequently troubled with nasal discharge.
  (4) Becomes deaf when it has a cold.

VII. Loss of flesh and frequent cough should receive attention from a doctor. These symptoms may be due to many different causes and are by no means peculiar to consumption.

VIII. Heart disease should be suspected if a child—

(1) Is always pale.

(2) Has palpitation and shortness of breath on exertion.

(3) Is blue in the face.

IX. Rheumatism. Children who often have sore throats and "growing pains" should be suspected of rheumatism. They require to see a doctor.

An important conclusion that has resulted from the experience of the last 10 years is the emphasis "on the fact that the problem of school attendance is, in the main, a medical problem." Since the teachers and school attendance officers have cooperated closely with the medical service, the number of absences from school for causes other than medical has decreased, while the average percentage of school attendance has increased. This situation has necessitated the development of a new type of attendance officer and the suggestion is put forward that "the most suitable visitor to send to the home of a child absent from school on alleged medical grounds is a woman health officer," who would be in a better position than an attendance officer to discover the nature of the ailment and to advise the parents. In the Borough of Taunton, where no men attendance officers have been employed for the past five years, there was an increase in the percentage of average attendance, and a decrease in the number of absences on grounds other than medical and in the frequency of prosecutions.

Not the least valuable part of the work of the school medical services has been the number of special inquiries, which were begun in 1909 and of which 350 have been made. These, as their titles indicate, are of great practical value not merely for the medical service itself but also for teachers and principals of schools. Many studies conducted in this country by the departments of school administration have been undertaken in England by the school medical officers. The only studies in England on retardation, for example, have resulted from such inquiries.[1]

Although the school medical inspection has necessarily been curtailed, the provision of medical treatment showed some progress even during the war. Of the 319 local education authorities, 219 had established 480 school clinics, all of which are extensively used. The more progressive authorities, like Birmingham, Bradford, and Sheffield, have provided comprehensive schemes with clinics available for medical inspection, and the treatment of minor ailments, teeth, skin, and X-ray operations, eyes, ears, and tuberculosis. A number of authorities cooperate with hospitals either as a supplement to or as a

[1] The study of this subject by the director of education of Blackpool came to the author's attention after this was written.

substitute for school clinics. Considering the immense importance of medical treatment in the scheme of a school medical service, it was found that the provision was still inadequate, and in 1917 the maintenance of an adequate system of medical treatment was made one of the conditions of the grant paid by the Board of Education. According to the latest regulations the standards of an efficient scheme of school medical service, on the basis of which a grant will be paid at the rate of one-half of the expenditure, are as follows: Arrangements must be made for the medical inspection of the four groups referred to above, for following up cases of defect and securing medical treatment where necessary, for coordinating the work of the school medical service with the work of the local public health service, and for rendering the school medical service an integral part of the system of elementary education. The whole tenor of the report is to emphasize the preventive aspect both of medical inspection and of medical treatment.

> To provide spectacles, to excise adenoids, to cleanse verminous children, to extract decayed teeth is good but not the best. It is part but not the whole. It is palliative but not preventive. It is imperative in the time of reconstruction lying before us that we should turn off the tap as well as remove the flood, that we should stop the production of disease and prevent what is preventable.

The national value of the medical service which is now in its tenth year of operation is shown by the improved health of the older children. "It is significant," says the report, "that while the health and personal condition of entrants shows little or no betterment, that of 8-year-old and leaving children shows a steady improvement" in clothing, nutrition, and cleanliness of head and body. Fortunately there has been a continuance of good health during the period of the war as a result of the improved economic conditions; there have been fewer cases of malnutrition and insufficient clothing than in previous years. But that the situation is not yet one for congratulation may be gathered from the fact that:

> The records of its findings (of the school medical service) show a large amount of ill-health, of bodily impairment, and of physical and mental defect * * *. Of the children in attendance at school (six millions) we know by medical inspection that many, though not specifically "feeble-minded," are so dull and backward mentally as to be unable to benefit from schooling, that upward of 10 per cent of the whole are at a like disability on account of uncleanliness, and that 10 per cent also are malnourished. Then we come to disease. Perhaps the largest contributor is dental disease, which handicaps children almost as seriously as it does adolescents and adults. Probably not less than half the children are in need of dental treatment, and a substantial number (not less than half a million) are urgently so. Again, upward of half a million children are so defective in eyesight as to be unable to take advantage of their lessons. Many of them need spectacles, some ophthalmic treatment, others special "myopic classes," and all of them careful supervision and

attention. Next we must add diseases of the ear, throat, and lymphatic glands involving another quarter of a million in a relatively serious condition. Then there come skin diseases, disorders of the heart, infectious disease, and tuberculosis.

The recognition of these facts, serious though they are, represents the awakening of a national conscience, which "finds its origin partly in the fuller appreciation of the importance of saving life, and partly in a larger understanding of the necessity of preserving and equipping the life we have."

How extensive the ramifications of a national system of school medical service are is indicated by the attention given in the report to all those agencies and activities essential to its successful operation. Extensive as the list of these agencies is, it can be supplemented by welfare supervisors, probation officers, children's care committees, juvenile employment committees, scoutmasters, leaders of boys' and girls' clubs and brigades, to whom only passing reference is made.

The safeguarding and protection of early child life may be promoted by the training of mothers in prenatal and infant care and management, the foundations for which may be laid in lessons in mothercraft to the older girls in the elementary schools. Under regulations of the Board of Education, issued in September, 1918, grants will be made to efficient schools for mothers at the rate of one-half of the approved expenditure. Day nurseries, *crèches*, and nursery schools are important cooperative factors in preserving the health of young children in the preschool period, particularly in crowded urban and industrial districts. Their importance has been recognized by the payment of grants-in-aid up to 50 per cent of the cost of maintenance by the Board of Education and more recently in the act by the incorporation of nursery schools in the national system of education. "The purpose of nursery schools is not to teach the three R's, but by sleep, food, and play to provide the opportunity for little children to lay the foundations of health, habit, and a responsive personality." For the children of elementary school age medical inspection and treatment must, in the words of the report, be supplemented by—

(*a*) the feeding of the child, by the parent or under the education (provision of meals) act, or otherwise; (*b*) the supply of fresh air for the child by means of open-air schools, playground classes, or adequately ventilated schoolrooms; (*c*) the exercise of the child's body by the adoption of an effective system of physical training; (*d*) the warmth and protection of the child, by requiring that it shall be sent to school properly clothed and that the schoolroom is sufficiently heated; and (*e*) the maintenance of the cleanliness of the child, by insuring that dirty and verminous children do not contaminate clean children at school, and that for the school itself bath and lavatory accommodation is available.

All of these agencies are now more or less adequately provided. A significant fact refuting the fears that the public provision of meals

would pauperize the parents is the decrease in the number of children receiving free meals from 422,401 in 1914–15, a large figure due to the industrial disorganization consequent on the outbreak of the war, to 117,901 in 1915–16 and 63,939 in 1916–17. Open-air schools are supplemented by classes conducted in playgrounds, parks, and open spaces, by school journeys, holiday and night camps, and open-air classrooms. The war has had a special influence in drawing attention to the value of life in the open air, and its extension is to be promoted and encouraged under the new act. To stimulate the further development of physical training, play, and games, the board in 1917 undertook to meet half the cost of the salaries of trained organizers and supervisors of these subjects and half the cost of maintaining evening play and recreation centers for children and young persons. Finally, to insure cleanliness, many schools are providing for school baths and showers in new buildings—an addition that is inexpensive

The twofold aim of the school medical service—to enable the child through improved physique to benefit from instruction in school and to lay the foundations for the physical well-being of the nation—finds expression throughout the report. One of the most serious menaces to the success of this work is found in the engagement of children on leaving school in employments dangerous to their health. For this reason emphasis is placed on the medical inspection of children immediately before leaving school on the basis of which advice can be given on the choice of employment.

> The physical injury (of a wrong choice) which manifests itself is insidious and inconspicuous but far-reaching. Malnutrition, anemia, fatigue, spinal curvature, and strain of heart or nervous system are conditions the discovery of which generally calls for clinical investigation and careful inquiry. They do not catch the eye or arrest the attention of the casual observer. But they are profoundly important for two reasons; they lay the foundations of disease, and they undermine the physiological growth of the child at a critical juncture in life. * * * It is the conditions rather than the character of employment which tend to injure the child.

Such conditions will no doubt be improved by the restriction imposed on child labor by the new act and the extension of the medical service to embrace pupils in secondary and continuation schools. The last provision closes the gap which existed hitherto between the medical inspection of children in the elementary school and the protection of wage earners under the National Health Insurance Act.

As soon as normal conditions are again restored, England will have established the broadest and most far-reaching system of health supervision, one that will affect every member of the population. Beginning with the maternity centers and unifying all the agencies both public and private for the promotion of health through childhood, adolescence, and beyond, the system will not only give every child a better chance of surviving but will through improved measures pro-

mote the physical and thereby the intellectual and spiritual well-being of the nation. The next few years will not only see the extension of the program in the schools but the application of the lessons of the war to industry. New light has been thrown on the relations between health and economic production that will prove as significant and far-reaching as the experience of the school medical service during the past 10 years.

In this country, where only a beginning has been made with the medical inspection and treatment of school children, parents, teachers, medical profession, and organizations for social service can have no better lesson brought to their attention than England's example. For those interested in establishing national standards of health there can be no more profitable subject for study than the irreducible minimum of a school medical service presented in the report here discussed:

(I) That every child shall periodically come under direct medical and dental supervision, and if found defective shall be "followed up."

(II) That every child found malnourished shall, somehow or other, be nourished, and every child found verminous shall, somehow or other, be cleansed.

(III) That for every sick, diseased, or defective child, skilled medical treatment shall be made available, either by the local education authority or otherwise.

(IV) That every child shall be educated in a well-ventilated schoolroom or classrom, or in some form of open-air schoolroom or classroom.

(V) That every child shall have, daily, organized physical exercise of appropriate character.

(VI) That no child of school age shall be employed for profit except under approved conditions.

(VII) That the school environment and the means of education shall be such as can in no case exert unfavorable or injurious influences upon the health, growth, and development of the child.

EDUCATION OF WORKING BOYS AND GIRLS.

The departmental committee on juvenile education in relation to employment after the war was appointed by Mr. Arthur Henderson, then president of the Board of Education, in April, 1916—

To consider what steps should be taken to make provision for the education and instruction of children and young persons after the war, regard being had particularly to the interests of those (1) who have been abnormally employed during the war; (2) who can not immediately find advantageous employment; (3) who require special training for employment.

The committee of 16 members, representing educational administration, social workers, and the teaching profession, met under the chairmanship of the Right Hon. J. Herbert Lewis, and issued its report, generally known as the Lewis Report[1] in March, 1917. The

[1] Final Report of the Departmental Committee on Juvenile Education in Relation to Employment after the War. 2 vols. Cd. 8512 and Cd. 8577. (London, 1917.)

committee took the evidence of a large number of representatives of industry and commerce, labor and education.

The committee recognized that their problem was really "the standing problem of the adolescent wage earners," similar to that which the consultative committee had considered and upon which a report upon attendance at continuation schools had been issued in 1909. On the basis of statistics for 1911 it was found that, of 650,000 children between 12 and 13 enrolled in public full-time day schools (elementary, secondary, junior, and technical), only 13 per cent are likely to have a full-time education after the age of 14, and that this number would dwindle to less than 1 per cent between the ages of 17 and 18. Of about 2,700,000 young persons between the ages of 14 and 18 in 1911–12 about 81.5 per cent were not attending any kind of school, and of the remainder very few completed the annual courses for which they registered in evening schools. The decline of apprenticeship, the development of a large number of initially attractive but ultimately blind-alley occupations, the increased industrial opportunities created for young persons by the war demands, together with high wages and relaxed discipline and control, all combined to bring about a serious situation for the country, which would be intensified by the inevitable dislocation of industries at the close of the war. The solution of the problem demanded a new outlook.

> Can the age of adolescence be brought out of the purview of economic exploitation and into that of the social conscience? Can the conception of the juvenile as primarily a little wage earner be replaced by the conception of the juvenile as primarily the workman and the citizen in training? Can it be established that the educational purpose is to be the dominating one, without as well within the school doors, during those formative years between 12 and 18?

The committee strongly urged the raising of the elementary school age to 14 without any exemptions whatever and compulsory attendance at a day continuation school between the ages of 14 and 18 for 8 hours a week for 40 weeks in the year. Broken terms both on entering and leaving school should be avoided by having definite times in the year for each. Criticizing the work of the elementary schools, the committee found that too frequently pupils in upper grades were merely marking time, and recommended the introduction of more practical education in place of the prevalent bookish type. "No child should feel on leaving school that he has attained to the fully independent status of wage-earning manhood." In defining the scope of the work to be offered in a continuation school the committee urged the postponement of specialization to the last two years (16 to 18), the first two years (14 to 16) being general in character.

We do not regard the object of establishing continuation classes as being merely an industrial one. The industries stand to benefit amply enough, both directly through the beginnings of technical instruction and indirectly through the effect of education upon the character and the general efficiency of those who come within its influence. But we are clear that the business of the classes is to do what they can in making a reasonable human being and a citizen, and that, if they do this, they will help to make a competent workman also. Though this is wholly true, it is also true that education must be approached, especially at the adolescent stage, through the actual interests of the pupil, and that the actual interests of pupils who have just turned a corner in life and entered upon wage-earning employment are very largely the new interests which their employment has opened out to them.

Local adaptation would accordingly be essential in both stages of the four-year course, with a vocational bias and a number of alternative courses. In the second stage some emphasis might be placed upon technical subjects bearing on the students' special work.

A liberal basis is still essential, and the English teaching should now tend toward a deliberate stimulation of the sense of citizenship * * *. Music, art, local history, home industries, first-aid, natural history, will all afford an opportunity for the skillful teacher, and can be treated suitably both for boys and girls.

Physical training should form part of the work of all adolescents for not less than one hour a week. Over and above the studies the continuation schools should become centers for the social and physical activities of the adolescent boy and girl; schools should be open in the evenings for recreation and games, and should be available for clubs, debating and other societies, study circles, concerts, and other organizations.

The committee did not feel that any opposition would be encountered by its proposals; parents were beginning to realize that the advantage would be in favor of the child, while employers were recognizing their responsibilities and the value of education, and the suggestions were warranted by the success of experiments in "works" schools. Assuming that the plan could be inaugurated in 1921, there would be about 2,600,000 pupils between 14 and 18 needing the service of some 32,000 teachers. The cost would be from $35,000,000 to $45,000,000 a year, without including the cost of providing buildings.

So far as young persons who had entered industrial life prematurely because of the war demands for labor were concerned, the committee suggests the possibility of providing special courses and the opening of technical schools as well as for those who might be thrown out of employment as a result of the dislocation of industries that might be expected to follow the war. The committee emphasized the new opportunities and responsibilities of juvenile employ-

ment bureaus at this particular crisis. The Board of Education, cooperating with the Ministry of Labor, issued a circular (No. 1072) in November, 1918, urging local education authorities to establish centers for the educational supervision of young persons who might be thrown out of work at the cessation of hostilities. It is proposed that the Government unemployment grants, payable to young persons between 15 and 18, be made conditional on attendance at such instructional centers.

The recommendations are summarized in the report under the following headings:

(1) That a uniform elementary school-leaving age of 14 be established by statute for all districts, urban and rural, and that all exemptions, total or partial, from compulsory attendance below that age be abolished.

(2) That a child be deemed to attain the leaving age on that one of a reasonable number of fixed dates in the year, marking the ends of school terms, which falls next after the date upon which he reaches 14.

(3) That steps be taken, by better staffing and other improvements in the upper classes of elementary schools, to insure the maximum benefit from the last years of school life.

(4) That difficulties of poverty be met in other ways than by regarding poverty as a reasonable excuse for nonattendance in interpreting section 74 of the education act of 1870.

(5) That the factory acts be amended in accordance with the amended law of school attendance, and that the law of school attendance be consolidated.

(6) That the Board of Education and the Home Office do consider the desirability of transferring the work of certifying as to the physical fitness of children for employment under the factory acts to the school medical officers.

(7) That it be an obligation on the local education authority in each area to provide suitable continuation classes for young persons between the ages of 14 and 18, and to submit to the Board of Education a plan for the organization of such a system, together with proposals for putting it into effect.

(8) That it be an obligation upon all young persons between 14 and 18 years of age to attend such day continuation classes as may be prescribed for them by the local education authority, during a number of hours to be fixed by statute, which should be not less than 8 hours a week for 40 weeks in the year, with the exception of—

(*a*) Those who are under efficient full-time instruction in some other manner.

(*b*) Those who have completed a satisfactory course in a secondary school recognized as efficient by the Board of Education and are not less than 16.

(*c*) Those who have passed the matriculation examination of a British university, or an equivalent examination, and are not less than 16.

(*d*) Those who are under part-time instruction of a kind not regarded as unsuitable by the Board of Education and entailing a substantially greater amount of study in the daytime than the amount to be required by statute.

(9) That during the first year from the establishment of this system the obligation to attend classes extend to those young persons only who are under 15, during the second year to those only who are under 16, during the third year to those only who are under 17, and subsequently to all those who are under 18.

(10) That all classes at which attendance is compulsory be held between the hours of 8 a. m. and 7 p. m.

(11) That it be an obligation on all employers of young persons under 18 to give them the necessary facilities for attendance at the statutory continuation classes prescribed for them by the local education authority.

(12) That where there is already a statutory limitation upon the hours of labor, the permitted hours of labor be reduced by the number of those required for the continuation classes.

(13) That in suitable cases the young persons be liable to a penalty for nonattendance; and that the parent or the employer be also liable in so far as any act or omission on his part is the cause of failure in attendance.

(14) That the local administration of the employment of children act of 1903 be transferred to the local education authorities; that it be an obligation on every local education authority to make by-laws under the act; that the statutory provisions of the act be extended; and that the Board of Education be the central authority for the approval of by-laws under the act.

(15) That the curriculum of the continuation classes include general, practical, and technical instruction, and that provision be made for continuous physical training and for medical inspection, and for clinical treatment where necessary, up to the age of 18.

(16) That suitable courses of training be established and adequate salaries be provided for teachers of continuation classes.

(17) That the system of continuation classes come normally into operation on an appointed day as early as possible after the end of the war, and that the Board of Education have power to make deferring orders fixing later appointed days within a limited period, where necessary, for the whole or part of the area of any local education authority.

(18) That the obligation to attend continuation classes be extended to children who are under 14 when the act comes into operation, although they may already have left the day school.

(19) That the attention of local education authorities be drawn to the possibility in certain cases of providing special full-time courses for children and young persons who have been abnormally employed.

(20) That in areas where maintenance allowances from public funds are available for the relief of unemployed young persons after the war, attendance at any classes that may be established for such young persons be a condition of relief.

(21) That the system of juvenile employment bureaus be strengthened and extended before the termination of the war, and that further financial assistance be given to local education for their maintenance.

(22) That in areas where there is probability of juvenile unemployment, teachers and other suitable persons explain to children and their parents the difficulties of obtaining work and the advantages of prolonged attendance at school.

(23) That the State grants in aid of present as well as future expenditure on education be simplified and very substantially increased.

The recommendations of this committee attracted widespread attention; comparison with the education act will indicate that most of these suggestions have been incorporated, that, indeed, the report of the committee furnished the general framework for the act.

SECONDARY EDUCATION DURING THE WAR.

The outstanding features in the field of secondary education are the increase in the number of pupils and the revived interest in the purposes and functions of higher education. There is perhaps no problem in the whole range of education that has been more minutely criticized and discussed than that of the place of the secondary school in a democracy and the nature of the education that it should provide. The increase of opportunities in which all may have their share is the keynote of the discussions on one side; on the other, a clear-cut definition of the boundary that separates general from specialized, technical, or vocational education is made. The demands that will be made in the new social order upon the trained intelligence of the citizen, whether as a member of society or as a member of a trade or profession or as an individual, are accepted as the proper measure of educational values. The unanimity with which these have been accepted by specialists, officials, statesmen, and the average citizen may furnish food for reflection to those who are concerned with the task of unraveling the tangle in which secondary education is at present involved in this country. The experiments that the two great democracies on each side of the Atlantic are making in this common effort to promote human progress are fraught with profound significance.

In striking contrast to this country, where the effect of the war has been to cause a reduction in the attendance at high schools, the increased prosperity in England has led to a considerable increase in the enrollment in secondary schools and an improvement in the length of school life. So great has been the pressure that in many areas schools are overcrowded, and many have a waiting list. Since the building of new schools has been stopped, and since a few are still under military occupation, overcrowding is accepted as inevitable, and the Board of Education has been compelled to relax the rules as to size of classes. At the same time the number of teachers absent on military service or war work has contributed to increase the difficulties, which have been met by the employment of women teachers in boys' schools and of such additional men as were available. "But the withdrawal from the schools of their younger and more vigorous masters, and their replacement by others of lower physique, of more advanced years, and often of inferior qualification, is an educational loss for which there can be no effective compensation." The schools have participated extensively in war work. Of the 1,056 schools on the board's list of efficient schools, 894 have given effective help in food production, in harvesting, and in producing details of munition plants and of hospital equipment.

The following table gives the statistics for secondary education from the last normal year preceding the war up to 1916–17:

Statistics of secondary education, England and Wales.

Year.	Schools on the grant list.				Schools not on the grant list.				All schools.	
	Schools.	Boys.	Girls.	Total.	Schools.	Boys.	Girls.	Total.	Schools.	Pupils.
1913–14	1,027	99,225	88,079	187,304	121	13,618	8,928	22,546	1,148	209,850
1914–15	1,047	105,096	93,788	198,884	129	14,185	9,253	23,438	1,176	222,322
1915–16	1,049	108,354	100,336	208,690	129	.....	.....	.....	.....	.....
1916–17	1,049	113,214	105,644	218,858	129	.....	.....	.....	1,178	[1] 244,599

[1] Statistics are not available since 1914–15 for the number in the schools not on the grant list. The figures here given are based on an assumption of an increase of 10 per cent over the figures for 1914–15.

During 1917 the Board of Education issued new regulations for secondary schools in England increasing the State aid to schools on its grant list and making provision for additional grants to schools developing advanced courses for students above the age of 16 who might be desirous of specializing in certain subjects. Separate regulations were issued for Wales, more suitable to its special conditions and, while maintaining the same general standards of efficiency, basing the grants on an age-range of pupils from 12 to 18 instead of 10 to 18 as in England. Grants are also made payable for the encouragement of experimental or pioneer work. To qualify for the grant, schools must, besides submitting to inspection and offering a certain proportion of free places to pupils entering from elementary schools, provide a progressive course of general education of a kind and amount suitable for pupils of an age-range at least as wide as from 12 to 17. An adequate proportion of the pupils must remain in school at least four years and up to and beyond the age of 16; these figures are subject to modification in rural areas. The grants, based on enrollment at the beginning of each school year, are increased mainly "to secure a higher standard of efficiency in the schools, and in particular to enable them to provide more adequate remuneration for the teaching staff." The consideration of the whole question of salaries of teachers in secondary schools was intrusted to a departmental committee for inquiring into the principles which should determine the fixing of salaries and technical schools, schools of art, training colleges, and other institutions for higher education.[1]

For the present no definite requirements are imposed as to qualifications and training, except that "where the board think fit, they may, on consideration of the teaching staff as a whole, require that a certain proportion of all new appointments shall consist of persons who have gone through a course of training recognized by the board

[1] See pp. 61ff.

for the purpose." Revised regulations[1] were issued in 1915 for the training of teachers in secondary schools, but conditions have not been favorable to their enforcement. The regulations recognize three methods of training teachers for secondary schools: (1) The first, in which a training college or university training department assumes the whole responsibility for instruction in both theory and practice of education. (2) The second, in which the training college is responsible for instruction in theory of education and an approved secondary school assumes the responsibility for training in practice. (3) The third, in which training in both theory and practice is given in an approved secondary school by one or more qualified members of the staff. In each case no candidates may be admitted to the course of training of one year except after graduation from a university.

For purposes of recognition as an efficient secondary school the board requires that the curriculum shall meet with its approval and "provide for due continuity of instruction in each of the subjects taken, and for an adequate amount of time being given to each of these subjects."

The curriculum must provide instruction in the English language and literature, at least one language other than English, geography, history, mathematics, science, and drawing. A curriculum including two languages other than English, but making no provision for instruction in Latin, will only be approved where the board are satisfied that the omission of Latin is for the educational advantage of the school. The instruction in science must include practical work by the pupils.

The curriculum must make such provision as the board, having regard to the circumstances of the school, can accept as adequate for organized games, physical exercises, manual instruction, and singing.

In schools for girls the curriculum must include provision for practical instruction in domestic subjects, such as needlework, cookery, laundry work, housekeeping, and household hygiene; and an approved course in a combination of these subjects may for girls over 15 years of age be substituted partially or wholly for science and for mathematics other than arithmetic.

By special permission of the board, languages other than English may be omitted from the curriculum, provided that the board are satisfied that the instruction in English provides special and adequate linguistic and literary training, and that the teaching staff are qualified to give such instructon.

At present the majority of pupils remain in school up to about the age of 16. There is a consensus of opinion, as will be pointed out later, that a course of general education consisting of the subjects here mentioned shall extend from about 12 to 16. In the regulations for 1917–18 the Board of Education recommended the development of advanced courses for pupils who intended to go on to the universities and other places for higher education and research as well as

[1] Board of Education, Regulations for the Training of Teachers for Secondary Schools. Cd. 8099. (London, 1915.)

those who planned to proceed to commerce and industry. It was thought that such opportunities for specialization would serve as inducements to boys and girls to remain in the secondary schools beyond the age of 16. The suggestions contained in these regulations were subjected to criticism and are issued in their revised form in the regulations for 1918–19. The advanced courses will be founded upon the general education offered to boys and girls up to 16 and will consist of specialization for two years on a group of coordinated subjects along those lines in which a pupil has already shown ability. "In every course there must be a substantial and coherent body of work taken by all pupils and occupying a predominant part of their time, the remainder being given to some additional subjects." Three groups of subjects are contemplated: "(A) Science and mathematics; (B) classics, viz, the civilization of the ancient world as embodied in the languages, literature, and history of Greece and Rome; and (C) modern studies, viz, the languages, literature, and history of the countries of western Europe in modern and medieval times." The courses are further defined as follows:

Course A should normally include work in both science and mathematics; but this requirement may be waived for pupils who do substantial work in the biological sciences if the course is otherwise suitable and includes work reaching an adequate standard in the physical sciences.

Course B must provide for all pupils substantial work in the language, literature, and history of both Greece and Rome.

Course C must include the advanced study of one modern foreign western European language and literature with the relevant history, together with the history of England and Greater Britain. It must also include either the study of a second modern foreign language or work of good scope and standard in English language and literature.

In all advanced courses, adequate provision must be made for the study and writing of English by every pupil either in connection with the main subjects of the course or otherwise. In other respects, full freedom is left in the choice and arrangement of additional subjects, so long as the syllabus for an A course provides for some substantial work in language, literature, or history, and that for a B or C course some substantial work in subjects other than language, literature, and history.

English must be included in all the groups; in group A, the scientific, work must be offered in language, literature, and history; in groups B and C, the linguistic and literary, subjects other than these must be provided. The courses will not be rigidly defined; the board will, for example, approve courses in ancient history from the Babylonian era to the complete organization of the Roman Empire in place of the history of Greece and Rome, as well as Old and New Testament history and the origins of Christianity. In the modern studies group it was intended originally to require the inclusion of Latin, but this compulsion has now been withdrawn, and at the same time English

language and literature may be substituted for a second foreign language. The study of the first modern language must be carried to the stage where the pupil can use it as an instrument for the study of literature and history as well as higher linguistic training. It will be noticed that commercial subjects and geography are not provided for as separate groups; it is the intention of the board that geography be made an essential part of the study of history or be given as an additional subject, while commercial studies may be covered under the third group.

Grants of $2,000 a year will be made for each advanced course that is approved by the board, and no restriction is placed upon the number that a school may organize. The grant is intended for efficient staffing and equipment. Up to November, 1917, between 270 and 280 applications had been made, mainly by schools in large urban areas, for the recognition of advanced courses of which more than half were in science and mathematics, and about two-thirds of the remainder for modern studies. Of the applications, 63 were approved in science and mathematics, 13 in classics, and 19 in modern languages.

Considerable criticism has been raised against the introduction of advanced courses on the ground that it penalizes the smaller schools, where the number of older pupils is as a rule not adequate for the organization of special work. It is felt that older pupils who desire to specialize will leave the smaller schools for schools where advanced work is offered, and it is objected that not only would the first schools be deprived of their more able product and of the grants for their attendance, but that the withdrawal of those who would normally become prefects or leaders would militate against the development of corporate life in the schools, while the transferred pupils would find difficulty in adjusting themselves to their new surroundings. It is replied in answer to such objections that the new development of education looks to the effective organization of educational facilities in an area and not the treatment of each school in isolation; since the new note is cooperation and not competition, some sacrifices must be made. There is much truth in this contention, but there is little doubt that the corporate life of some schools may suffer, although not quite to the extent claimed by the opponents of the scheme, since the withdrawal of older boys would leave a more homogeneous group behind.

The movement for the establishment of advanced courses so closely resembles that for the development of junior colleges in this country that the parallel need not be pressed. It may be pointed out, however, that the general education planned for the four years between 12 and 16 in England corresponds closely to that provided in Ameri-

can high schools to pupils between 14 and 18. The necessary conclusion must be that at the close of the advanced courses at the age of 18 a pupil in England would certainly have reached the stage of a college junior or even of a senior in America, allowing for the fact that classes will be small and methods adapted to encourage as rapid advancement as possible. The movement is one that deserves the attention of educators in this country who feel, as many do, that somewhere on the educational highway two years are lost by the American student.

The organization of advanced courses and the implications arising out of them will contribute in large measure to define the scope of the English secondary schools. Closely associated with this problem is the vexed question of examinations. The existence in England of many examination bodies without unanimity as to standards has for a long time exercised a detrimental effect on secondary education. In 1911 a report was issued on the subject of the consultative committee of the Board of Education, and in the following year the board[1] prepared the outline of a scheme upon which conferences were conducted with the universities, examining bodies, and representatives of local education authorities and secondary school teachers. In July, 1914, the scheme had advanced sufficiently to be submitted for further criticism and suggestions from those interested in secondary school examinations. This scheme proposed that examining bodies appointed by the universities should conduct two examinations, the first of those classes in secondary schools in which the pupils were about the age of 16, and the second at about the age of 18, with necessary modifications in the case of girls. The first examination, it was intended, should test the results of general education in English subjects (English language and literature, history, and geography), foreign languages, and science and mathematics, and should be of such a standard as to be accepted for entrance to the universities. The second examination was directed to test the results of specialized study of a coordinated group of subjects combined with more general knowledge of subjects outside this group; in other words, the results of the advanced courses that are now established.

The chief criticism of the examination system has always been that it was conducted by men who were out of touch with the schools, and that the examinations tended to be the goal of school work instead of a test of its results. To obviate these defects the board proposed that examining bodies should keep more closely in touch with the teachers, either by appointing representatives of the latter on their boards, or permitting them to submit their own syllabuses, or taking into consideration the teachers' estimates of the merits of candidates.

[1] See Board of Education, Circulars 849, 933, 996, 1002, and 1010.

It was further recommended that an authority be appointed to coordinate the standards of the examination, and it was proposed that this function be exercised by the Board of Education, assisted by an advisory committee representing universities, examining bodies, teachers, education authorities, and professional and commercial bodies.

In December, 1915, the board indicated in Circular 933 that their proposals had met with considerable approval, except that it was generally urged that the additional expenditure that would result from the scheme should be borne by the State. It was also insisted that provision should be made for the inclusion of such subjects as manual instruction, housecraft, music, and drawing in the proposed examinations. Owing to the war it was felt to be impossible for financial reasons to proceed with the plan, but the following educational points as a basis for future action met with general agreement:

(*a*) Limitation of external examination to two examinations at the age of about 16 and 18, respectively.

(*b*) Recognition of the principle that the group rather than the individual subject should be the unit on which success or failure is determined in the first examination.

(*c*) Concentration in the second examination on a special group of studies with one or more by-subjects.

(*d*) Inclusion of subjects such as drawing, music, manual instruction, housecraft, or some of them, in the scheme of examination; and

(*e*) Provisions for securing the cooperation of the teachers with the examining body.

A return was made to the proposals in Circular 996, which was issued on May 25, 1917, announcing that the board intended to put the system into operation on August 1, 1917, and would serve as the coordinating authority. A secondary school examinations council was established to act as an advisory council, consisting originally of 18 and later 21 members, and including representatives of examination boards of universities (9), of the teachers' registration council (5), of the county council association (2), of the municipal corporations council (2), of a newly created standing committee of professional bodies (1), of the association of education committees (1), and of a secondary school headmaster as supernumerary. Officials of the board may attend meetings of the council, but have no vote. The functions of the council are to deal with the following matters:

(*a*) The recommendation of examining bodies for approval by the coordinating authority.

(*b*) The maintenance by each approved examining body of an adequate standard both for a pass in the examinations and for a pass with credit.

(*c*) Investigation of complaints made by school authorities with regard to examinations.

(*d*) Promotion of conferences with examining bodies and others as occasion arises.

(*e*) The form and contents of the certificates granted on the result of the examinations and the arrangements for their issue.

(*f*) Negotiations with universities and professional bodies for the acceptance of the examination certificates as exempting the holders from certain other examinations.

The council will act in an advisory capacity and make suggestions for reform to the board as the coordinating authority, but "the council will consult the board before committing themselves on questions of principle or policy which are controversial or specially important." No examination scheme will be approved unless it provides for bringing teachers into touch with the examining board, for examining a school on its own syllabus, if it so chooses, and the syllabus is, in the opinion of the examining body, adequate in scope or character and the estimates of candidates as reported by their principals are taken into account. The board have undertaken to pay $10 for each pupil in a State-aided school who takes an examination as a member of his class.

The new scheme should have an important influence in reducing the existing situation to some sort of uniformity. English education has been too much subject to a system that disturbed the development of secondary education in this country in the latter part of the last century. Not only will it reduce the numerous examining bodies to a reasonable size, but the requirement that closer contact be maintained with schools will have a salutary effect in removing from the school the necessity of sacrificing the real ends of education to the examination goal. A similar attitude is developing in the matter of the award of scholarships. More and more, narrow specialization for ends that are not inherent in sound education is being eliminated, and examinations will but serve as tests to be taken in the ordinary course of developments. The problem that still remains to be solved relates to the nature of the examinations. Something has been done to discount cramming in the present regulations and to take into consideration a student's record as reported by the teachers. The next step will undoubtedly be a consideration of the reform of the character of the examinations themselves. The probability is that more attention will be given in the future to oral tests and that in the written examinations mere repetition of information will be discouraged.[1]

THE POSITION OF SCIENCE IN THE EDUCATIONAL SYSTEM.[2]

The controversy that began almost at the outbreak of the war over the relative merits of the classics and the sciences in secondary edu-

[1] See Hartog, P. J. Examinations and their Relation to Culture and Efficiency. (London, 1918.)

[2] Report of the committee appointed to inquire into the position of natural science in the educational system of Great Britain. Cd. 9011. (London, 1918.)

cation, combined with the recognition of the inadequate attention given in schools and universities to applied science, led in 1916 to the appointment by the Prime Minister of a committee—

to inquire into the position of natural science in the educational system of Great Britain, especially in secondary schools and universities, and to advise what measures are needed to promote its study, regard being had to the requirements of a liberal education, to the advancement of pure science, and to the interests of the trades, industries, and professions which particularly depend upon applied science.

The committee, consisting of 17 members, was under the chairmanship of Sir J. J. Thomson and issued its report in 1918. Evidence was collected from schools and universities, representative men of science in the fields of agriculture, chemistry, geology, engineering, and metallurgy, and a number of leading firms engaged in engineering and the chemical industry.

After a brief reference to the history of science teaching and the prejudice against its introduction both in schools and universites, the report emphasizes the need of a wider extension of the subject:

Now it is the war and its needs that have made us once again conscious of the nation's weakness in science. But it is for the sake of the long years of peace, quite as much as for the days of war, that some improvement in the scientific education of the country is required.

With regard to the controversy between the classicists and scientists, it is pointed out that the humanizing influence of science has too often been obscured. In urging the recognition of the educational value of science, its place in education is thus summarized:

It can arouse and satisfy the element of wonder in our nature. As an intellectual exercise it disciplines our powers of mind. Its utility and applicability are obvious. It quickens and cultivates directly the faculty of observation. It teaches the learner to reason from facts which come under his own notice. By it the power of rapid and accurate generalization is strengthened. Without it, there is a real danger of the mental habit of method and arrangement never being acquired. Those who have had much to do with the teaching of the young know that their worst foe is indolence, often not willful, but due to the fact that curiosity has never been stimulated and the thinking powers never awakened. Memory has generally been cultivated, sometimes imagination, but those whose faculties can best be reached through external and sensible objects have been left dull or made dull by being expected to remember and appreciate without being allowed to see and criticize. In the science lesson, the eye and the judgment are always being called upon for an effort, and because the result is within the vision and appreciation of the learner, he is encouraged as he seldom can be when he is dealing with literature. It has often been noticed that boys when they begin to learn science receive an intellectual refreshment which makes a difference even to their literary work.

This quotation has been made at length, in spite of what will be regarded by many as faulty psychology, because it furnishes the keynote of the report and in one form or another recurs many times,

and because it is representative of the type of thought on education that is frequently found in England. The report nowhere enters into a detailed discussion of the humanizing influence of science, but here and there deprecates the fact that many of the ablest boys and girls leave the secondary schools "with little or no idea of its importance as a factor in the progress of civilization or of its influence on human thought."

Science teaching in secondary schools for boys—

> is in general confined to the elements of physics and chemistry; botany and zoology are, as a rule, taught only to those boys who intend to enter the medical profession, while geology, so far as it is taught at all, is taken in connection with geography, or informally as part of the activities of the school scientific society.

Under the regulations of the Board of Education for grant-earning schools, science must be included in the curriculum, unless exceptions are permitted in special cases. But although science thus occupies a position in no way inferior to that of any other subject, the committee found a number of conditions that militate against successful work in science. Among these are: (1) Late entrance into secondary school, the assumption being that 12 should be the normal age for entry. (2) Early leaving, after less than three years in school, due to "(*a*) the parents' inability or reluctance to forego the wages which boys of 14 can earn; (*b*) the want of appreciation of the value of secondary education, even from the point of view of success in after life; (*c*) the tradition of beginning work at as early an age as possible; (*d*) the desire of the boys themselves to escape from the restraints of school life." (3) Lack of advanced work for those remaining at school to 18. (4) Inadequate staffing, equipment, and time. (5) Restricted scope, with the result that "in some cases physics up to the age of 16 means little more than practical measurements and heat, while in chemistry the theoretical foundations of the subject are often neglected." (6) Inadequate provision of university entrance scholarships for boys who have specialized in science. The situation is still less satisfactory in the public schools, many of which are not inspected by the Board of Education and in which the literary and classical traditions are more influential. It frequently happens that little or no science is offered in these schools to boys who specialize in classics, even though adequate provision is made for the subject on the modern sides. The public schools in turn exert an adverse influence on the preparatory schools because science carries hardly any weight either in the entrance or scholarship examinations.

In the secondary schools for girls the conditions are less favorable and there is even less definiteness than in the boys' schools as to the nature of education to be provided and the relative importance

of subjects. The Board of Education, in its regulations for grant-earning secondary schools for girls, permits the substitution of a course in domestic subjects for science and mathematics after 15, and in the period preceding this age the time assigned to science is quite inadequate. In a large number of private schools the subject is omitted entirely.

With reference to secondary education in general the committee is in agreement with the present trend of thought in England that:

> The best preparation for any occupation or profession is a general education reached by the average boy at the age of 16, followed, where possible, by a more specialized course on a limited range of subjects. This general education should provide normally for the study of English, including history and geography, languages other than English, mathematics, and science; each of these subjects should be regarded as an integral part of the education of both boys and girls, and a fair balance should be maintained between the time allotted to them.

In a four-year course from 12 to 16 not less than four periods a week in the first year nor on the average less than six periods a week in the following three years should be given to science. Efficient teaching of the subject should be promoted by a system of State inspection and by its inclusion in the first school examination,[1] which should come at the completion of the general course at about the age of 16.

The further recognition of science in a secondary education must in the opinion of the committee be accompanied by a revision of the curriculum, which has tended to become too narrow and to be out of touch with many of its applications. "The course should be self-contained, and designed so as to give special attention to those natural phenomena which are matters of everyday experience; in fine, the science taught should be kept as closely connected with human interests as possible." The committee finds general agreement that the best preparation for the study of science in secondary schools is a course of nature study up to the age of 12, and suggests that the work of the first year might include physiography, practical work involving measurements of simple physical quantities, and serving as an introduction to some important physical branches in connection with the making of such things as electric bells, small induction coils, telescopes, pumps, and so on; where laboratory facilities are available the committee favors, in addition to physiography, "a course of elementary general science, including work of an introductory kind on hydrostatics, heat, and the properties, both physical and chemical, of air and water."

The systematic study of science, beginning at about the age of 13, should include physics, chemistry, and biology, not with a view

[1] See on the question of secondary school examinations, pp. 32ff.

to training specialists, but rather to give as good a mental discipline as possible and an acquaintance with the principles involved in the phenomena of daily experience in each of these branches. The report emphasizes the responsibility of the science teacher for the English in which the work of his class is written, and the excellent opportunities for teaching clear writing in connection with everyday laboratory work and for instilling the habit of reading books in science. Some modifications would be essential in the case of girls. Hygiene, for example, should be well taught in girls' schools, but preferably at the 16 to 18 stage:

> Where this is impossible definite teaching on the laws of health and on personal hygiene may well form part of the work of the lower forms, but it can not be properly considered as a part of the science course. Similarly, lessons on the everyday affairs of the household are obviously of practical importance, and they form a part of scientific education if they are given by a teacher who has a real background of scientific knowledge. But much of the domestic science taught in schools has no claim to the name of science at all; it would be less pretentious and more accurate to call it housecraft and find a place for it outside the hours allotted to science.

At the age of 16 students may begin a more intensive study, usually for two years, of some special subject, but without neglecting other branches of the general course, especially English and mathematics, and frequently enough French and German to be used as tools. The specialists in science will carry forward to a higher stage the work in two or more of the sciences—physics, chemistry, or biology—the choice depending somewhat upon the future career of the students. The fact may here be mentioned that under the new regulations for advanced courses in scondary schools the Board of Education in 1917 recognized 63 courses in science and mathematics out of a total of 95 approved, the remainder being distributed between classics (13) and modern languages (19). At the same time it is recommended that a course or courses be offered suitable for students specializing in other subjects than science. The following courses are suggested tentatively:

> A. (1) A course on the outlines of cosmical physics and astronomical principles of general interest, such as the measurement of time, the calendar, the size and mass of the earth and sun; the applications of spectroscopy to elucidate the composition of the stars, nebulæ, etc.; (2) a course on the general principles of geology, without too much technical detail, illustrated by local examples and the use of geological maps; (3) a course on physiology and hygiene, which would include a discussion of the part played by bacteria and other lower organisms in fermentation and in the spread of disease; (4) a course on physical meteorology; the composition and general circulation of the atmosphere, relation of wind to pressure, storm, clouds, rain, snow, thunderstorm, the aurora, weather-mapping.
>
> B. Courses on the history of science, e. g., (1) the history of astronomy from the Greeks to Newton, including some account of the geocentric and heliocentric

systems; (2) the history of mechanics on the lines of the earlier portions of Mach's Principles of Mechanics.

C. Courses on the development of scientific ideas, e. g., the constitution of matter; the conservation of energy; the doctrine of evolution; heredity; immunity.

D. The lives and work of scientific men, e. g., Leonardo da Vinci, Galileo, Newton, Lavoisier, Cavendish, Faraday, Clark Maxwell, Kelvin, Pasteur, Darwin, and Helmholtz.

E. The bearing of scientific inventions on industrial progress, e. g., in connection with the history of farming or other local industries; methods of transport by land, water, and air; means of communication, such as signaling, telegraphy, telephones; methods of lighting.

F. Courses of a more practical kind than those mentioned above on the particular applications of science, e. g., on the internal-combustion engine or the dynamo; such courses would appeal to boys with a mechanical turn of mind.

G. A course on the method and philosophy of science, historically treated with special reference to the work of Aristotle and his predecessors, Archimedes, Galileo, and Bacon, and the later experimental philosophers.

The committee recommends that, if a second school examination is adopted in accordance with recent proposals of the Board of Education, candidates be examined in the group of subjects in which they have specialized, together with at least one other general subject. Thus a student who has taken an advanced course in science should be examined in that subject as well as in history or an ancient or modern language or English literature. Candidates who pass the second school examination might properly be exempted from the intermediate examination which in some universities comes at the end of the first year.

The committee recognizes that any progress in the teaching of science depends on the adequate supply of teachers well trained in academic and professional subjects, and that such a supply is dependent on the payment of considerably better salaries than at present and on improvement in conditions of service. It is suggested that, in addition to university study of science, teachers be required to have one year of training, spent partly in actual teaching in a secondary school and partly in attendance at professional teachers' courses at the universities. Such training should later be supplemented by further study and visits to other teachers and schools. Other essentials to successful advancement of the position of science are suitable laboratory accommodation, equipment, and libraries, with apparatus and books, periodically renewed and supplemented.

Turning to the universities, the committee recommends an increase in the number of scholarships, especially for students of science, but based on an examination that does not encourage overspecialization in the schools. Since the need of an increased number of trained scientific workers could not be met by an extension of scholarships, it is suggested that university fees be lowered. The normal age at

which boys should pass from the secondary schools, at least to the universities of Oxford and Cambridge, should be 18 rather than 19, the usual age before the war. More adequate opportunities should be offered for students who do not intend to work for an honors degree to take a continuous course in science for a pass degree corresponding more nearly to the B. S. in this country. But the committee is opposed to one-sided specialization, since—

> the increase of specialization in all branches of knowledge at the universities has brought it about that students of one branch of knowledge have little opportunity of hearing anything about other subjects. It is therefore very desirable that there should be given at the universities courses of lectures of a general character on philosophy, history, literature, science, and economics.

On the completion of the undergraduate course the committee urges the introduction of a year's research work, not so much for the sake of getting new results as for the training afforded in independence of thought, maturity of judgment, and self-reliance, and for the gain in critical powers and enthusiasm for service. The committee recommends a uniform and comprehensive system of research degrees in accordance with the resolutions passed at the Universities' Conference held on May 18, 1917. Far larger provision should be made by means of scholarships for the encouragement of postgraduate research, since "no expenditure of public money on scholarships holds out more prospects of valuable returns." For the promotion of original research by students and members of university faculties the committee recommends an increase of State grants to insure the efficient equipment of laboratories and a reduction in the amount of time required by routine duties.

The report also considers the relation of science to medicine, engineering, agriculture, the Army, the civil service, and its importance in the preparation of students for these professions. With reference to technical education outside the universities the committee recommends an increase in "the provision of instruction in pure and applied science in technical schools and institutions of all grades," including junior and senior technical schools and evening schools, all of which need to be adequately coordinated so that students can pass from one to the other. "Science, both in its general aspects and in its bearing on industry," should find a place in the courses of the proposed continuation schools, and might properly be more extensively introduced in schemes and systems for adult education. The committee declares with reference to the latter that:

> We are by no means sure that popular interest in science is as great to-day as it was 30 years ago. Until this general interest in science is extended and increased and the deficiencies of adult education in this respect are made good, an important piece of work in national education remains to be done.

The report closes with a consideration of the supply of trained scientific workers for industrial and other purposes which the committee regards as a matter of the utmost gravity and urgency, for—

It is agreed on all sides that it is absolutely necessary for the prosperity and safety of the country after the war that the development of the resources of the Empire and the production of our industries must be on a scale greatly in excess of anything we have hitherto achieved. Schemes of reconstruction and development are being prepared and discussed; each one of them requires a supply of trained workers, and the proposals will be futile unless a large army of these is forthcoming.

The work of the Department for Scientific and Industrial Research, established in July, 1915, has already stimulated a new attitude among employers to the need of well-directed research, better training, and the more skillful use of scientific methods. An extensive movement has been inaugurated toward the formation of research associations in the larger industries, some working independently, some in connection with universities. This movement will lead to a demand for more trained men and will offer better recognition and higher remuneration for their services than hitherto. To meet this demand the supply on the basis of prewar statistics was inadequate. After canvassing the possibilities the committee concludes that:

It is of the utmost importance that ability should not be wasted, and if it is not to be wasted, measures must, as we have said, be taken to insure (1) that no pupil capable of profiting by a full secondary education should miss the opportunity of receiving it; and (2) that the leakage from the schools should be so far as possible stopped.

For these the doors to the universities and technical colleges must be thrown open by means of scholarships and maintenance grants, and the development of sufficient and attractive careers for trained skill and knowledge. No small factor in the movement is the dissemination of a knowledge and appreciation of the need of reform.

If science is to come by its own, the Nation as a whole must be brought to recognize the fundamental importance of the facts and principles of science to the right ordering of our national life. The more closely the work of our legislators touches the life of the people, the more intimately it is concerned with questions of food supply, housing, transport, the utilization of natural resources, and the conditions which make for bodily health, the more dependent it becomes on the skilled advice and assistance of those who can bring their knowledge of science to bear on social and economic problems. Certainly we must provide the requisite training and opportunities for those who are capable of advancing natural knowledge or acting as scientific experts. But it is no less important that we should secure for all who are of an age to receive it an education which will enable them to realize the vital need of a knowledge of science both for the individual and national well-being.

POSITION OF MODERN LANGUAGES.[1]

The committee to inquire into the position of modern languages in the educational system of Great Britain was appointed by the Prime Minister in 1916, under the chairmanship of Mr. Stanley Leathes, and reported in 1918. Considerable unrest has existed for some time on the neglect of modern languages and dissatisfaction has arisen with the assumption that English alone is an adequate medium for conducting the ever-increasing world intercourse of the country. As in the case of the neglect of science the uneasiness has been not a little stimulated by the greater attention devoted to such matters in Germany. The work of the present committee must, therefore, be considered in relation to the whole movement for reconstruction in English education that will have its effect not merely on the schools but on commerce and industry as well. The province of the committee was as follows:

> To inquire into the position occupied by the study of modern languages in the educational system of Great Britain, especially in secondary schools and universities, and to advise what measures are required to promote their study, regard being had to the requirements of a liberal education, including an appreciation of the history, literature, and civilization of other countries, and to the interests of commerce and public service.

The committee followed the same procedure as the committee on the position of natural science and heard witnesses representing industry and commerce, educational institutions and associations, and the public services. Questions were also sent to similar representative organizations.

An account of the history of modern languages in Great Britain indicates that the modern subjects have received adequate recognition in the schools and universities only during the past 30 years, but that public interest has not been strong and the supply of teachers with appropriate qualifications has not kept up with the demand. Several reasons, obvious to the American educator, have militated against a better appreciation of modern subjects, not the least valid of these being the richness of English literature and the extensiveness of the repertory of knowledge in most fields, as well as the insular situation of the country. Foreigners, too, have taken the trouble to learn English, so that this language served as an adequate medium of intercourse the world over. "The need of modern language study was not clear and insistent before the war." In the schools modern subjects have suffered, as most new subjects, in competition with those that have a traditional place and are encouraged by the granting of scholarships and other incentives.

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[1] Report of the committee appointed by the prime minister to inquire into the position of modern languages in the educational system of Great Britain. Cd. 9036. (London, 1918.)

In competition with the classics, modern language studies suffered from uncertainty of method and of aims, from lack of established traditions and standards; teachers needed exceptional qualifications, involving unusual length of training and expense; many were accepted as instructors whose attainments were frankly insufficient. Those of the highest attainments and ideals were discouraged by indifference, sometimes by contempt and hostility.

Much progress has been made in recent years; any further advance depends on the cultivation of sound public opinion. With this end in view the committee has defined the many-sided values of modern studies, that is, "all those studies (historical, economic, literary, critical, philological, and other) which are approached through modern foreign languages":

Modern studies subserve the purposes of industry and commerce; they are needed for scientific instruction and information; by them alone can be gathered and disseminated that more intimate knowledge of foreign countries which is necessary for the wise conduct of its affairs by a democratic people; they are required for the public service of the country at home as well as abroad; through and by them our people can learn what is best and highest in other countries. Some of us may attach more importance to one, some to another of these elements, but all together must combine to supply such motives as can unite and mobilize a nation in the pursuit of worthy knowledge.

The relation and place of modern studies for each of these ends and purposes are considered in some detail. But in addition to the practical values, modern studies it is claimed are an instrument of culture—

and by culture we mean that training which tends to develop the higher faculties, the imagination, the sense of beauty, and the intellectual comprehension. Clearer vision, mental harmony, a just sense of proportion, higher illumination—these are the gifts that culture ought to bring. It can not bring them to all; in their fullness they can be possessed by few; but in some measure they may be shared by all who desire them.

If modern studies are to meet with the same success that has attended the study of the classics—

We need an ideal such as inspires the highest classical studies. The best work will never be done with an eye to material profit. We must frame our ideal so that it can be consistently pursued through the whole course of school and university life and even beyond. The first object in schools must be to lay the foundation of scholarship and skilled facility of expression and comprehension. The "more or less," the "there or thereabouts," is not good enough in language, or in any other instrument of culture or information; the standard of accuracy and of form can not be too high. Early we should also aspire to make some of the boys and girls understand that foreign languages are not learned as an end in themselves, but as a means to the comprehension of foreign peoples, whose history is full of fascinating adventure, who have said and felt and seen and made things worthy of our comprehension, who are now alive and engaged in like travail with ourselves, who see things differently from ourselves and therefore can the better help us to understand what is the whole of truth.

After discussing the general aims and purposes underlying the study of modern languages, the report takes up the question of the

relative importance of the several languages—European and non-European. French, from every point of view, is declared for English purposes to be the most important living tongue, the standard being as follows:

> The importance of any language may be judged by the significance of its people in the development of modern civilization, by the intrinsic value of its literature, by its contribution to the valid learning of our times, and by its practical use in commercial and other national intercourse.

Germany, Italy, Spain, and Russia deserve a first-class place, after France, in the modern studies of the universities, and all but Russian, which is apparently not yet sufficiently organized or valuable for such purposes, should find a place in the schools. With reference to the vexed question of German, the report leaves no room for doubt as to its importance from the point of view of information in a large number of fields of human knowledge. But by the standard quoted above the report believes, that:

> The time is hardly propitious for their dispassionate consideration. No doubt, as a factor of the first importance in shaping the destiny of Europe during the last hundred years, Germany must retain a permanent and compelling interest to the historical student, though the estimate of the causes which have raised her to that position may undergo changes in the opinion of succeeding generations. And on this also there will be general agreement. After the war the importance of German must correspond with the importance of Germany. If Germany after the war is still enterprising, industrious, highly organized, formidable no less in trade than in arms, we can not afford to neglect her or ignore her for a moment; we can not leave any of her activities unstudied. The knowledge of Germany by specialists will not suffice; it must be widespread throughout the people. A democracy can not afford to be ignorant. We may indicate one point in particular, which is likely to be of importance at the end of the war. It will in any case be impossible to oust the use of German in commerce, even for our own purposes at home, apart from any question of competition in neutral countries. The mere settlement of pre-war accounts with Germany will be a long and difficult matter. If we are not ourselves able to supply men who have sufficient knowledge of German to conduct the necessary correspondence, strong incentive will be offered to the old practice of employing qualified German clerks for the purpose. This is only one of many considerations which lead us to the conclusion that it is of essential importance to the Nation that the study of the German language should be not only maintained but extended.

Besides these five languages for which adequate provision should be made in all universities, the study of other European languages and of non-European languages should be promoted in various centers, determined partly by commercial needs, partly by other interests. London it is recommended should become a center for an institution for the study of the minor European languages similar to the School of Oriental Studies. In general, however, "the prospects of modern studies depend on the esteem of the public."

The nature of instruction in foreign languages must vary according to the needs, age, and training of the students. Home instruction by skilled governesses may lay a sound foundation for the future, and it is suggested that kindergartens conducted in a foreign language might serve the same purpose. Systematic study in school or university is essential and should be supplemented by residence abroad, especially by those who intend to teach. Facilities for foreign residence and the exchange of teachers and pupils should be systematically organized and encouraged.

The systematic study of modern languages should be begun in the secondary schools; the committee does not consider it advisable to introduce them in elementary schools, although the phonetic study of English might well be begun there and serve as a starting point for foreign languages. The committee does not commit itself on the question of the right age for beginning foreign-language study, but prefers to define its position in general terms:

> The position of reformers is that it is neither expedient nor profitable to begin the systematic study of a foreign language in school until the child has reached a stage of intellectual development which admits of his having already received a sound training in the use of his mother tongue, as well as a reasonable discipline in the essentials of a wide general education.

The scope of modern subjects will vary somewhat according to the type of secondary school attended, and the continuity of study. The chief aim should be to give a sound training in the principles of language, and a firm basis on which a pupil can advance by private study. Intensive work on one language is much more to be commended than the sacrifice of thoroughness by the study of two or three at the same time—a practice not uncommon in England. This principle is warranted by the fact that success in one language is the best preparation, not only for its further study but for the study of a second or more languages. In a four-year course, that is, from 11 or 12 to about 16, the energies of the pupils should not be dissipated. "It should be possible in a four-year course to bring one language to a useful point with the majority; only with the minority can a second language be begun with any advantage." The economical minimum for the study of the first language is four hours a week, preferably for two years, when a second language may be taken up. Specialization in language studies should not begin until a student has passed his first school examination, at about the age of 16. The advanced courses, as defined by the Board of Education,[1] should cover as wide a range as possible, and private study should be encouraged.

The chief essential for the improvement of the status of modern studies is to secure well-qualified teachers, and this end can only be

[1] See pp. 29ff.

achieved by improving the pay and prospects of those who must necessarily undertake, in the case of modern languages, an unusually long, laborious, and expensive training. "It is desirable that every teacher of modern languages in a secondary school should have a university degree, should have spent not less than a year abroad under suitable conditions, and should have undergone definite training for his profession." The committee recommends that professional training should consist of a period spent in a school recognized for the purpose, where a teacher—

> would at first employ his time in observing the methods of skilled teachers, and studying the scheme of work and the elements of his art, and would thus gradually come to understand the principles he was to follow and the difficulties he would have to meet. After a sufficient period of initiation he might begin to teach under supervision, receiving frequent advice and practical hints; and before his period of training was over, he might begin to run alone.

The committee accepts the conclusions of the Modern Language Association that qualified British teachers are superior to foreign teachers, partly because the latter are found less effective for discipline and for the exercise of a salutary influence over the pupils, partly because the training of foreign students has tended to give them an "excessive philological and antiquarian bias," and chiefly because "it is natural to suppose that the studies themselves will be more successfully presented to the classes by teachers who approach them from the British point of view." Foreign exchange assistants, however, are a most valuable supplement.

But "the universities are the keystone of the whole structure of higher education." At present the arrangements as to staff, equipment, and expenditure for modern languages are defective in the British universities. The committee urges that action should be taken by Parliament to adopt a policy embodying—

> a scheme providing for the establishment, within 10 years from the conclusion of the war, in addition to all the posts that already exist and those that may be founded by private or local initiative, of, say, 55 first-class professorships—15 of French studies, and 10 each for the studies concerned with the four other principal countries of Europe—and double that number of lectureships.

Such a scheme must be accompanied by a considerable increase in the number of scholarships for entrance to the universities and postgraduate studies. In 1911–12 only 8 out of 440 entrance scholarships at Oxford and Cambridge were awarded to modern languages. Assistance should also be afforded to students to spend some time abroad.

In addition to organized study in secondary schools and universities the report emphasizes the importance of providing facilities for the study of modern languages in later life, especially for those who discover the need of such knowledge for commerce or industry. The

local authorities are urged to extend the provisions already made in evening classes by the organization of other part-time and even brief whole-time study. But the pursuit of such study can only be stimulated if adequate pay and prospects are held out for specialization, a condition not prevailing at present.

For the specialist in modern language teaching the sections on method and examinations will prove of particular interest, especially the carefully elaborated consideration of the merits and limitations of the direct method, of the importance of oral tests, and of the place of translation from English into the foreign tongue. The report contains a summary of conclusions and recommendations, an appendix on the hours of work, salaries, and pensions in a number of foreign countries, and a letter from 31 professors and readers of modern languages in British universities representing their views on the subject of the committee's reference. The report represents the substantial consensus of the whole committee; the exceptions are certain reservations on the questions of the educational value of French and Latin, compulsory Latin at the university, languages in the first school examination, modern sides, the age at which foreign languages should be begun, preparatory schools, and the classification of schools. The report will, like the corresponding report on the position of natural science, exercise an important influence on the development of higher education in Great Britain. The general position of the committee may well be summarized in its own words:

> The due advance of modern studies appears to us to require in the first place a change of spirit. We do not underrate, we may even be held by some to have unduly emphasized, the practical value of modern studies as affecting the material fortunes of the Nation, its classes, and its individual citizens. But no department of knowledge can obtain its highest development unless it be inspired by an ideal. That ideal of humane learning concerned with the thought, the life, the achievements, the psychology, in fact, the entire history of modern nations, we have endeavored to indicate and define; and we have found an encouraging example in the highest results attained during many centuries by the culture based on the records of ancient civilization. What has been done through the study of the dead people of Greece and Rome, can be done, we conceive, through the study of the living peoples of the habitable globe in proportion to their several contributions to the art of living. Modern studies must for such purposes be pursued with like intensity of purpose, with like faith and sympathy, with like seriousness and accuracy, and a like ideal of scholarship.

TENDENCIES IN SECONDARY EDUCATION.

EDUCATIONAL OPPORTUNITIES.

The education act gives no special treatment or attention to secondary education. Local authorities are encouraged to devote more money to higher education by the removal of the existing restriction on the amount that can be levied from the local rates, and the law

specifically requires that "adequate provision shall be made in order to secure that children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting, through inability to pay fees." Although the law does not require the establishment of secondary schools, the Board of Education is empowered to withhold its refusal of schemes submitted by local education authorities unless they make adequate provisions for education in the area as a whole. Indirectly, therefore, considerable pressure will be brought to bear to increase the opportunities for higher education that are at present limited. The question of free secondary education was not entirely lost sight of, and it was proposed, during the course of the debate on the Fisher bill, that fees be abolished in State-aided secondary schools. The proposal did not meet with much response. Mr. Fisher pointed out that 67 per cent of the pupils in the State-aided schools had come from the public elementary schools; instead of abolishing fees and losing $5,000,000 of revenue, it was wiser to encourage local education authorities to provide more secondary schools, to apply for more State grants, and as a natural consequence to provide more free places in such schools. The legal requirement quoted above would insure that no pupil of ability would be deprived of his opportunity of securing a higher education.

No action has accordingly been taken by the State to secure the establishment of free secondary education as a part of the national system. There is, however, a pronounced body of opinion throughout the country in favor of free higher education for those who have the ability to profit by it. The British Labor Party had something of this kind in mind when they demanded in their program public provision "for the education alike of children, of adolescents, and of adults, in which the Labor Party demands a genuine equality of opportunity, overcoming all differences of material circumstances." The Workers' Educational Association adopted the following resolutions on full-time secondary education as part of their program for educational reconstruction:

> That all children admitted to a secondary school should have reached an approved standard of education, the ground of transfer being the fitness of the scholar for the broader curriculum.
>
> That free provision should be made for all who are eligible and desirous to enter such schools, such provisions to include a satisfactory maintenance allowance where necessary.
>
> That the number of secondary schools of varying types should be largely increased, and that the curriculum be made more variable to meet the interests of individual scholars.

The sense of the Education Reform Council, a large and representative body appointed at the instance of the Teachers' Guild, was that

scholarships and free places "should be provided in such numbers as will admit to secondary schools those pupils from elementary or preparatory schools who can profitably undertake a full secondary course." It also urged that "the number of efficient secondary schools of varying types should be increased," a view shared by the Incorporated Association of Headmasters, which declared in its educational policy that "there should be a considerable increase in the number of secondary schools, i. e., schools which provide some form of whole-time general education as distinct from technical training up to the age of 18." The Incorporated Association of Assistant Masters in Secondary Schools also declared it to be part of its educational policy that "no child who has shown capacity to profit by a course of secondary education should be refused admission to the schools, even if the child has to be fed and clothed at the public expense to enable him to attend." This view was slightly expanded in the educational policy of the National Association of Education Officers, who declared "that no child who is qualified to receive secondary, technical, or university education should be debarred therefrom for financial reasons." Finally, the Teachers' Registration Council supported "the principle of abolishing fees in secondary schools for the maintenance of which a local education authority is responsible, and also the principle of a due number of free places in secondary schools which are partly maintained by State grants."

The Athenaeum and the Times Educational Supplement went beyond this program and urged the establishment of a system of universal free secondary education based on a common elementary education. The common basis would continue up to the age of 11 or 12 and would be followed by a general secondary education adapted to individual ability and interests up to 15 and 16. It is hardly probable that these proposals will take concrete shape for some time. The principle that differentiation should take place at the age of 11 or 12 is very generally accepted and is undoubtedly the age that will be universally adopted. The accomplishments of an elementary school or its equivalent up to that age will become the basis upon which will be developed the advanced work in the upper grades and the central schools required by the act and the lower secondary school courses.

It may be generally assumed that the opportunities that are demanded will be extended and increased in public and other State-aided schools. In addition to these schools there has been a supply of private schools ranging all the way from the great public schools and other endowed schools to their private venture or proprietary school. At the present time neither the Board of Education nor any other authority knows the extent of this supply. Under the

new act, however, the board is now empowered to secure a description of all schools "in order that full information may be available as to the provision for education and the use made of such provision in England and Wales." Together with local education authorities the board may inspect schools that desire to be recognized as efficient for certain purposes. The Teachers' Registration Council will also affect the status of private schools indirectly in so far as a teacher's eligibility to be registered will depend in part on the character of the schools in which he has served. Further, private schools will be subjected to severe competition for various reasons; the schools established by local education authorities will command more money from the State and their localities; such schools will offer higher salaries and pensions to teachers; the board will grant additional aid to the larger schools for advanced courses; and, finally, it is proposed that there shall be some differentiation between public and private schools in the certificates awarded as a result of the secondary schools examinations. On the other hand, the influence of competition, inspection, and some public supervision may well stimulate the private schools to take a very real place in the national system. The private schools have always played an important part in English education, and, if they have not fully measured up to the claims of those who have favored their existence on the ground that they serve as experimental stations, they have furnished opportunities for secondary education that would otherwise not have been available. Many will disappear under the full light of publicity, but many others may win a new place for themselves as the result of the revived interest in education.

THE MEANING OF A LIBERAL EDUCATION.

Complete unanimity prevails on the broad question of the function of secondary education. The opportunities will undoubtedly be democratized, and access to the secondary school will become more ready. There is no intention, however, to confuse the functions of secondary education by introducing into it elements of technical and vocational training. Those who charge the European secondary school with being the haven of aristocracy would be somewhat astonished to find liberal and conservative, democrat and aristocrat, employee and employer united in complete agreement on the principle that "a secondary school exists to provide a liberal training, and it is no part of its task to furnish specific or technical instruction in the rudiments of professional studies or commercial routine." (Schoolmasters' Yearbook, 1918.) The Workers' Educational Association expresses the same view in its resolutions:

> That the requirements of a liberal education should be regarded as paramount in the organization of every type of secondary school.

That in the interests alike of education and of economic efficiency a sound general education in childhood and adolescence is the necessary foundation for any specialized course of technical or professional training, both in town and country, and that therefore a technical education should be regarded as supplementary to secondary education.

The Incorporated Association of Headmasters urges that:

The essential characteristic of post-elementary education should be the development of various types of schools so as to give the best possible chance to the most varied kinds of ability. The one common feature must be that the aim is primarily educational—the harmonious development of the mental, moral, and physical powers. The imparting of the technical elements of a trade is not in itself an education, but to say this is not to deny that a great deal of the knowledge that lies at the foundation of every sort of trade and practical pursuit can be and ought to be laid under contribution for the building up of various sorts of educational courses.

The functions of liberal and technical education are thus clearly separated. Before entering upon a discussion of the meaning and content of a liberal education, the general aim of secondary education that a liberal education is to promote may be considered. Again it is illuminating to quote current English thought. The Schoolmasters' Yearbook, 1918, thus describes the purposes of secondary schools:

They have to foster learning as a necessary element in life, and this they do by giving instruction which aids the pupil in his efforts to understand the things about him. To realize this purpose the schools need a wide curriculum. Literature, science, mathematics, art, and practical work all have their place, since each in its own sphere helps to cultivate that power of interpreting life which is the result of sound education.

Similarly the Athenæum in endeavoring to combat what appeared to it and many others efforts on the part of employers united into a Federation of British Industries to direct education into vocational channels, sums up the needs of the day as follows (Mar., 1918):

But man can not live by bread alone. He is a member of a family, a trade-union, a club, a city, a nation, a church. He is a human personality, with something more than a pair of hands condemned to toil at the will of another. He has intellectual and esthetic taste (only too often cramped and undeveloped) and moral principles. He believes in liberty, justice, and public right, and goes to give his life for these things. The worker is much more than a worker; he is a citizen. And every citizen, regardless of his social position or wealth, has claims which are prior even to the claims of industry itself—claims of opportunities to enable him to fulfill his manifold responsibilities as a producer, as a member of various social groups from the family to the State. His responsibilities are no less if he be a ship's riveter than if he were a shipbuilder. The engine fireman is no less a citizen than the railway director or the railway shareholder.

The detailed definition of the content that should make up a liberal education depends on these points of view. Democracy will make more and more demands on the intelligence of its citizens, both as

individuals and as members of society. The school should prolong rather than restrict the opportunities for that general education that is the foundation of the well-being of man as an individual and as a citizen. Those who look into the future see that for the working classes a new era is opening up in which more leisure will be provided; it should be one of the functions of education to train for the enjoyment of that leisure. Further, the extension of the franchise will require a more general dissemination of education than hitherto. There is also a genuine and sincere belief that technical and vocational training will be improved if based on a broad general education, a belief that is shared both by teachers and specialists alike. Industrial and commercial success and progress, it is felt, will depend on well-trained and well-educated leaders rather than on the early specialization of boys and girls. Finally, it is not improbable that the importance of vocational training for the masses of industrial workers may be proved by the experience with such training during the war to have been exaggerated.

The question of educational values was raised soon after the outbreak of the war and discussion was bandied to and fro on the merits of this subject or that, now classics, now the sciences, and from time to time modern languages. For a time it seemed that no advantages could be claimed for one subject without disparaging another. It was many months before it was recognized that the problem involved was much broader than that of the value of this subject or that, and that no settlement could be obtained unless the larger view were taken and the question approached from the standpoint of the needs of the boy or girl to be educated. If any progress was to be made, the curriculum as a whole must be subjected to critical evaluation. This stage was not reached until the middle of 1916.

On February 2, 1916, a letter on the neglect of science, signed by a large number of eminent scientists, appeared in the Times. It was pointed out that the country had suffered checks during the war through lack of scientific knowledge among administrative officials, statesmen, and civil servants, and leaders in public and industrial life. In the history of the British Government Lord Playfair was the only scientist to become a cabinet minister. In general there was not enough knowledge of science to give an intelligent respect for it. Scientific method and scientific habit of mind would be essential to success in the period of reconstruction. At present science "does not pay" in most examinations, and few leaders in education are scientists. If science were assigned a greater value in the civil-service examinations, the subject would rise into its proper position and gain the respect necessary for national welfare. "Our desire is to draw attention to this matter, not in the interests of existing professional

men of science, but as a reform which is vital to the continued existence of this country as a great power." A meeting was held in London on May 3, 1916, at which resolutions were passed urging increased attention to science in educational institutions.

On the day following this meeting, May 4, 1916, a number of eminent men of letters and scientists issued a letter on "Educational Aims and Methods," urging the claims of humanities. They pointed out the danger that results of a war in which material means and technical skill are essential might be misleading.

> If in our reforms we fix our eyes only on material ends, we may foster among ourselves that very spirit against which we are fighting to-day * * *. Technical knowledge is essential to our industrial prosperity and national safety; but education should be nothing less than a preparation for the whole of life.

It is essential, therefore, to consider carefully the effect of sweeping changes proposed at a time of great stress. The purpose of education is broader than preparation for a vocation.

> It should introduce the future citizens of the community, not merely to the physical structure of the world in which they live, but also to the deeper interests and problems of politics, thought, and human life. It should acquaint them, so far as may be, with the capacities and ideals of mankind, as expressed in literature and art, with its ambitions and achievements as recorded in history, and with the nature and laws of the world as interpreted by science, philosophy, and religion. If we neglect physical science, we shall have a very imperfect knowledge of the world around us; but if we ignore or subordinate the other elements of knowledge, we shall cut ourselves off from aspects of life of even greater importance. Even physical science will suffer. Some of its most distinguished representatives have strongly insisted that early specialization is injurious to the interests they have at heart, and that the best preparation for scientific pursuits is a general training which includes some study of language, literature, and history. Such a training gives width of view and flexibility of intellect. Industry and commerce will be most successfully pursued by men whose education has stimulated their imagination and widened their sympathies.

A belief in intellectual training is more important than physical science, while scientific method is necessary not only in science proper but in all branches of education. The whole of civilization is rooted in the classics and can not be neglected by those who are interested in literature or government. "Greece and Rome afford us unique instances, the one of creative and critical intelligence, the other of constructive statesmanship." In the closing paragraph of the letter a way was opened for securing cooperation and harmony on the larger question of the meaning of a liberal education:

> In urging this we do not commit ourselves to defending the present system of classical education in all its details. Still less do we claim for it any artificial privilege. We cordially sympathize with the desire to strengthen the teaching of modern history, of modern languages, and of the literature of our own country. Further, we fully accept the importance of promoting scientific re-

search, or extending scientific instruction in schools where it is still inadequately provided, and of improving the quality of science teaching; and we desire to cooperate with the representatives of these studies in insuring them a due place in our national education. At the same time we would point out that much criticism of our schools seems directed against a past state of things and ignores reforms which have been already effected. It is sometimes forgotten that the teaching of physical science is compulsory in all State-aided secondary schools, that of Latin, and of course of Greek, in none.

In the following month, at the suggestion of the Historical Association, the principal organizations representing humanistic studies—the Classical, English, Geographical, Historical, and Modern Language Asociations—held a conference in Manchester, at which the following resolutions were passed:

(i) It is essential that any reorganization of our educational system should make adequate provision for both humanistic and scientific studies.

(ii) Premature specialization on any one particular group of studies, whether humanistic or scientific, to the exclusion of all others, is a serious danger, not only to education generally but to the studies concerned.

(iii) Humanistic education implies the adequate study of language and literature, geography, and history, which in each case should, at the appropriate stage of education, go beyond the pupils' own language and country.

(iv) The representatives of humanistic studies would welcome from the representatives of the mathematical and natural sciences a statement with regard to those studies similar to that contained in (iii).

(v) In all reform of education it must never be forgotten that the first object is the training of human beings in mind and character, as citizens of a free country, and that any technical preparation of boys and girls for a particular profession, occupation, or work must be consistent with this principle.

(vi) Subject to the above principles the associations concerned would welcome a comprehensive revision of national education from the point of view of present needs.

In response to this resolution the committee of the Association of Public School Science Masters, in October, expressed their agreement with the principles stated at the conference and sent the accompanying statement:

Natural science in education should not displace the "humanistic" studies, but should be complementary to them. In this capacity natural science meets two needs in particular:

1. *Search for truth.*—Imaginative power indicates new fields in which further knowledge of truth may be revealed; its subsequent establishment depends on accurate observation, with constant recourse to nature for confirmation. The one aim of natural science is, in fact, the search for truth based on evidence rather than on authority. Hence the study of the subject implies accurate observation and description and fosters a love of truth. The special value of natural science in the training of mind and character lies in the fact that the history of the subject is a plain record of the search for truth for its own sake.

2. *Utility.*—There are certain facts and ideas in the world of natural science with which it is essential that every educated man should be familiar. A knowledge of these facts assists men (*a*) to understand how the forces of nature may be employed for the benefit of mankind, (*b*) to appreciate the sequence of

cause and effect in governing their own lives, and (*c*) to see things as they really are, and not to distort them into what they may wish them to be. It is the business of natural science in education to bring this knowledge within the range of all.

This was followed by a letter in November from the Mathematical Association to the effect that:

The teaching committee of the Mathematical Association concurs with the Councils of the Classical, English, Geographical, Historical, and Modern Language Associations in the view that any reorganization of our educational system should make adequate provision for both humanistic and scientific studies; that premature specialization should be avoided; and that technical preparation for a particular profession should be conceived in such a spirit that it misses none of the essentials of a liberal education.

In reply to the invitation of the representative conference to make a statement as to the position of mathematical studies in schools, the Mathematical Association committee would submit that from a school course of mathematics the pupil should acquire—(1) an elementary knowledge of the properties of number and space; (2) a certain command of the methods by which such knowledge is reached and established, together with facility in applying mathematical knowledge to the problems of the laboratory and the workshop; (3) valuable habits of precise thought and expression; (4) some understanding of the part played by mathematics in industry and the practical arts, as an instrument of discovery in the sciences, and as a means of social organization and progress; (5) some appreciation of organized abstract thought as one of the highest and most fruitful forms of intellectual activity.

In the course of the autumn of 1916 a Council for Humanistic Studies was formed representing the British Academy and the five associations mentioned above. The council entered into communications with organizations representing natural science—the joint board of scientific studies of the Royal Society and a committee on the neglect of science for the purpose of arriving at a common basis for future action. As the result of a conference between the council and the joint board, the following resolutions were passed in January, 1917:

1. The first object in education is the training of human beings in mind and character, as citizens of a free country, and any technical preparation of boys and girls for a particular profession, occupation, or work must be consistent with this principle.

2. In all schools in which education is normally continued up to or beyond the age of 16, and in other schools so far as circumstances permit, the curriculum up to about the age of 16 should be general and not specialized; and in this curriculum there should be integrally represented English (language and literature), languages and literatures other than English, history, geography, mathematics, natural sciences, art, and manual training.

3. In the opinion of this conference, both natural science and literary subjects should be taught to all pupils below the age of 16.

4. In the case of students who stay at school beyond the age of 16, specialization should be gradual and not complete.

5. In many schools of the older type more time is needed for instruction in natural science; and this time can often be obtained by economy in the time allotted to classics, without detriment to the interests of classical education.

6. In many other schools more time is needed for instruction in languages, history, and geography; and it is essential, in the interests of sound education, that this time be provided.

7. While it is probably impossible to provide instruction in both Latin and Greek in all secondary schools, provision should be made in every area for teaching in these subjects, so that every boy and girl who is qualified to profit from them shall have the opportunity of receiving adequate instruction in them.

Subject to a few verbal amendments proposed by the executive committee of the joint board, these resolutions represent the present settlement of the function of the secondary school. In the words of a report[1] issued by Sir Frederic G. Kenyon on behalf of the Council for Humanistic Studies:

> It is not a little that the organizations which represent all the principal subjects of education, whether scientific or humanistic, should agree in deprecating early specialization, and should recognize the importance of opening the doors of all subjects to all pupils, and of facilitating their entrance into the paths most suitable for them. * * * All alike deprecate the conduct of education in a commercial spirit, and declare their faith in a liberal education as the foundation for all activities of mind and spirit in a civilized country.

A comparison of the above resolutions with the program laid down for secondary schools by the Board of Education (see p. 29) will indicate how closely these discussions represent the requirements of current practice. The effect of these discussions, together with the reports of the committees on the position of natural science and on the position of modern languages, will be to give greater reality to all the subjects in the schools and to build up a body of public opinion that will insist on their equal recognition. All the proposals for educational reconstruction that deal with secondary education concur with these resolutions which now represent the deliberate opinion of leaders in each of the subjects recommended, of statesmen, professional men, and men of affairs. The great task still remains of securing the teachers educated and trained for the new duties laid upon the schools. The activities and progress of the Teachers' Registration Council and the Government inquiry into the whole queston of salaries are of great promise for the future status of the teachers. The future has still before it the consideration of the appropriate kind of training that must be devised.

The aim of the secondary school is to impart a liberal education, the scope of which is now defined and permits such flexibility as is demanded by the needs and capacities of the individual. A general education will be provided for pupils between the ages of 12 and 16, and specialization will be based on this foundation. These will be incorporated in the university and other examinations, and the equal recognition of the subjects included in the resolutions will be pro-

[1] Kenyon, Sir Frederic G. Education, Scientific and Humane. (London, 1917.)

moted in the reconstituted examinations for the higher branches of the Civil Service.[1] There will be removed from the secondary schools that reproach to which the Education Reform Council drew attention in its report:

> At the same time they are convinced that in the general system of these schools the interests of the many have hitherto been largely sacrificed to the special culture of the clever few, and that generally speaking the esthetic, observational, manual, and even literary elements of education have been starved to provide for an excessive and wasteful, because premature and inappropriately methodized, attention to foreign languages, especially Latin.

It is now clearly established and accepted after a struggle of nearly 300 years that classical monopoly is incompatible with the extension of educational opportunities. More secondary schools and easier access to them inevitably demand a broader definition of a liberal education than has hitherto prevailed, and such an education to be democratic must be subject to adaptation to the abilities and interests of the individuals who are to enjoy it. Referring to their regulations for secondary schools the Board of Education state that they—

> allow and encourage much elasticity in curricula, subject only to the fundamental principle that the school course make effective provision for the development of bodily and mental faculties on broad and human lines in the pupils who will be the citizens of the future.

It remains for the future to prove whether England, in thus building her hopes on a broad, liberal education and on a curriculum humanized in all its branches and in defying the demands of her materialists who in the name of patriotism are urging vocational education, is destined to be proved right or wrong. The upbuilding after the war—

> is to be economic as well as spiritual, but those who think out most deeply the need of the economic situation are most surely convinced that the problems of industry and commerce are at the bottom human problems and can not find solution without a new sense of "cooperation and brotherliness."[2]

SALARIES AND PENSIONS.

SALARIES OF ELEMENTARY SCHOOL-TEACHERS.[3]

The problem of maintaining an adequate supply of elementary-school teachers was already becoming serious in England and Wales before the war; the outbreak of the war and its continued duration have only served to intensify the crisis. A large proportion of the

[1] See Report of the Treasury Committee on Civil Service, Class I, Examination. (Cd. 8657, 1917.)

[2] Paton, J. L. The Aim of Educational Reform; in Benson, A. C., Cambridge Essays on Education (Cambridge, 1918).

[3] A portion of this section appeared in School and Society, Vol. VII, pp. 773ff, and is here reprinted by the courtesy of the editor.

men had joined the army, and many women had been attracted to occupations which appeared to be more obviously connected with the war activities and to offer higher remuneration than teaching.

At the same time the war imposed additional burdens, willingly assumed but none the less demanding sacrifices, on the teachers; these took the form of larger classes, extra work in the school, voluntary war work of different kinds, and so on. Not the least of the hardships was the depreciation of salaries due to the rising cost of living which by 1917 had increased about 80 per cent above that of 1914. Education authorities were confronted with several problems—inability to retain teachers in the face of more attractive opportunities elsewhere, inability to secure an adequate supply of candidates ready to undertake several years of training at a time when remunerative occupations were open to them without training, and inability to find additional resources when the public purse was otherwise being drained to meet other demands.

The first response was to grant bonuses on salary, which never went beyond an annual addition of 10 per cent, and rarely affected salaries above $1,000 or $1,250 a year. Such increases were of course quite incommensurate with the needs of the time, especially when skilled workmen could command as much as $75 a week, and boys still under 18 about $15 a week for unskilled services.

In only one important respect was the stringency relieved by a Government prohibition against the increase of rents. The bonus system prevailed until about the middle of 1917, when the Government came to the rescue with an addition to the educational budget of about $18,000,000, which was specially earmarked for salaries. At the same time the Board of Education issued a minute recommending that the minimum salary for women teachers in elementary schools should be $450 and for men teachers $500. The effect of the additional Government grant was to stimulate the establishment of new scales of salary.

In the meantime the Government had, in June, 1917, appointed a departmental committee to inquire into the principles which should determine the construction of scales of salary for teachers in elementary schools, and another committee to make a similar inquiry into the salaries of secondary school teachers. The first committee issued its report in February, 1918.[1] The report is based on three main principles:

1. That "authorities, in constructing a scale should aim at obtaining a constant supply of suitable recruits, at retaining them while other careers are

[1] Report of the Departmental Committee for Inquiring into the Principles which should determine the Construction of Scales of Salary for Teachers in Elementary Schools, Vol. I, Report Cd. 8939; Vol. II, Summaries of Evidence and Memoranda, Cd. 8999. (London, 1918.)

still open to them, and at securing service of the desired quality from those who make teaching their life work."

2. That the scale "shall provide them with a reasonable assurance of a remuneration that will enable them to live appropriately without embarrassment, and that they may have a fair chance of advancement to posts of greater importance and emolument."

3. That "as authorities, in framing their scales are taking part in the work of establishing the teaching service of the country on a basis conducive to the efficiency of the system of national education, they should proceed upon a common basis of principles."

The committee, while accepting the administrative advantages of a salary scale, recognized that special consideration must be given to rewarding teachers of exceptional ability, to dealing with teachers who drift into a rut, to withholding increments from those teachers who are reported to be inefficient. It further considered the question of equal pay for men and women, for which a strong agitation has been launched by women teachers throughout the country. Finally, attention was given to removing some of the inequalities in salaries paid to teachers in rural and urban areas.

The chief principle adopted for the construction of salary scales was that a scale with smaller increments for the early years of service, followed by larger increments leading up to a salary adequate for increasing family responsibilities, and then with further prospects until retirement, is superior to a sharp, steep scale leading early up to a maximum, or a long and gradual scale which would not yield an adequate salary when responsibilities were greatest. For example, in the case of men certificated teachers annual increments are suggested for not less than 12 years, followed by increments at intervals of not more than 3 years for a further period of about 10 years, and for women certificated teachers annual increments for not less than 8 years, followed by increments at longer intervals as in the case of men. Uncertificated teachers should have a short scale covering a period of 4 to 6 years and not rising above the minimum for women certificated teachers, with discretionary increments in cases of individual merit.

Owing to the opposition of the teaching body, the committee was unable to recommend that increments should depend solely upon merit, and suggested that increments be automatic except in the case of definite default or willful neglect, with additional rewards for exceptional merit. The committee was unable to accept the principle of equal pay for men and women, partly because a scale of salaries adequate for women is under present circumstances inadequate for men, and partly because it is essential to attract and retain suitable men in the profession. Accordingly, it advocated the principle that the minimum salaries for both men and women should be approxi-

mately the same, but that the maximum for women should not be less than three-fourths of the maximum for men.

With reference to rural and urban teachers the committee was of the opinion that service in the rural districts should be made financially attractive and that accordingly salaries should be only a little lower than in urban areas. While the committee did not attempt to establish a national scale, it offered for consideration a number of illustrative scales, and emphasized the importance of avoiding such diversity that the larger school systems would draw teachers away from the smaller.

The following illustrations of scale making for certificated teachers were offered:

Men.—(1) Minimum $500, rising by annual increments of $25 to $800 in the thirteenth year of service, and then by triennial increments of $50 to $950 in the twenty-second year of service.

(2) Minimum $500, rising by annual increments of $25 to $700 in the ninth year of service, and then by annual increments of $50 to $900 in the thirteenth year of service, and then by triennial increments of $50 to $1,050 in the twenty-second year of service.

(3) Minimum $500, rising by annual increments of $25 to $575 in the fourth year of service, then by annual increments of $50 to $1,050 in the fourteenth year of service, and then by triennial increments of $50 to $1,200 in the twenty-third year of service.

(4) Minimum $500, rising by annual increments of $25 to $600 in the fifth year of service, then by annual increments of $50 to $1,150 in the sixteenth year of service, and then by triennial increments.

(5) Minimum $500, rising by annual increments of $50 to $1,200 in the sixteenth year of service, and then by triennial increments of $100 to $1,500 in the twenty-fifth year of service.

Women.—(1) Minimum $450, rising by annual increments of $25 to $650 in the ninth year of service, and then by triennial increments of $50 to $750 in the thirteenth year of service.

(2) Minimum $450, rising as in (1) to $650 in the ninth year of service, and then by one increment to $700 in the tenth year of service, and then by triennial increments to $850 in the nineteenth year of service.

(3) Minimum $450, rising by annual increments of $25 to $600 in the seventh year of service, then by annual increments of $50 to $750 in the tenth year of service, and then by triennial increments of $50 to $900 in the nineteenth year of service.

(4) Minimum $450, rising by annual increments of $25 to $550 in the fifth year of service, and then by annual increments of $50 to $750 in the eleventh year of service, and then by triennial increments of $50 to $1,000 in the twentieth year of service.

(5) Minimum $450, rising as in (4) to $550, then by annual increments of $50 to $900 in the twelfth year of service, and then by triennial increments of $100 to $1,200 in the twenty-first year of service.

The existing situation is indicated in a return on teachers' salaries in public elementary schools issued by the Board of Education in 1917. Of 36,827 certificated men teachers, only 18,332 were receiving salaries over $750 a year, while 7,040 received over $1,000 a year.

2,066 of over $1,250 a year, and only 1,866 over $1,500 a year; 2,629 received less than the minimum of $500 a year prescribed for men. Of 77,139 certificated women teachers, 17,832 received less than the minimum of $450 prescribed, and 32,314 less than $500 a year, while 20,573 received more than $600 a year, 7,603 over $750, and only 1,269 were in receipt of more than $1,000 a year. The certificated teachers represent the highest paid elementary school teachers. The situation is much worse in the case of uncertificated teachers, for of 3,546 men, only 128 received more than $500 a year, and of 35,979 women only 39 received more than this sum. The proposals contained in the present report will, if carried into practice, not only raise the minimum salaries considerably above the present minimum rates, but will offer teachers the prospect of a maximum of more than twice the present average. To these prospects must be added the benefits of the superannuation act of 1918.

SALARIES FOR SECONDARY SCHOOL TEACHERS.

The inadequacy of salaries paid to teachers in secondary and other schools of similar grade led in 1917 to the appointment of a departmental committee—

> To inquire into the principles which should determine the fixing of salaries for teachers in secondary and technical schools, schools of art, training colleges, and other institutions for higher education (other than university institutions), due regard being had to such differentiation in respect of locality, duties, qualifications, sex, and other relevant circumstances as is consistent with or necessary for the organization of teaching service throughout the country on a system conducive to the efficiency of national education.

The commission, under the chairmanship of Sir H. L. Stephen, after taking the evidence of officials of the Board of Education and local education authorities, and of teachers and their associations, issued its report[1] in 1918. The report considers the character of the different types of institutions involved, discusses the principles determining the fixing of salaries, and includes a memorandum on the institutions falling within the terms of reference. The chief part of the report is devoted to a discussion of salaries in secondary schools. The salary question assumes particular importance at a time when there is urgent need for attracting and developing a strong teaching force. In spite of the fact that the institutions considered represent a great degree of variation in sources of maintenance and character of government, national standards must be maintained. "A national system of education may be indefinitely divided and subdivided; but it must always be regarded as an organic unity the

[1] Report of the departmental committee for inquiring into the principles which should determine the fixing of salaries for teachers in secondary and technical schools, schools of art, training colleges, and other institutions for higher education (other than university institutions), Cd. 9140. Summaries of Evidence, Cd. 9168. (London, 1918.)

welfare of which depends upon the welfare of every recognizable division or subdivision." The increasing competition with commerce, industry, and the public services, all of which offer better opportunities than the teaching profession, which at present holds out prizes only for the few, renders the need of providing attractive inducements to prospective candidates more urgent than ever. At present, in the secondary schools that come under the survey of the Board of Education, only 460 out of the 1,050 institutions have established scales of salary. The majority of the 460 schools are under public authorities, thus leaving a vast number of small endowed and private schools with inadequate provisions for the financial welfare of teachers.

The advantages of scales of salaries outweigh any disadvantages that they may involve. A scale assures to the teachers certain financial prospects and defines the liabilities of the school authorities. It relieves teachers of the perpetual anxiety of financial embarrassment, while securing a larger and better supply of candidates. The chief disadvantages, such as the unfairness of treating all teachers alike, and the lack of stimulus for the exceptionally able, can be offset by introducing elasticity in the administration of the scale and establishing posts of responsibility. In order to secure as homogeneous a body of teachers as possible for any one branch of education, possessing similar qualifications, academic and professional, a national scale would be the ideal to be attained. In view of the great variations in the organization and administration of schools, the commission was not able to advocate a national scale. The units of scales must necessarily remain the same, some applying only to a single school, others to all the schools maintained by a local authority. A national scale prescribed by a central authority would be inconsistent with existing arrangements. The imposition of a national scale is impossible without a national guarantee, which the commission was not empowered to discuss. Of three plans suggested, namely, (1) the prescription of a complete scale with initial salary, increments, and maximum; (2) the establishment of a minimum initial salary with a minimum to be reached at one point at least later in the scale; and (3) the prescription of only a minimum salary, the commission selected and advocated the second. This plan the commission considers will provide a certain common measure among all scales, leaving local units to frame such steps on the scale and to provide such maxima as suit their circumstances. There is very little doubt that this recommendation will not be considered satisfactory, and it may be pointed out that the commission's suggestion was contrary to the opinions presented to it, for "most of the witnesses who have appeared before us, and have considered this matter, are in favor of such

a scale (national) being introduced in all secondary schools that receive public money."

In dealing with the question of equal pay for both sexes, for which justification may be found by some in the requirement of similar qualifications and efficiency from both men and women teachers, and in the fact that needs of both may be the same in meeting certain personal obligations, in providing for leisure and self-improvement, and in saving for old age, the commission is of the opinion that there must be differentiation of scales on the basis of sex. At present "a salary that will attract a woman will not necessarily attract a man of similar qualifications." Since salaries must be sufficiently high to attract and retain the services of qualified teachers, the fact must be taken into consideration that there are more openings in commerce and industry, and in the professional and public services for men than for women, that as a general rule men are likely to give longer service, and that, while the prospect of marriage may be the same for both sexes marriage for the man implies the assumption of new financial responsibilities. The commission considers that "under present economic and social conditions the principle of equality of pay for the two sexes would lead to the one being underpaid or the other overpaid." It is accordingly suggested that scales of salary should be approximately the same in the initial stages for both men and women, but that differences imposed by differences of economic and social status should be introduced at later stages.

The construction of scales of salary gives rise to the question of their length and the frequency of increments. A national scale should imply a minimum initial salary rising by annual increments to a substantial salary at the age of 32 or 33, and a maximum at the age of 42 or 43. It is also suggested that at some intermediate point in a scale there should be another minimum that can be attained by most teachers. A review of past services is recommended before teachers are advanced to the highest point of a scale. The initial salary should not be so high as to render the maximum unattractive, and the maximum should be attainable at an age when it will serve to retain experienced teachers, and leave them some years for its enjoyment. The increments should be granted automatically, subject to satisfactory service and conduct. Where an increment is withheld, a teacher should be informed of the cause and be given an opportunity to defend himself. In order to meet cases of special ability, whether in teaching or administration, scales should be sufficiently elastic to enable authorities to offer suitable financial recognition of special merit. Additional salaries must be provided for assistant principals and heads of departments. Another element of flexibility that it may be desirable to consider may arise out of

differences in local conditions in such matters as the cost of living and rents. Other differentiations that will necessarily arise under existing conditions may follow from differences in academic and professional training and length of experience. The commission holds that for appointment in a secondary school a university degree and one year of professional training are essential. Other matters, such as differentiation on the basis of the subject taught, or the character or size of a school, should not, in the opinion of the commission, lead to variation in scales. So far as possible, in the interests of national education, differences between different schools in the establishment of salary scales should be eliminated. The commission strongly urges the more general establishment of "grace terms" or leave of absence on full pay, for purposes of study or research, without affecting the continuity of the scales or the future prospects of teachers.

These recommendations are not intended to apply to the salaries of principals. For these, personal scales reaching a high maximum within a short time should be established. Here the size of the school and character of the work to be done should be taken into consideration. The commission wisely deprecates the practice of paying principals by capitation fees and the system by which principals or assistants make a profit by taking boarders.

The standards advocated for the establishment of salary scales for secondary school teachers are also recommended for the other institutions that come within the terms of reference, in so far as the same qualifications are needed as in the secondary schools. Where special factors, such as competition with opportunities in commerce and industry in the case of certain teachers in technical and art schools, must be taken into account, personal scales are advocated.

The following is an illustrative scale for assistant masters in secondary schools:

Salaries of assistant masters in secondary schools.

Years of service for the purposes of the scale.	Approximate age.	Salary.	Years of service for the purposes of the scale.	Approximate age.	Salary.
1	22–23	$900	14	35–36	$1,725
2	23–24	950	15	36–37	1,800
3	24–25	1,000	16	37–38	1,875
4	25–26	1,050	17	38–39	1,950
5	26–27	1,100	18	39–40	2,025
6	27–28	1,150	19	40–41	2,100
7	28–29	1,200	20	41–42	2,175
8	29–30	1,275	21	42–43	2,250
9	30–31	1,350	22–28	43–60	At maximum.
10	31–32	1,425			
11	32–33	1,500			
12	33–34	1,575	Total		70,275
13	34–35	1,650	Average annual salary		1,850

The scale here recommended may be compared with the average salaries prevalent in two types of secondary schools in receipt of grants from the treasury.

Average salaries in two types of secondary schools.

Teachers and principals.	Council schools.		Foundation schools.	
	Number.	Average salary.	Number.	Average salary.
Assistant teachers:				
Men	1,655	$835	2,275	$875
Women	2,136	635	1,355	625
Principals:				
Men	221	1,950	330	2,465
Women	390	1,435	93	1,990

In addition to salary scales, which will probably be put into effect under the broad powers intrusted to the Board of Education, secondary school-teachers in grant-earning schools are eligible to the pension benefits provided under the superannuation act of 1918.

TEACHERS' SUPERANNUATION ACT OF 1918.

The urgent need of securing men and women to promote that development of education for which the act prepares the way, has not only directed attention to the question of salaries, but has prompted the Government to introduce a system of pensions for all grades of teachers. Whatever may be the result of the recommendations of the committees appointed to consider salaries, a pension system has already been established by the school-teachers' (superannuation) act, passed in November, 1918. The main purpose of the act is to attract men and women to the teaching profession by giving them "that sense of elasticity and freedom from care, which is essential to the proper discharge of their duties." By extending the benefits of the act to teachers in all schools aided by the State, the act will also promote the unity of the profession, and will to this extent supplement the efforts of the Teachers' Registration Council. Combined with adequate salary scales, the pension system should contribute to an improvement in the qualifications of teachers.

The act provides benefits for teachers in all grant-aided institutions below the grade of universities or university colleges. These include elementary, secondary, and technical schools, training colleges for teachers, and other institutions in receipt of aid from the State. Teachers will become eligible for the superannuation allowance at the age of 60 after 30 years of qualifying service, of which at least 10 years must be recognized service in a grant-aided school. The age

of retirement is the same for men and women, but in the case of women who withdraw from service to marry and later return to teaching, the period of qualifying service is reduced to 20 years. The distinction between qualifying and recognized service permits migration to and from grant-aided schools to schools not on the grant list, but all service in the following types of schools is excluded: (*a*) Schools conducted for private profit, (*b*) schools not open to inspection by the Board of Education, and not shown to the satisfaction of the board to be efficient; (*c*) schools able out of their own resources to maintain a satisfactory pension scheme, and (*d*) schools which do not satisfy such other conditions as may be prescribed as necessary or desirable for securing the public interest.

The amount of the retirement allowance is one-eightieth of average salary for each year of recognized service, or one-half of the average salary, whichever is the less. In addition a gratuity will be given in a lump sum of one-thirtieth of average salary for each year of recognized service, or one and a half times the average salary, whichever is the less. Disability allowances of one-twelfth of average salary for each year of recognized service will be paid after 10 years of service to teachers incapable of further service by reason of infirmity of mind or body. In the case of death after five years of recognized service a death gratuity will be paid to the legal representatives of a deceased teacher of an amount not exceeding the average salary; where a teacher dies after retirement without having received an amount equal to his average salary on account of his superannuation allowance and the additional allowance, the board may grant to his legal representatives a gratuity not exceeding the difference between these two sums.

The act abolishes the deferred annuity system under the acts of 1898 to 1912, but annuities will be paid in respect to contributions already made and teachers are given the option of continuing their contributions or of coming under the new scheme. Local pension schemes are similarly abolished and contributions are to be returned to the teachers, unless they desire to forego the benefits of the act.

The administration of the act is in the hands of the Board of Education, which is empowered to frame rules for this purpose. The board may refuse or reduce allowances in cases of misconduct of teachers. Its decisions on the application of the act are final. In the words of the act:

> Nothing in this act shall give any person an absolute right to any superannuation allowance or gratuity, and, except as in this act provided, the decision of the board on any question which may arise as to, or which may affect, the application of the act to any person, or the qualification for any superannuation allowance or gratuity, or the amount of any superannuation allowance or gratuity, or any questions which may arise as to the amount of the average salary of any teacher shall be final.

In thus establishing a noncontributory pension system Mr. Fisher has departed from the tendency which has been very generally accepted in the establishment of local pension systems in Great Britain, in many parts of the British Empire, and in the United States. It is estimated that the cost of the scheme in about 10 years will be $10,000,000 a year, but as no actuarial investigation has been made, this figure is nothing more than an estimate, which is particularly dangerous at a time when salary rates are changing and show an upward tendency. However, the Government is protecting itself by the provision that there is "no claim to superannuation allowances or gratuities as of right." As a measure for meeting the immediate demand for teachers the act will undoubtedly serve this purpose, as it will also tend to promote unity among teachers, and raise the standards of instruction in schools, service in which is excluded under the act. The history of other noncontributory pension systems does not, however, offer a sound guaranty of the future success of the present act.

ADULT EDUCATION.

Of the many reports on education that have appeared during the war period, none goes more thoroughly into the problem and none is more significant than the interim report of the committee on adult education, which was appointed by the Minister of Reconstruction, "to consider the provision for, and possibilities of, adult education (other than technical or vocational) in Great Britain, and to make recommendations." Reaching the conclusion that industrial and social reforms are necesary to make adult education possible and effective, the committee issued the present interim report on industrial and social conditions in relation to adult education.[1]

The committee points out that "there is a wide and growing demand among adults for education of a nonvocational character," accompanied among the working classes by considerable suspicion of "technical" education. The motives underlying the demand for education are based partly "upon a claim for the recognition of human personality," partly upon a desire to become "better fitted for the responsibilities of membership in political, social, and industrial organizations." The new problems that will confront democratic societies everywhere in all branches of organized life will demand intelligent participation on the part of men and women of all classes, and since many of these problems are of such a nature that they can be grasped only after experience with the world, the committee is of the opinion that "facilities for adult education must therefore be regarded as permanently essential, whatever developments there may be in the education of children and adolescents."

[1] Committee on Adult Education, Interim Report. Industrial and Social Conditions in Relation to Adult Education. Cd. 9107 (London, 1918).

Although a discussion of the question of adult education is reserved for a subsequent report, a general survey of the existing facilities is presented. These cover a remarkable array of activities and include besides the well-known University Extension Lecture System, the University Tutorial Class Movement, the Workers' Educational Association, Ruskin College and the Labor College, a number of organizations like the Adult School Movement, the Cooperative Societies' educational work, working men's colleges, clubs, summer courses, and libraries, as well as the more formal work of the local education authorities. The war has stimulated an interest in the historical background and causes of the war and in the problems of reconstruction. But extensive as the facilities have been, their reach has not been universal. "What is needed is some organization sufficiently comprehensive and systematic to bring facilities for higher education within the reach of the inhabitants of every town and village in the country."

The most significant and valuable contribution of the report is the analysis of the industrial and social conditions that militate against the effectual operation of a system of adult education, however well organized and financed. The survey of these conditions inevitably leads to recommendations which, if accepted, may alter the whole face of industrial and economic life in England. The report presents a treatment of educational politics that is altogether too rare and infrequent. Excessive hours of work, overtime, the shift system, and night work are all obstacles that must be overcome before adequate consideration can be given to the problem referred to the committee. "From the point of view of education and of participation in public activities (which we regard as one of the most valuable means of education)," declares the committee, "we are of opinion that one of the greatest needs is the provision of a greater amount of leisure time; this is the more necessary because of the increasing strain of modern life." A shorter working day will go far to protect the worker against the worst consequences of monotonous toil, but this should be supplemented by alternating forms of employment and opportunities for the exercise of initiative. "The more industry becomes a matter of machinery, the more necessary it becomes to humanize the working of the industrial system." With the improvement of these conditions there still remains the problem of coping with heavy and exhausting work, whose depressing effects can be increasingly counteracted by the introduction of mechanical devices, and the prevalence of which, if such conditions can not be ameliorated, would not be tolerated in the light of adequate publicity. The introduction of a reasonable holiday without stoppage of pay for all workers in town and country, the committee

believes, "would have a beneficial effect upon the national life." Finally, the fear of unemployment which—

> hangs like a heavy cloud over so many breadwinners brings a sense of insecurity into the life of the worker and deprives him of all incentives to take a whole-hearted interest in the various activities which are a necessary accompaniment of a complete life.

The progressive increase in productivity that has characterized the development of industry in the last generation has resulted in specialized, mechanical, and monotonous labor, with the consequent stunting of the creative impulse and of the spirit of craftsmanship and the deprivation of opportunities for self-expression. These conditions react on human personality in so far as "the present industrial system offers little opportunity for the satisfaction of the intellectual, social, and artistic impulses." The committee accordingly urges the need for a new industrial outlook:

> Adult education and, indeed, good citizenship, depend in no small degree, therefore, upon a new orientation of our industrial outlook and activities. Improved conditions and the diffusion of responsibility for the proper conduct of industry will strengthen the need for educational opportunities. In so far as that need is fulfilled, industry will gain by a more effective "industrial citizenship," and will itself become more truly educative. Thus increased opportunities for adult education and the stimulus of a freer and finer industrial environment are correlative and help to develop each other. Education is to be measured essentially in terms of intellectual accomplishment, power of esthetic appreciation, and moral character, and these have little or no opportunity for realization except through a harmonious environment. Nor is the environment likely to be substantially modified except in response to the higher ideals of social life, stimulated by a more prolonged and widely diffused education.

Addressing itself to the problem of improving the environment, the committee emphasizes the importance of the preparation of schemes of housing, town planning, and public health by the cooperation of experts and representatives of the people for whom such schemes are intended, especially women, to whom an adequate scheme of housing reform will bring an improvement in conditions without which they will be unable to play their new part in public affairs. For the improvement of rural life, measures are needed beyond the necessary improvement of labor conditions. A communal organization that will promote vigorous intellectual and social life in the country districts is essential. To this end the committee recommends the provision of a hall under public control with a village institute providing for many-sided activities as the ideal to be aimed at.

In conclusion, the committee is under no delusions as to the possibility of putting its recommendations into early practice. It does draw attention to the fact that at this turning-point in England's

national history "it is in our power to make the new era one of such progress as to repay us even for the immeasurable cost, the price in lives lost, in manhood crippled, and in homes desolated." The war has generated a new spirit which must be utilized immediately as a foundation for the future.

> We have awakened to the splendid qualities that were latent in our people, the rank and file of the common people, who before this war were often adjudged to be decadent, to have lost their patriotism, their religious faith, and their response to leadership; we were even told they were physically degenerate. Now we see what potentialities lie in this people and what a charge lies upon us to give these powers free play. There is stirring through the whole country a sense of the duty we owe to our children, and to our grandchildren to save them not only from the repetition of such a world war and from the burdens of a crushing militarism, but to save them also from the obvious peril of civil dissension at home. We owe it also to our own dead that they shall not have died in vain, but that their sacrifice shall prove to have created a better England for the future generation.

EDUCATIONAL RECONSTRUCTION AND PUBLIC OPINION.

The dislocation caused in the social, economic, and educational life of the country by the outbreak of the war has already been mentioned. For a time events of larger moment that were happening in France tended to overshadow the discussion of domestic problems. In the attempts to understand the German enigma, however, it was inevitable that attention should be turned to the German educational system and that comparisons should be instituted between that and the English. It was not many months before a fierce controversy broke out between the classicists and the scientists in which the advocates of modern language studies soon joined. But the dissatisfaction that began to find voice was not confined to higher education; it spread very naturally to the elementary schools and expressed itself in criticism of the school attendance regulations, of the early exemptions, of the lack of advanced work in the upper grades, and particularly of the absence of provision for the large class of boys and girls who are allowed to drift after leaving the elementary schools. The dissatisfaction and criticism were not new; they had already been heard before the war; but as soon as it became clear that the war was one of conflicting ideals, they received at once a new stimulus and a new focus or objective. The shortcomings of English education began to be measured by their adequacy for training healthy, moral, and intelligent citizens of a democracy. In discussing the "Outlook for 1914" the Times Educational Supplement in January of that year wrote:

> Like English poetry and English painting, our education is astir with new ideas. These new ideas are not all of one pattern, but often discordant with one another, the offspring of different stocks, and as diverse as the roots from

which they spring, though novel in their combinations and sometimes one-sided in their emphasis.

The war helped to furnish a rallying and unifying point for the new ideas and stimulated a widespread interest in education which was not present even three months before the outbreak of the war, and certainly not in 1911, when Mr. Runciman presented the school and continuation class attendance bill, or when the several efforts were made to abolish the half-time system.

It was less than a year after England's entrance into the war when discontent and criticism began to make way for the discussion of a constructive program. In May, 1915, the Times Educational Supplement propounded the question, "How can the educational institutions of the country be molded and developed to fit the childhood of the nation to meet wisely the problems of the Great Peace?" and in the same month Mr. Pease, shortly before retiring from the office of president of the Board of Education, emphasized the urgent need of longer schooling, greater opportunities, and closer relations between scientific research and industry. It began to be generally accepted that the appointed hour for reform had arrived. "If we are to face the future with any confidence after this exhausting war," wrote the Times, "we must face it as an educated people. We shall not be able to afford to waste the efficiency of a single English child." By the close of 1915 the reform movement was in full swing, and by the middle of the following year the Times was able to report that "it is certain that there is not now a place in England where educational affairs are considered that is not agog with the demand for reform."

The consideration of plans for educational reconstruction was not confined to the teaching profession. The problem occupied the attention of leaders of the working classes, local and national trade-union bodies, manufacturers and employers, and the public in general. Early in 1916, the Athenaeum, hitherto devoted almost exclusively to literature, changed its character and dedicated its pages to the consideration of the broader phases of reconstruction. Later in the same year the Times Educational Supplement, until then a monthly magazine, decided to appear weekly "in the hope of enabling the public, which is now bent upon educational reform, to take an instructed part in the process."

The Trade-Union Congress, meeting in Birmingham early in September, 1916, passed resolutions protesting against the employment of children in agricultural work, factories, and workshops, and against any reduction in the expenditure on education, and pledged itself to support all measures to secure a higher standard of education for all children. The British Labor Party, in the program of reconstruction issued at the close of 1917, emphasized the demands

for health, leisure, education, and subsistence, and urged the application of national funds "for the education alike of children, of adolescents, and of adults, in which the labor party demands a genuine equality of opportunity, overcoming all differences of material circumstances." The general secretary of the Workers' Educational Association, Mr. J. M. Mactavish, had already given a more detailed definition of these demands in a pamphlet on What Labor Wants from Education:

> Labor wants from education health and full development for the mind, fineness for the feelings, good will toward its kind, and, coupled with this liberal education, such a training as will make its members efficient, self-supporting citizens of a free self-governing community. Such an education and only such an education will meet the needs of the individual, the class, the nation, and the race.

Mr. Fisher, appreciating the influence of labor in the development of public opinion on education, paid a tribute to the leaders in the introduction to his Educational Reform Speeches.[1] "The leaders of the labor world, having discovered education some time since, are now communicating the message to those below."

To these expressions of faith on behalf of labor there deserve to be added the views of the more enlightened employers. After the introduction of Mr. Fisher's first bill Messrs. Tootal, Broadhurst, Lee Co. (Ltd.), of Manchester and London, issued four pamphlets[2] urging the support of the bill. The platform that they insisted upon was the following:

> We believe that the vast majority of the nation favor the main proposals of the new education bill, viz, 1. Whole-time education up to the age of 14. 2. Compulsory part-time education up to 18.
>
> Over and above these proposals a straight road to the university should be open to those who desire the fullest development of their intellect. Only by such provision for complete knowledge of the arts and sciences can we as a nation maintain our place in the world.
>
> It is important for the opponents of the bill to realize that the two proposals we have mentioned are regarded by educationists as merely a first step to a real system of democratic education.
>
> They are by no means exhorbitant proposals. They represent in fact a minimum of democracy's demand for a fuller life. They do nothing more than give a reasonable chance to the children of this country to make the best of themselves.

Local reconstruction committees began to be formed and a large number of professional associations devoted themselves to the task of drafting plans of reforms, while the daily press gave increasing attention to the subject. "Nothing has been more remarkable," said

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[1] Fisher, H. A. L. Educational Reform Speeches (Oxford, 1918).

[2] These appeared first as advertisements in the country's press. They were published under the title "The Great Decision," and included four pamphlets: Now or Never, Our Success or Failure, A Just Complaint, and A First Step. Messrs. Cadbury, of Bournville, followed a similar policy.

Mr. Fisher in introducing his first educational estimate in 1917, "than the attention which has recently been paid, both in the public press and on public platforms, to the subject of education."

Among the professional associations the following issued proposals for educational reconstruction:

Assistant Masters Association (Educational Policy).
Directors and Secretaries for Education (Toward an Educational Policy).
Teachers of Domestic Subjects (Memorandum).
Education Committees (Report of Executive).
Education Officers' Association (Policy).
Education Reform Council (Education Reform).
Headmasters' Association (Educational Policy).
Headmistresses Conference.
British Science Guild (National Education).
Teachers' Registration Council (Resolutions).
Technical Institutions Association.
Workers' Educational Association (Educational Reconstruction).
National Union of Teachers (Educational Progress).
London County Council Education Committee (Education after the War—Government Grants and Educational Development).

The suggestions and recommendations of some of these bodies received wide publicity and consideration. Many of these recommendations, as well as the proposals contained in a draft bill, which appeared in the Times Educational Supplement of March 15, 1917, were embodied in the act as finally passed.

The Government in the meantime was not neglecting the subject of education. It was recognized that the reform of education could not be considered in isolation but must fit in with the general plan for national reconstruction. The subject of reconstruction was for a time intrusted to a committee consisting of members of the Cabinet, but it soon became clear that such a committee could not devote to the problem the attention that it deserved. In March, 1917, a new committee of reconstruction was appointed with the Prime Minister as chairman and Mr. E. S. Montague as executive head. Four months later the province of the committee was further expanded and under the new ministries act of 1917 a ministry of reconstruction was established. According to the Report of the War Cabinet, for 1917, page xix—

> The scope of its activities covers almost every branch of the national life. It has been concerned not only with the problems which will arise immediately on the return of peace, such as the demobilization of the armies and reconversion to peace production of many industries now making war material; it has also to consider education, the supply and distribution of raw material, a great scheme for the better housing of the people both in town and country, labor and industrial problems, transportation, national health, and so forth.

For a time it was expected that a royal commission would be appointed to consider proposals for educational reform, but at the end

of June, 1916, it was announced that the problem of education would come within the scope of the cabinet committee of reconstruction. Education, however, constituted but one of 15 different branches of activities, the consideration of which was intrusted to 87 distinct committees.[1] It was clear that even the adoption of this course would involve delay, and it does not appear that this plan was eventually carried out, with the exception that a number of separate problems were left for consideration by the section of the Ministry of Reconstruction in charge of education. The following committees were established and placed under this ministry (the appointing authorities and the dates of the reports, if they have already been issued, are given in parentheses):

Royal Commission on University Education in Wales. (The Crown; Cd. 8991 and Cd. 8993; 1918.)
Adult Education Committee. (Ministry of Reconstruction; Cd. 9107; 1918.)
Committee on Juvenile Education in Relation to Employment after the War. (Board of Education; Cd. 8512 and Cd. 8577; 1917.)
Committee on the Teaching of Modern Languages. (The Prime Minister; Cd. 9036; 1918.)
Committee on the Teaching of Science. (The Prime Minister; Cd. 9011; 1918.)
Committee on Principles of Arrangements Determining Salaries of Teachers in Elementary Schools. (Board of Education; Cd. 8939; 1918.)
Committee on Principles of Arrangement, Determining Salaries of Teachers in Secondary, Technical, etc., Schools. (Board of Education; Cd. 9140; 1918.)
Juvenile Organizations Committee. (Home Office.)

It will be seen that most of these committees have already reported, and an account of these reports is given elsewhere.

The Government had also entered upon new developments in another direction—the promotion of scientific and industrial research. In 1915, under a scheme for the organization and development of scientific and industrial research (Cd. 8005, 1915), there were established a committee of the Privy Council responsible for expenditure of any new moneys provided by Parliament for such research, and a small advisory council composed of eminent men of science and others actually engaged in industries dependent upon scientific cooperation. On December 1, 1916, the committee and council were replaced by a Department of Scientific and Industrial Research. The object of this new development is indicated in the statement that:

> It appears incontrovertible that if we are to advance or even maintain our industrial position, we must as a nation aim at such a development of scientific and industrial research as will place us in a position to expand and strengthen our industries and to compete successfully with the most highly organized of our rivals.

[1] Ministry of Reconstruction. A list of commissions and committees set up to deal with questions which will arise at the close of the war. Cd. 8916. (London, 1918.)

The scope of the department's activities is to consider—

(1) Proposals for instituting scientific researches; (2) proposals for establishing or developing special institutions or departments of existing institutions for the scientific study of problems affecting particular industries and trades; (3) the establishment and award of research studentships and fellowships.

The department has begun active cooperation with scientific societies, institutions, trades, and industries, and has already stimulated the establishment of research associations maintained by local industries either independently or in cooperation with local universities. The task devolving as a consequence upon members of the department is thus described in the scheme under which the original committee and advisory council were established:

A large part of their work will be that of examining, selecting, combining, and coordinating, rather than of originating. One of the chief functions will be the prevention of overlapping between institutions or individuals engaged in research. They will, on the other hand, be at liberty to institute inquiries preliminary to preparing or eliciting proposals for useful research, and in this way they may help to concentrate on problems requiring solution the interest of all persons concerned in the development of all branches of scientific industry.

The establishment of the department represents the realization of some of the proposals and recommendations made by the committee to inquire into the position of natural science.

Associated with this movement is the report of the subcommittee on relations between employers and employed on joint standing industrial councils (Cd. 8606, 1917). This report, more generally known as the Whitley Committee Report, is not directly educational, but in its development it will exercise a tremendous influence in expanding the scope of education for the working classes. The committee recommends the establishment of national, district, and works committees or councils, consisting of representatives of employers and employees, and of the associations of the former and trades-unions of the latter.

The object is to secure cooperation by granting to workpeople a greater share in the consideration of matters affecting their industry, and this can only be achieved by keeping employers and workpeople in constant touch.

Among some of the questions that the committee suggests for the consideration of such councils are (1) the better utilization of the practical knowledge and experience of workpeople; (2) technical training and education; (3) industrial research and the full utilization of the results; (4) the provision of facilities for the full consideration and utilization of inventions and improvements designed by workpeople, and for adequate safeguarding of the rights of designers of such improvements; and (5) improvements of processes,

machinery, and organization and appropriate questions referring to the management and the examination of industrial experiments, with special reference to cooperation in carrying new ideas into effect and full consideration of the point of view of the employees with reference to them. The educational implications are obvious. If the working classes are to avail themselves of the new position with which they will be endowed by the establishment of councils, they must also avail themselves of all the educational opportunities that the Nation can put at their disposal. The burden is thus placed finally on the Nation to provide as extensive facilities as possible to equip every boy and girl for the new industrial conditions. Many industrial councils have already been established, and for educational administration it is significant that teachers are demanding the setting up of joint councils representing the active teaching profession and the education committees that employ them.

Finally, it would be equally impossible to leave out of an account of the social background that led up to the education act reference to the passing of the Representation of the People Act early in 1918, which extends the franchise to about two million additional male and six million new female voters. It is estimated that the numbers of persons qualified under the act to vote is about one-third of the population, or about ten million men and six million women. At the same time the university franchise has been extended and the number of seats in the House of Commons raised by redistribution from 670 to 707. Again, as throughout the nineteenth century, every extension of the franchise has been followed, very closely in the present case, by an extension of educational opportunities. It is inevitable that the evolution of political democracy should be accompanied by the expansion of a democratic system of education, for "the same logic which leads us to desire an extension of the franchise points also to an extension of education."

By the close of 1916 the stage was set for the introduction of the proposals for educational reconstruction. The problem had been canvassed from every direction and every point of view. The mental attitude that then separated the ultimate conception of the problem from the conception of the education problem in 1902 and 1906 could hardly be measured by the number of years that separated the two periods. The denominational question has, as Lord Haldane had predicted earlier, vanished in comparison with the really vital problems; the nation was united in conceiving the task of educational reform in the terms so appropriately set forth by the departmental committee on juvenile education in relation to employment after the war.

Any inquiry into education at the present juncture is big with issues of national fate. In the great work of reconstruction which lies ahead there are

aims to be set before us which will try, no less searchingly than war itself, the temper and enduring qualities of our race; and in the realization of each and all of these, education, with its stimulus and its discipline, must be our stand-by. We have to perfect the civilization for which our men have shed their blood and our women their tears; to establish new standards of value in our judgment of what makes life worth living, more wholesome and more restrained ideals of behavior and recreation, finer traditions of cooperation and kindly fellowship between class and class and between man and man. We have to restore the natural relations between the folk and the soil from which the folk derives its sustenance, to revivify with fresh scientific methods and better economic conditions the outworn practice of our agriculture, to learn over again that there is no greater public benefactor than the man who makes two ears of corn to grow where but one grew before. We have to bring research to bear upon the processes of our manufactures, to overhaul routine and eliminate waste, to carry our reputation for skillful workmanship and honest and intelligent trafficking into new markets and to maintain it in the old. These are tasks for a nation of trained character and robust physique, a nation alert to the things of the spirit, reverential of knowledge, reverential of its teachers, and generous in its estimate of what the production and maintenance of good teachers inevitably cost. Whether we are to be such a nation must now depend largely upon the will of those who have fought for us, and upon the conception which they have come to form of what education can do in the building up and glorifying of national life. For ourselves, we are content to leave it to that arbitrament.

The recommendations of this committee were generally accepted as furnishing the framework for the educational legislation that was expected. (See p. 23.)

It was under these conditions that Mr. H. A. L. Fisher was appointed president of the Board of Education in December, 1916. His appointment was greeted with universal approval. It was an appointment in which mere political considerations were subordinated to the great needs of the hour and of the office. In Mr. Fisher's nomination the presidency of the Board of Education was filled by a man eminently equipped for the position, and not by a rising politician for whom the Board of Education was to serve merely as a temporary stepping stone on the road to higher office. Mr. Fisher combines distinction as a scholar in his chosen field of history with an interest in popular education. His fellowship at New College, Oxford, had given him an experience with the problems of higher education that he was beginning to apply to the needs of one of the youngest universities. As vice-chancellor of the University of Sheffield he was inevitably brought into touch with needs and the demands of popular education. His grasp of the task to which he was called was strengthened by membership on a number of the commissions and committees to which reference has been made. The confidence of the country in his ability to carry out the task to a sucessful conclusion was soon to be justified by Mr. Fisher's success in presenting the problem to Parliament and to the country, and by his

adroit handling of all the obstacles and difficulties that stood in his way in spite of the readiness of the country for the reform proposals.

Mr. Fisher at once addressed himself to the solution of the problem intrusted to him. In February, 1917, he issued a stirring appeal, Sursum Corda, to the teachers of the country, in which he reminded them that:

> The proclamation of peace and victory in the field will summon us not to complacent repose, but to greater efforts for a more enduring victory. The future welfare of the Nation depends upon its schools.

On April 19, 1917, he had an opportunity of testing the new faith of the country in education, when he introduced the education estimates in the House of Commons. The task of demanding from Parliament an increase for 1917–18 of more than $19,000,000 over the estimate for the previous year, was one that would have deterred a parliamentarian of longer experience than Mr. Fisher, but the Parliament of a country that was then spending about $35,000,000 a day on the work of destruction could not well refuse its consent to increased estimates for education:

> So that the foundations may be laid for a fabric of national education worthy of the genius and heroism of our people and a fitting monument of the great impulse which is animating the whole nation during the war.

The chief part of the increase was to be devoted to securing "the first condition of educational advance," the better payment of teachers, to the importance of which Mr. Fisher referred in the words:

> I do not expect the teaching profession to offer great material rewards—that is impossible; but I do regard it as essential to a good scheme of education that teachers should be relieved from perpetual financial anxieties, and that those teachers who marry should be able to look forward to rearing a family in respectable conditions. An anxious and depressed teacher is a bad teacher; an embittered teacher is a social danger.

In the course of his speech Mr. Fisher foreshadowed the nature of the bill that he was shortly to introduce:

> The object which we are all striving to attain is very simple. We do not want to waste a single child. We desire that every child in the country should receive the form of education most adapted to fashion its qualities to the highest use. This will mean that every type and grade of school in the country must be properly coordinated. It will mean that the county authorities, either separately or combined together in provincial committees, should make complete and progressive schemes for education in their respective areas, so that adequate and systematic provision may be made not only for the elementary, but also for technical, commercial, and secondary education of the children in the district.

The unanimity with which the increased expenditure for education was received prepared the way for the education bill, which Mr. Fisher introduced on August 10, 1917. "The bill," said Mr. Fisher, "is prompted by deficiencies which have been revealed by the war;

it is framed to repair the intellectual wastage which has been caused by the war."

Into the details of the bill it is unnecessary to go; the causes of opposition to it are given in another section. But its introduction afforded Mr. Fisher another opportunity of declaring his educational faith. Striking throughout was his appreciation of the views of the leaders of the labor world:

> I notice also that a new way of thinking about education has sprung up among more reflecting members of our industrial army. They do not want education in order that they may rise out of their own class, always a vulgar ambition; they want it because they know that, in the treasures of the mind, they can find an aid to good citizenship, a source of pure enjoyment, and a refuge from the necessary hardships of a life spent in the midst of clanging machinery in our hideous cities of toil.

The conclusion of his speech furnishes an admirable summary of the newly born recognition of the place of education in the national life:

> We assume that education is one of the good things of life which should be more widely shared than has hitherto been the case amongst the children and young persons of the country. We assume that education should be the education of the whole man, spiritually, intellectually, and physically, and that it is not beyond the resources of civilization to devise a scheme of education possessing certain common qualities, but admitting at the same time of large variation from which the whole youth of the country, male and female, may derive benefit. We assume that the principles upon which well-to-do parents proceed in the education of their families are valid also, *mutatis mutandis*, for the families of the poor; that the State has need to secure for its juvenile population conditions under which mind, body, and character may be harmoniously developed. We feel also that in the existing circumstances the life of the rising generation can only be protected against the injurious effects of industrial pressure by a further measure of State compulsion. But we argue that the compulsion proposed in this bill will be no sterilizing restriction of wholesome liberty, but an essential condition of a larger and more enlightened freedom, which will tend to stimulate civic spirit, to promote general culture and technical knowledge, and to diffuse a steadier judgment and a better informed opinion through the whole body of the community.

The closing months of the year were spent by Mr. Fisher in touring the country, particularly the manufacturing centers, for purposes of propaganda. Many employers had still to be won over to the idea of compulsory continuation schools; and much opposition had developed against the bill among those concerned with the administration of education. Deputations had to be met, compromises considered, and the bill so amended that it would in effect become an accepted bill on its introduction. The first bill was withdrawn in January of 1918, and a new one took its place, with the elimination of those features to which objections had been raised. In introducing the second reading of the new bill on March 14, 1918, Mr. Fisher continued to maintain the high standards of statesmanship that

marked his speeches on the first bill. His final plea for the passage of the bill will probably rank as the clearest and most far-sighted analysis of England's need for educational reform that has been made in the course of the last four years:

> The broad question before the House is whether the education provided for the general mass of our young citizens is adequate to our needs. We have been asking them to fight and work for their country, we have been asking them to die for their country, to economize for their country, to go short of food for their country, to work overtime for their country, to abandon trade-union rules for their country, to be patient while towns are bombed from enemy aircraft, and family after family is plunged in domestic sorrow. We have now decided to enfranchise for the first time the women of this country. I ask then whether the education which is given to the great mass of our young citizens is adequate to the new, serious, and enduring liabilities which the development of this great world war created for our Empire, or to the new civic burdens which we are imposing upon millions of our peoples. I say it is not adequate. I believe it is our duty here and now to improve our system of education, and I hold that, if we allow our vision to be blurred by a catalogue of passing inconveniences, we shall not only lose a golden opportunity, but fail in our great trust to posterity.

These words furnished a fitting climax to the campaign of nearly four years to change the opinion of a country from apathetic indifference to education to the stage where almost the only criticisms of the act which stands to Mr. Fisher's credit come from those who feel that it does not go far enough.

SIGNIFICANCE OF THE EDUCATION ACT, 1918.[1]

By the enactment on August 8 of the Fisher education bill the first step has been made toward the realization of the program of social and economic reconstruction that is to follow the war in England. For the reform of the English educational system, and of the Scottish system which is being provided for separately (see pp. 110ff), is but part of the larger task that has been intrusted to such bodies as the Ministry of Reconstruction or the Department on Scientific and Industrial Research. Without the sound foundations laid in the earlier years of school life, any recommendations that such bodies may make on adult education, public health, physical training, unemployment, juvenile employment and apprenticeship, or cooperation between science and industry would inevitably remain nothing more than pious hopes. Educational reform in England to-day is also inevitably associated with the recent extension of the franchise, and indirectly will have some bearing on the recommendations of the Whitley committee. Nor can the act be considered apart from the administrative changes already made by the Board

[1] This section, with the exception of some additions, appeared in the Educational Review, December, 1918, and is here reprinted by the courtesy of the editor.

of Education, such as the regulations for advanced courses and examinations in secondary schools, from the Superannuation Act passed in November, 1918, or apart from departmental reports such as those on salaries for elementary and secondary school teachers, on the teaching of modern languages, or on the position of natural science in the schools. The quickened recognition by the public of the essential function of education in national life must also be taken into account as one of the assets for the future. Public interest and support have acquired an impetus from the conditions and realizations arising out of the war that has made possible such educational progress within one year as could in normal times not have been achieved in less than a generation. The sacrifices and public burdens undertaken by teachers of all grades throughout the country have given them a repute and status that they have not hitherto enjoyed, and it will result in substantial improvement of their material position. The outlook of the local educational authorities has also been deeply affected by the urgent necessity of giving much closer attention than ever before to the educational problems under adverse conditions. Finally, although little is as yet known about its effects, the educational activities undertaken with the army will undoubtedly have a healthy reaction on that public opinion without which educational progress is impossible.

It is too often forgotten in recent discussions of English education that the train for "a comprehensive and progressive improvement of the educational system" had already been laid before the war in the budget speech of the Chancellor of the Exchequer on May 4, 1914. The act accordingly does not constitute a revolution in English education. It represents the normal development whose evolution has been hastened by the favorable conditions already described. After the satisfactory reception of the estimates for the Board of Education, introduced by Mr. Fisher in April, 1917, and calling for an increase of more than $18,000,000 over the estimates of the previous financial year, the passage of an education bill to meet the new demands, as formulated by numerous education authorities and associations of lay and professional men and women, was a foregone conclusion. Mr. Fisher's first essay, however, a bill which he introduced in August, 1917, was from the first condemned to failure because it exceeded these suggestions and recommendations and because it was suspected of being an attempt to conceal a scheme for centralized control over education, behind a large number of measures otherwise acceptable. While the country was ready and willing to surrender its rights to the National Government in the interests of the conduct of the war, it did not show itself so amenable in accepting what might prove to be a bureaucratic and centralized system of educational

administration for all time. The education authorities were up in arms against the administrative measures and indicated in no uncertain terms their refusal to countenance any education bill at all that threatened their liberties or might interfere with local initiative and variety. In every case the administrative discretion of the Board of Education has been surrounded by limitations. Clause 4 of the first bill, which gave the board the final word in the approval or rejection of schemes submitted by the local education authorities, now becomes clause 5, and a definite procedure has been established in cases of conflict between a local education authority and the board, with final power vested in Parliament. The old clause 5, which provided for the combination of local areas into provincial associations in accordance with Lord Haldane's proposals, has been dropped altogether, and the same fate met the old clause 29, which would have permitted the board to transfer the smaller to larger educational areas. Clause 38 in the original bill also disappears and with it any danger that the board would become the final authority in cases of dispute with local authorities. Finally, the old clause 40 now becomes clause 44, and the indefinite provisions for national grants to education are replaced by a definite undertaking that these shall amount to not less than one-half of the local expenditure. A few additions and amendments have been made, in each case extending rather than limiting the powers of local authorities.

The general structure of the educational system remains the same as under the provisions of the Education Act of 1902,[1] that is, the responsible authorities for elementary and higher education consist of counties and county borough councils, and for elementary education of the councils of noncounty boroughs and urban districts. The relation of the Board of Education to the local education authorities continues as hitherto with the broad exception that it now has the power of approving or rejecting schemes "for the progressive development and comprehensive organization of education" that may be submitted to it by the local education authorities. In cases of conflict between the board and a local authority the act provides for a conference or public inquiry, and in the last resort the submission of a report to Parliament with reasons for any action taken by the board. The grants from the national exchequer have been consolidated and will in the future be dependent on the approval by the board of such progressive and comprehensive schemes of education in a local area. The act abolishes the fee, the aid, and the small population grants, and provides that the consolidated grant shall be not less than one-half of the expenditure of a local authority. By this means the board will have the power of requiring, among other

[1] For a detailed statement see Kandel, I. L. Elementary Education in England. U. S. Bureau of Education, Bulletin, 1913, No. 57.

things, the efficient administration of school attendance, the satisfactory provision of elementary continuation and secondary schools, the maintenance of adequate and suitable teaching staffs, and the provision of adequate systems of medical inspection and treatment. For the first time in the history of English education the national authorities are placed by the act in a position to secure full information as to the provision of education throughout the country, the responsibility of furnishing such information being placed upon the schools. Under other provisions the board is empowered on request to inspect schools not already on its grant list and with local education authorities to inspect schools that desire to qualify as efficient for the purposes of securing exemptions from attendance at public elementary or continuation schools. The effect of these measures, combined with the indirect influence of the qualifications required of teachers for registration with the Teachers' Registration Council, will have an incalculable effect in raising the standards of private schools, and at the same time safeguarding their status. Room will thus be found under the national system for public and private schools, schools established and maintained entirely by the public authorities, and nonprovided schools, or those established by denominational bodies but maintained out of public funds. Such a scheme under the wise direction and advice of the Board of Education will secure that variety and initiative on which the English system is founded, while the new method of allocating grants will furnish the necessary encouragement for the rapid expansion of the system. It is significant that for the first time in English history the act speaks of the development of a national system of public education. By bringing the private schools into more effective relations with public education England will present an example of a national system in which public and private effort cooperate to the larger end.

The responsibility for "the progressive development and comprehensive organization of education" is intrusted to the county authorities in all matters pertaining to elementary, secondary, and higher education. The noncounty boroughs and the urban districts have the same responsibility only in relation to elementary education, which is now considerably expanded in conception. Provision is made, however, for cooperation between the two types of authorities, and also for the federation of any two educational areas for cooperative purposes under joint bodies of managers, including teachers and representatives of universities. Under the extended powers of the act, education authorities now become the responsible authorities for the administration of the Employment of Children Act, 1903, the Prevention of Cruelty to Children Act, 1904, and the Children Act, 1908. Further, for the promotion of physical and social training, education authorities may maintain and equip holiday camps, centers

for recreation and physical training, playing fields, school baths, and swimming baths and other facilities in addition to the system of medical inspection and treatment. Finally, the limit hitherto imposed on the amount that could be raised by county authorities for secondary and higher education is removed. The duty is imposed on local education authorities to draft schemes for their areas after due consideration of existing facilities, public or private, and of the possible advantages of cooperation. Since the new system of grants will be based on the adequacy of a scheme as a whole, it will effectually check the development of schemes that are not comprehensive. Here again the Board of Education will act in an advisory capacity, and the responsibility for the development of local initiative and progress is placed on the local education authorities and so on the public in whose interests schools are maintained. The withholding of grants and the power of the board to conduct public inquiries, the reports of which may be laid before Parliament, are effective measures for dealing with recalcitrant authorities.

While the improvement of the administrative organization of education constitutes one of the purposes of the act, it is not in any way its main purpose. Primarily, the act represents the new democracy rising to a recognition of the function of education in preparing healthy, intelligent, and responsible citizens. The advancement of the physical welfare of the nation, with the promotion of educational opportunities, constitutes the chief objects of the act. As at the time of the South African War, so at this crisis, recruiting of soldiers has revealed the great extent of physical deficiencies in the country; at the same time a better chance for survival is to be furnished to every child in order to repair the physical wastage of the war. An already excellent system of school medical inspection and a developing system of medical treatment are extended by the act. In the schools for mothers training is given in prenatal care and the care of infant children. From the age of 2 to 5 or 6, children may attend nursery schools where attention will be devoted primarily to their "health, nourishment, and physical welfare." In the elementary schools the existing regulations for school medical inspection and treatment will apply, with the probability that more effective provision of the latter will be required under the procedure by schemes. By the provisions of the new act, local education authorities are empowered to extend this system of medical inspection and treatment to pupils in secondary and continuation schools maintained by them, and even in schools not aided by them, if so requested. Since the National Insurance Act applies to employed persons from the age of 16 up, the great majority of citizens in England and Wales will be under an effective system of medical supervision throughout their lives. At the same

time local authorities are required to ascertain the number of physically defective and epileptic children and make such provision for their education as they are already required to make for mental defectives under the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914.

These measures for the prevention and cure of disease are supplemented by positive measures for the promotion of health through physical training, which is to form an even more important part of the curriculum of elementary, continuation, and secondary schools than ever before. The power granted to authorities to supply or maintain holiday or school camps, centers and equipment for physical training, playing fields, school baths, school swimming baths, and "other facilities for social and physical training in the day or evening" has already been referred to. Before the passing of the act the Government had already inaugurated the practice of financially assisting local authorities in the appointment of play supervisors and in the maintenance of evening recreation centers. By these measures provision is made for social and moral training as well as physical. Mr. Fisher allayed the fear that an opportunity would be seized to expand physical training to cover military training. He agreed that—

> it would be entirely inappropriate to take advantage of an education bill to introduce such a very radical alteration in our scheme of education as the introduction of compulsory military training in schools. So far as he knew their mind, the war office had no desire whatever to see military training in the continuation schools given to young people in this country. The interest of the war office was that young boys, when they reached the military age of 18, should be in fit physical condition. It was only after they had reached 18 that formal instruction under the war office began.

The control of child labor, which constitutes the greatest menace to physical welfare, is now placed in the hands of the education authorities. No child of school age will be permitted to be employed on any school day or on any day before 6 o'clock in the morning or after 8 o'clock in the evening or for more than two hours on Sunday. By an unfortunate concession, local authorities may by by-laws permit the employment of children over 12 for one hour before and one hour after school. Street trading by children is prohibited, and restrictions are placed around the employment of children on the stage and in certain factories and occupations. On the report of a school medical officer individual children may be prohibited from engaging in certain occupations that may be prejudicial to health or physical development or interfere with their obtaining the proper benefit from education.

In the matter of school attendance the act at one stroke removes all exemptions from attendance at public elementary schools, in

which fees are now entirely abolished, for children between the ages of 5 and 14, unless exemption is claimed on the ground of attendance at other schools that must be subject to inspection either by a local authority or the Board of Education. Thus is brought to a close controversy that has lasted nearly 30 years on the question of half-time attendance at school for children over 11 or 12 years of age. Where nursery schools are established, a local authority may permit attendance at these up to the age of 6 and transfer to the elementary schools at that age. Further, local authorities are empowered to enact by-laws requiring compulsory attendance at public elementary schools up to the age of 15, or, with the approval of the board, up to 16.

The act now extends the scope of the elementary schools by requiring the inclusion of practical instruction suitable to the ages, abilities, and requirements of the children and the organization of advanced instruction for the older or more intelligent children, who are not transferred to higher schools, by means of central schools and central or special classes. This provision means that children in the upper grades will not be required to waste what for many will be the last years of full-time education as the result of an antiquated definition of the term "elementary school." The act thus sets up what will virtually prove to be a system of intermediate education, with the right to exemption from attendance at continuation schools for children remaining until 16. The act does not define, nor did the debates bring out, the nature of the work that will be provided in the advanced courses, but the guess may be hazarded that they will follow the type already successfully inaugurated in the London central schools, and probably not unlike some of the schemes proposed for the junior high schools in this country.

For the present the question of providing free secondary schools is shelved, but local authorities are encouraged to provide a more adequate supply of secondary schools, with easier access to them, so that, in the words of the act, "children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting through inability to pay fees." The enlarged and enriched opportunities of education will consist not merely of an increase of free places to pupils from elementary schools and of scholarships, but also of the provision of maintenance allowances. Beyond the references already made the act does not deal with secondary schools, but the board has recently issued new regulations that will require the organization of advanced courses for pupils above the age of 16 who desire to specialize in classics, science, and mathematics, and modern languages. Up to the age of 16 it is intended that all pupils shall enjoy a general education with

due recognition of the claims of the classics, the sciences, and modern languages in a liberal education. Vocational preparation finds no place in the program, but will probably be provided in an extension of the number of junior and senior technical schools.

Up to this point Mr. Fisher encountered no difficulty in piloting his measure through the House of Commons. The storm center proved to be the provision for compulsory attendance at continuation schools for young persons between the ages of 14 and 18 for 8 hours a week for 40 weeks in the year between the hours of 7 in the morning and 8 in the evening. Employers are required not only to allow the time off necessary for attending school, but such additional time up to two hours as may be necessary to secure that a young person "is in a fit mental and bodily condition to receive full benefit from the attendance at school." The young person, his parents, and his employers may be liable to a fine if he fail to attend regularly. Exemptions from attendance are granted only to those who have attended a full-time day school to 16 or are in attendance at such school or are attending part-time continuation or "works" schools established by employers in connection with their factories and open to inspection by the board and the local education authority.

The chief opposition came from a small group of employers who feared that their supply of labor would be cut off. These were ready to suggest all kinds of compromises—half-time attendance for 20 hours a week between the ages of 14 and 16; special intensified and advanced courses for pupils between 12 and 14; and increased opportunities for secondary and university education for brighter pupils. But, as Mr. Fisher eloquently pointed out, "there is nothing sacrosanct itself about industry. The real interests of the State do not consist in the maintenance of this or that industry, but in the maintenance of the welfare of all its citizens."

To the surprise of the opposition, no less than of his supporters, Mr. Fisher agreed to postpone the full operation of the compulsory provision as it affects young persons between 16 and 18 for seven years from the appointed day, that is, the day on which the whole section is declared by the board to become operative. In addition he agreed to reduce the required attendance from 8 hours a week to 7 hours. The opposition was now satisfied, but many of the ardent supporters of the bill charged Mr. Fisher with betraying the cause. As a matter of fact Mr. Fisher has sacrificed nothing that he was not fully aware could be sacrificed. It is obvious that at this crisis, when the building of new schools is suspended, when the existing schools have the greatest difficulty in maintaining even a minimum supply of teachers, and when the industrial demands for labor are urgent, the full operation of the law would not have been pos-

sible. Mr. Fisher's compromise means that a start can soon be made and that the public will be educated to the full significance of the measure when the seven years are completed. A number of educational authorities and a number of the larger industrial establishments have already adopted schemes that have the approval of the board, thus disproving the contention that only the bare minimum required by Mr. Fisher's concession will be provided. The probability is that after seven years of experimentation local authorities will be ready to do more than the act requires.

As in the case of the advanced courses in elementary schools, the function of the continuation schools is broadly defined as schools "in which suitable courses of study, instruction, and physical training are provided without payment of fees." The provisions for social training and medical inspection will also apply to these schools. It is probable that the courses of study will be liberal and general in character. Indeed, guaranties were asked and assurances were given in the course of the debates that specific vocational training would not be given in these schools, but as Mr. Fisher pointed out:

> It would not be to the interest of an educated democracy that there should be no connection between the education they were seeking in the schools and the lives they were to lead. At the same time he felt that education should be a great liberating force, that it should provide compensation against the sordid monotony which attached to so much of industrial life of the country by lifting the workers to a more elevated and pure atmosphere, and the board would be false to the purpose for which the bill was framed if it were to sanction a system in continuation schools in which due attention was not paid to the liberal aspects of education.

The attitude of the Workers' Education Association was somewhat the same in their declaration of a policy—

> That the education in such schools should be directed solely toward the full development of the bodies, minds, and character of the pupils; that it should therefore be intimately related to the environment and interests of the pupils and should contain ample provision for physical well-being.

Under the freedom permitted by the procedure through schemes, considerable latitude will be permitted to local authorities to adapt the courses to local conditions. The vocations will no doubt furnish a starting point for such courses of instruction. The Report of the Departmental Committee on Juvenile Education[1] contains some suggestions on the organization of the curriculum of continuation schools. Instruction should in no case be too narrowly technical, and the curriculum should maintain a proper balance between the technical and humanistic elements, since the primary function of education is to prepare for citizenship. A four-year course should be divided into equal stages, of which the first will be mainly general,

[1] See pp. 22ff.

and the second technical and vocational. The common ground for all in the first stage should be English subjects, including not only literature but geography and social and industrial history. The remaining subjects should be mathematics, manual training, science, each varied to suit the needs and the occupational interests of the students, and physical training. Only in the second stage would the curriculum be definitely founded on the chief vocational groups—agriculture, engineering, building, mining, textiles, the technical industries, commercial occupations, and domestic occupations. But even in the second stage the committee urges that technical subjects might be included as a medium of education and not as a means of production. In general the emphasis should be placed on social, historical, and economic elements in the subjects adopted in both stages. Steps have already been taken, as, for example, at the University of Manchester, to furnish special courses for training teachers for continuation schools. For the present there is some danger that a false start may be made by appointing teachers whose sole experience has been in elementary or secondary schools. However that may be, the point that needs to be emphasized here is that the criticism that has been leveled against Mr. Fisher's compromise is not valid, and that the continuation school with compulsory attendance required up to the age of 18 will be an accomplished fact at the close of the seven years of the postponement. It is significant that this is the only point that has been subjected to serious criticism.

The true estimate of the act may be reached by comparing it with the suggestions and recommendations of the bodies referred to on pp. 70ff; those which have not been incorporated in the act can be provided for by the Board of Education by its administrative regulations; others look too far into the future. It must be borne in mind that the act is but a first step, giving local authorities power to expand their educational activities. However desirable such proposals may be, the time is not ripe for the abolition of fees in secondary schools and for establishing an entirely free system of higher education or for the payment by the State of grants equal to 75 per cent of the local expenditure on education or to require 20 hours' attendance a week at continuation schools. Other suggestions will probably never be adopted in England; it is unlikely, for example, that the State will assume the direct payment of teachers' salaries, and, as a consequence, the establishment of the teaching profession as a branch of the civil service; it is improbable too that teachers will be placed on education committees to any large extent, especially as joint councils may be set up under the Whitley committee's recommendations. Technical education, university education, adult education, and the training of teachers still remain problems that the Government must shortly

consider, but, important though they are, these problems are not such as could be legislated upon at the present crisis.

The act has been variously hailed as the children's charter and as the Nation's charter. Certainly it inaugurates a new era as embodying "the first real attempt ever made in this country (England) to lay broad and deep the foundations of a scheme of education which would be truly national." Of much greater significance for the future of English democracy is the fact that the act is an attempt to provide the foundations of an education for the great mass of young citizens which, to quote Mr. Fisher, is "adequate to the new, serious, and enduring liabilities which the development of this great world war creates for our Empire or to the new civic burdens which we are imposing upon millions of our people." But whatever the merits of the act may be, it should not escape attention that the English Government and the English people did not consider it incompatible with the successful conduct of the war to divert some attention to the more pressing domestic problems of the present and the immediate future. Education is but part of the broader program for reconstruction after the war that is already being considered in England and whose scope is defined in the following words by the war cabinet in its report for 1917:

> It is, indeed, becoming more and more apparent that reconstruction is not so much a question of rebuilding society as it was before the war, but of molding a better world out of the social and economic conditions which have come into being during the war.

EDUCATION ACT, 1918.

[8 and 9 Geo. 5. Ch. 39.]

ARRANGEMENT OF SECTIONS.

National System of Public Education.

Sec.
1. Progressive and comprehensive organization of education.
2. Development of education in public elementary schools.
3. Establishment of continuation schools.
4. Preparation and submission of schemes.
5. Approval of schemes by Board of Education.
6. Provisions as to cooperation and combination.
7. Provision as to amount of expenditure for education.

Attendance at School and Employment of Children and Young Persons.

8. Provisions as to attendance at elementary schools.
9. Provisions for avoidance of broken school terms.
10. Compulsory attendance at continuation schools.
11. Enforcement of attendance at continuation schools.
12. Administrative provisions relating to continuation schools.
13. Amendment of 3 Edw. 7, c. 45, and 4 Edw. 7, c. 15.
14. Prohibition against employment of children in factories, workshops, mines, and quarries.
15. Further restrictions on employment of children.
16. Penalties on illegal employment of children and young persons.

Extension of Powers and Duties.

17. Power to promote social and physical training.
18. Medical inspection of schools and educational institutions.

Sec.
19. Nursery schools.
20. Education of physically defective and epileptic children.
21. Powers for the education of children in exceptional circumstances.
22. Amendment of Education (Choice of Employment) Act, 1910.
23. Power to aid research.
24. Provision of maintenance allowances.
25. Provisions as to medical treatment.

Abolition of Fees in Public Elementary Schools.

26. Abolition of fees in public elementary schools.

Administrative Provisions.

27. Voluntary inspection of schools.
28. Collection of information respecting schools.
29. Provisions with respect to appointment of certain classes of teachers.
30. Provisions as to closing of schools.
31. Grouping of nonprovided schools of the same denominational character.
32. Provisions relating to central schools and classes.
33. Saving for certain statutory provisions.
34. Acquisition of land by local education authority.
35. Power to provide elementary schools outside area.
36. Amendments with respect to the allocation of expenses to particular areas.
37. Provisions as to expenses of Provisional Orders, etc.
38. Expenses of education meetings, conferences, etc.
39. Power to pay expenses of prosecution for cruelty.
40. Public inquiries by Board of Education.
41. Inspection of minutes.
42. Payments to the Central Welsh Board.
43. Evidence of certificates, etc., issued by local education authorities.

Education Grants.

44. Education grants.

Educational Trusts.

45. Power to constitute official trustees of educational trust property.
46. Exemption of assurance of property for educational purposes from certain restrictions under the Mortmain Acts.
47. Appointment of new trustees under scheme.

General.

48. Definitions.
49. Compensation to existing officers.
50. Extension of certain provisions of the education acts.
51. Repeals.
52. Short title, construction, extent, and commencement.

CHAPTER. 39.

An Act to make further provision with respect to education in England and Wales and for purposes connected therewith. [8th August 1918.]

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

National System of Public Education.

1. With a view to the establishment of a national system of public education available for all persons capable of profiting thereby, it shall be the duty of the council of every county and county borough, so far as their powers extend, to contribute thereto by providing for the progressive development and com-

prehensive organization of education in respect of their area, and with that object any such council from time to time may, and shall when required by the Board of Education, submit to the board schemes showing the mode in which their duties and powers under the education acts are to be performed and exercised, whether separately or in cooperation with other authorities.

2. (1) It shall be the duty of a local education authority so to exercise their powers under Part III of the Education Act, 1902, as—

(*a*) To make, or otherwise to secure, adequate and suitable provision by means of central schools, central or special classes, or otherwise—

(i) For including in the curriculum of public elementary schools, at appropriate stages, practical instruction suitable to the ages, abilities, and requirements of the children; and

(ii) For organizing in public elementary schools courses of advanced instruction for the older or more intelligent children in attendance at such schools, including children who stay at such schools beyond the age of 14;

(*b*) To make, or otherwise to secure, adequate and suitable arrangements under the provisions of paragraph (*b*) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, for attending to the health and physical condition of children educated in public elementary schools; and

(*c*) To make, or otherwise to secure, adequate and suitable arrangements for cooperating with local education authorities for the purposes of Part II of the Education Act, 1902, in matters of common interest, and particularly in respect of—

(*i*) The preparation of children for further education in schools other than elementary, and their transference at suitable ages to such schools; and

(*ii*) The supply and training of teachers;

and any such authority from time to time may, and shall when required by the Board of Education, submit to the board schemes for the exercise of their powers as an authority for the purposes of Part III of the Education Act, 1902.

(2) So much of the definition of the term "elementary school" in section three of the Elementary Education Act, 1870, as requires that elementary education shall be the principal part of the education there given, shall not apply to such courses of advanced instruction as aforesaid.

3. (1) It shall be the duty of the local education authority for the purposes of Part II of the Education Act, 1902, either separately or in cooperation with other local education authorities, to establish and maintain, or secure the establishment and maintenance under their control and direction, of a sufficient supply of continuation schools in which suitable courses of study, instruction, and physical training are provided without payment of fees for all young persons resident in their area who are, under this act, under an obligation to attend such schools.

(2) For the purposes aforesaid the local education authority from time to time may, and shall when required by the Board of Education, submit to the board schemes for the progressive organization of a system of continuation schools, and for securing general and regular attendance thereat, and in preparing schemes under this section the local education authority shall have regard to the desirability of including therein arrangements for cooperation with universities in the provision of lectures and classes for scholars for whom instruction by such means is suitable.

(3) The council of any county shall, if practicable, provide for the inclusion of representatives of education authorities for the purposes of Part III of the Education Act, 1902, in any body of managers of continuation schools within the area of those authorities.

4. (1) The council of any county, before submitting a scheme under this act, shall consult the other authorities within their county (if any) who are authorities for the purposes of Part III of the Education Act, 1902, with reference to the mode in which and the extent to which any such authority will cooperate with the council in carrying out their scheme, and when submitting their scheme shall make a report to the Board of Education as to the cooperation which is to be anticipated from any such authority, and any such authority may, if they so desire, submit to the board as well as to the council of the county any proposals or representations relating to the provision or organization of education in the area of that authority for consideration in connection with the scheme of the county.

(2) Before submitting schemes under this act a local education authority shall consider any representations made to them by parents or other persons or bodies of persons interested, and shall adopt such measures to ascertain their views as they consider desirable, and the authority shall take such steps to give publicity to their proposals as they consider suitable, or as the Board of Education may require.

(3) A local education authority in preparing schemes under this act shall have regard to any existing supply of efficient and suitable schools or colleges not provided by local education authorities, and to any proposals to provide such schools or colleges.

(4) In schemes under this act adequate provision shall be made in order to secure that children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting through inability to pay fees.

5. (1) The Board of Education may approve any scheme (which term shall include an interim, provisional, or amending scheme) submitted to them under this act by a local education authority, and thereupon it shall be the duty of the local education authority to give effect to the scheme.

(2) If the Board of Education are of opinion that a scheme does not make adequate provision in respect of all or any of the purposes to which the scheme relates, and the board are unable to agree with the authority as to what amendments should be made in the scheme, they shall offer to hold a conference with the representatives of the authority and, if requested by the authority, shall hold a public inquiry in the matter.

(3) If thereafter the Board of Education disapprove a scheme, they shall notify the authority, and, if within one month after such notification an agreement is not reached, they shall lay before Parliament the report of the public inquiry (if any) together with a report stating their reasons for such disapproval and any action which they intend to take in consequence thereof by way of withholding or reducing any grants payable to the authority.

6. (1) For the purpose of performing any duty or exercising any power under the education acts, a council having powers under those acts may enter into such arrangements as they think proper for cooperation or combination with any other council or councils having such powers, and any such arrangement may provide for the appointment of a joint committee or a joint body of managers, for the delegation to that committee or body of managers of any powers or duties of the councils (other than the power of raising a rate or borrowing money), for the proportion of contributions to be paid by each coun-

cil, and for any other matters which appear necessary for carrying out the arrangement.

(2) The Board of Education may, on the application of two or more councils having powers under the education acts, by scheme provide for the establishment and (if thought fit) the incorporation of a federation for such purposes of any such arrangements as aforesaid as may be specified in the scheme as being purposes relating to matters of common interest concerning education which it is necessary or convenient to consider in relation to areas larger than those of individual education authorities, and the powers conferred on councils by this section shall include power to arrange for the performance of any educational or administrative functions by such a federation as if it were a joint committee or a joint body of managers: *Provided*, That no council shall without its consent be included in a scheme establishing a federation, and no council shall be obliged to continue in a federation except in accordance with the provisions of a scheme to which it has consented.

(3) A scheme made by the Board of Education constituting a federation, and an arrangement establishing a joint committee or a joint body of managers, shall provide for the appointment of at least two-thirds of the members by councils having powers under the education acts, and may provide either directly or by cooperation for the inclusion of teachers or other persons of experience in education and of representatives of universities or other bodies.

(4) A scheme constituting a federation may on the application of one or more of the councils concerned be modified or repealed by a further scheme, and, where a scheme provides for the discontinuance of a federation, provision may be made for dealing with any property or liabilities of the federation.

(5) Where any arrangement under this section provides for the payment of an annual contribution by one council to another, the contribution shall, for the purposes of section 19 of the Education Act, 1902, form part of the security on which money may be borrowed under that section.

7. The limit under section 2 of the Education Act, 1902, on the amount to be raised by the council of a county out of rates for the purpose of education other than elementary shall cease to have effect.

Attendance at School and Employment of Children and Young Persons.

8. (1) Subject as provided in this act, no exemption from attendance at school shall be granted to any child between the ages of 5 and 14 years, and any enactment giving a power, or imposing a duty, to provide for any such exemption, and any provision of a by-law providing for any such exemption, shall cease to have effect, without prejudice to any exemptions already granted. Any by-law which names a lower age than 14 as the age up to which a parent shall cause his child to attend school shall have effect as if the age of 14 were substituted for that lower age.

(2) In section 74 of the Elementary Education Act, 1870, as amended by section 6 of the Elementary Education Act, 1900, 15 years shall be substituted for 14 years as the maximum age up to which by-laws relating to school attendance may require parents to cause their children to attend school, and any such by-law requiring attendance at school of children between the ages of 14 and 15 may apply either generally to all such children, or to children other than those employed in any specified occupations: *Provided*, That it shall be lawful for a local education authority to grant exemption from the obligation to attend school to individual children between the ages of 14 and 15 for such time and upon such conditions as the authority think fit in any case where after due inquiry the circumstances seem to justify such an exemption.

(3) It shall not be a defense to proceedings relating to school attendance under the education acts or any by-laws made thereunder that a child is attending a school or institution providing efficient elementary instruction unless the school or institution is open to inspection either by the local education authority or by the Board of Education, and unless satisfactory registers are kept of the attendance of the scholars thereat.

(4) A local education authority may with the approval of the Board of Education make a by-law under section 74 of the Elementary Education Act, 1870, providing that parents shall not be required to cause their children to attend school or to receive efficient elementary instruction in reading, writing, and arithmetic before the age of 6 years: *Provided*, That in considering any such by-law the board shall have regard to the adequacy of the provision of nursery schools for the area to which the by-law relates, and shall, if requested by any 10 parents of children attending public elementary schools for that area, hold a public inquiry for the purpose of determining whether the by-law should be approved.

(5) Notwithstanding anything in the education acts the Board of Education may, on the application of the local education authority, authorize the instruction of children in public elementary schools till the end of the school term in which they reach the age of 16 or (in special circumstances) such later age as appears to the board desirable: *Provided*, That, in considering such application, the board shall have regard to the adequacy of the provision of nursery schools for the area to which under paragraphs (*a*) and (*c*) of subsection (1) of section 2 of this act and to the effective development and organization of all forms of education in the area, and to any representations made by the managers of schools.

(6) The power of a local education authority under section 7 of the Education Act, 1902, to give directions as to secular instruction shall include the power to direct that any child in attendance at a public elementary school shall attend during such hours as may be directed by the authority at any class, whether conducted on the school premises or not, for the purpose of practical or special instruction or demonstration, and attendance at such a class shall, where the local education authority so direct, be deemed for the purpose of any enactment or by-law relating to school attendance to be attendance at a public elementary school: *Provided*, That, if by reason of any such direction a child is prevented on any day from receiving religious instruction in the school at the ordinary time mentioned in the time-table, reasonable facilities shall be afforded, subject to the provisions of section 7 of the Elementary Education Act, 1870, for enabling such child to receive religious instruction in the school at some other time.

(7) In section 11 of the Elementary Education Act, 1876 (which relates to school attendance), for the words "there is not within 2 miles" there shall be substituted the words "there is not within such distance as may be prescribed by the bylaws."

(8) Nothing in this section shall affect the provisions of the Elementary Education (Blind and Deaf Children) Act, 1893, or the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, relating to the attendance at school of the children to whom those acts apply.

9. (1) If a child who is attending or is about to attend a public elementary school or a school certified by the Board of Education under the Elementary Education (Blind and Deaf Children) Act, 1893, or the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, attains any year of age during the school term, the child shall not, for the purpose of any enactment or

by-law, whether made before or after the passing of this act, relating to school attendance, be deemed to have attained that year of age until the end of the term.

(2) The local education authority for the purposes of Part III of the Education Act, 1902, may make regulations with the approval of the Board of Education providing that a child may, in such cases as are prescribed by the regulations, be refused admission to a public elementary school or such certified school as aforesaid except at the commencement of a school term.

10. (1) Subject as hereinafter provided, all young persons shall attend such continuation schools at such times, on such days, as the local education authority of the area in which they reside may require, for 320 hours in each year, distributed as regards times and seasons as may best suit the circumstances of each locality, or, in the case of a period of less than a year, for such number of hours distributed as aforesaid as the local education authority, having regard to all the circumstances, consider reasonable: *Provided*, That—

(*a*) The obligation to attend continuation schools shall not, within a period of seven years from the appointed day on which the provisions of this section come into force, apply to young persons between the ages of 16 and 18, nor after that period to any young person who has attained the age of 16 before the expiration of that period; and

(*b*) During the like period, if the local education authority so resolve, the number of hours for which a young person may be required to attend continuation schools in any year shall be 280 instead of 320.

(2) Any young person—

(i) Who is above the age of 14 years on the appointed day; or

(ii) Who has satisfactorily completed a course of training for, and is engaged in, the sea service, in accordance with the provisions of any national scheme which may hereafter be established, by Order in Council or otherwise, with the object of maintaining an adequate supply of well-trained British seamen, or, pending the establishment of such scheme, in accordance with the provisions of any interim scheme approved by the Board of Education; or

(iii) Who is above the age of 16 years and either—

(*a*) Has passed the matriculation examination of a university of the United Kingdom or an examination recognized by the Board of Education for the purposes of this section as equivalent thereto; or

(*b*) Is shown to the satisfaction of the local education authority to have been up to the age of 16 under full-time instruction in a school recognized by the Board of Education as efficient or under suitable and efficient full-time instruction in some other manner,

shall be exempt from the obligation to attend continuation schools under this act unless he has informed the authority in writing of his desire to attend such schools and the authority have prescribed what school he shall attend.

(3) The obligation to attend continuation schools under this act shall not apply to any young person—

(i) Who is shown to the satisfaction of the local education authority to be under full-time instruction in a school recognized by the Board of Education as efficient or to be under suitable and efficient full-time instruction in some other manner; or

(ii) Who is shown to the satisfaction of the local education authority to be under suitable and efficient part-time instruction in some other manner for a number of hours in the year (being hours during which if not exempted he might be required to attend continuation schools) equal to the number of hours during which a young person is required under this act to attend a continuation school.

(4) Where a school supplying secondary education is inspected by a British university, or in Wales or Monmouthshire by the Central Welsh Board, under regulations made by the inspecting body after consultation with the Board of Education, and the inspecting body reports to the Board of Education that the school makes satisfactory provision for the education of the scholars, a young person who is attending, or has attended, such a school shall for the purposes of this section be treated as if he were attending, or had attended, a school recognized by the Board of Education as efficient.

(5) If a young person who is or has been in any school or educational institution, or the parent of any such young person, represents to the board that the young person is entitled to exemption under the provisions of this section, or that the obligation imposed by this section does not apply to him, by reason that he is or has been under suitable and efficient instruction, but that the local education authority have unreasonably refused to accept the instruction as satisfactory, the Board of Education shall consider the representation, and, if satisfied that the representation is well founded, shall make an order declaring that the young person is exempt from the obligation to attend a continuation school under this act for such period and subject to such conditions as may be named in the order: *Provided*, That the Board of Education may refuse to consider any such representation unless the local education authority or the Board of Education are enabled to inspect the school or educational institution in which the instruction is or has been given.

(6) The local education authority may require, in the case of any young person who is under an obligation to attend a continuation school, that his employment shall be suspended on any day when his attendance is required, not only during the period for which he is required to attend the school, but also for such other specified part of the day, not exceeding two hours, as the authority consider necessary in order to secure that he may be in a fit mental and bodily condition to receive full benefit from attendance at the school: *Provided*, That if any question arises between the local education authority and the employer of a young person whether a requirement made under this subsection is reasonable for the purposes aforesaid, that question shall be determined by the Board of Education, and if the Board of Education determine that the requirement is unreasonable, they may substitute such other requirement as they think reasonable.

(7) The local education authority shall not require any young person to attend a continuation school on a Sunday, or on any day or part of a day exclusively set apart for religious observance by the religious body to which he belongs, or during any holiday or half holiday to which by any enactment regulating his employment or by agreement he is entitled, nor so far as practicable during any holiday or half holiday which in his employment he is accustomed to enjoy, nor between the hours of 7 in the evening and 8 in the morning: *Provided*, That the local education authority may, with the approval of the board, vary those hours in the case of young persons employed at night or otherwise employed at abnormal times.

(8) A local education authority shall not, without the consent of a young person, require him to attend any continuation school held at or in connection with the place of his employment. The consent given by a young person for the purpose of this provision may be withdrawn by one month's notice in writing sent to the employer and to the local education authority.

Any school attended by a young person at or in connection with the place of his employment shall be open to inspection either by the local education

authority or by the Board of Education at the option of the person or persons responsible for the management of the school.

(9) In considering what continuation school a young person shall be required to attend a local education authority shall have regard, as far as practicable, to any preference which a young person or the parent of a young person under the age of 16 may express, and if a young person or the parent of a young person under the age of 16 represents in writing to the local education authority that he objects to any part of the instruction given in the continuation school which the young person is required to attend, on the ground that it is contrary or offensive to his religious belief, the obligation under this act to attend that school for the purpose of such instruction shall not apply to him, and the local education authority shall, if practicable, arrange for him to attend some other instruction in lieu thereof or some other school.

11. (1) If a young person fails, except by reason of sickness or other unavoidable cause, to comply with any requirement imposed upon him under this act for attendance at a continuation school, he shall be liable on summary conviction to a fine not exceeding 5 shillings, or in the case of a second or subsequent offense to a fine not exceeding £1.

(2) If a parent of a young person has conduced to or connived at the failure on the part of the young person to attend a continuation school as required under this act, he shall, unless an order has been made against him in respect of such failure under section 99 of the Children Act, 1908, be liable on summary conviction to a fine not exceeding £2, or in the case of a second or subsequent offense, whether relating to the same or another young person, to a fine not exceeding £5.

12. (1) The Board of Education may from time to time make regulations prescribing the manner and form in which notice is to be given as to the continuation school (if any) which a young person is required to attend, and the times of attendance thereat, and as to the hours during which his employment must be suspended, and providing for the issue of certificates of age, attendance, and exemption, and for the keeping and preservation of registers of attendance, and generally for carrying into effect the provisions of this act relating to continuation schools.

(2) For the purposes of the provisions of this act relating to continuation schools, the expression "year" means in the case of any young person the period of 12 months reckoned from the date when he ceased to be a child, or any subsequent period of 12 months.

13. (1) The Employment of Children Act, 1903, so far as it relates to England and Wales, shall be amended as follows:

(i) For subsection (1) of section 3 the following subsection shall be substituted:

"A child under the age of 12 shall not be employed; and a child of the age of 12 or upward shall not be employed on any Sunday for more than two hours, or on any day on which he is required to attend school before the close of school hours on that day, nor on any day before 6 o'clock in the morning or after 8 o'clock in the evening: *Provided*, That a local authority may make a by-law permitting, with respect to such occupations as may be specified, and subject to such conditions as may be necessary to safeguard the interests of the children, the employment of children of the age of 12 or upward before school hours, and the employment of children by their parents, but so that any employment permitted by by-law on a school day before 9 in the morning shall be limited to one hour, and that if a child is so employed

before 9 in the morning he shall not be employed for more than one hour in the afternoon."

(ii) In subsection (2) of section 3, which prohibits the employment of a child under the age of 11 years in street trading, the words "under the age of 11 years," shall be repealed.

(iii) For section 12 the following section shall be substituted:

"Except as regards the City of London, the powers and duties of a local authority under this act shall be deemed to be powers and duties under Part III, of the Education Act, 1902, and the provisions of the education acts for the time being in force with regard to those powers and duties and as to the manner in which the expenses of an authority under that part of that act shall be paid shall apply accordingly":

(iv) For the definition of the expression "local authority" there shall be substituted the following definition:

"The expression 'local authority' means in the case of the City of London the mayor, aldermen, and commons of that city in common council assembled and elsewhere the local education authority for the purposes of Part III of the Education Act, 1902."

(2) The Prevention of Cruelty to Children Act, 1904, so far as it relates to England and Wales, shall be amended as follows:

(i) In paragraph (*b*) of section 2, which restricts the employment of boys under the age of 14 years and of girls under the age of 16 years for the purpose of singing, playing, or performing, or being exhibited for profit, or offering anything for sale, between 9 p. m. and 6 a. m., "8 p. m." shall be substituted for "9 p. m." so far as relates to children under 14 years of age;

(ii) In paragraph (*c*) of section 2, which restricts the employment of children under 11 years for the purpose of singing, playing, or performing, or being exhibited for profit, or offering anything for sale, 12 years shall be substituted for 11 years;

(iii) In section 3, which relates to licenses for the employment of children exceeding 10 years of age, the age of 12 years shall be substituted for the age of 10 years;

(iv) A license under section 3 to take part in any entertainment or series of entertainments, instead of being granted, varied, added to, or rescinded as provided by that section, shall be granted by the local education authority for the purposes of Part III of the Education Act, 1902, of the area in which the child resides, subject to such restrictions and conditions as are prescribed by rules made by the Board of Education, and may be rescinded by the authority of any area in which it takes effect or is about to take effect if the restrictions and conditions of the license are not observed, and, subject as aforesaid, may be varied or added to by that authority at the request of the holder of the license;

(v) The holder of a license shall at least seven days before a child takes part in any entertainment or series of entertainments furnish the the local education authority of the area in which the entertainment is to take place with particulars of the license and such other information as the Board of Education may by rules prescribe, and if he fails to furnish such particulars and information as aforesaid, he shall be liable on summary conviction to a fine not exceeding £5.

(vi) Subsections (3) and (4) if section 3 shall cease to apply with respect to licenses to take part in an entertainment or series of entertainments;

(vii) If the applicant for a license or a person to whom a license has been granted feels aggrieved by any decision of a local education authority, he may appeal to the Board of Education, who may thereupon exercise any of the powers conferred on a local education authority by this section.

(viii) The provisions of this subsection shall not apply to any license in force on the appointed day.

(ix) References to the Employment of Children Act, 1903, shall be construed as references to that act as amended by this act.

14. No child within the meaning of this act shall be employed—

(*a*) In any factory or workshop to which the Factory and Workshop Acts, 1901 to 1911, apply; or

(*b*) In any mine to which the Coal Mines Act, 1911, applies; or

(*c*) In any mine or quarry to which the Metalliferous Mines Acts, 1872 and 1875, apply;

unless lawfully so employed on the appointed day; and those acts, respectively, shall have effect as respects England and Wales as if this provision, so far as it relates to the subject matter thereof, was incorporated therewith.

15. (1) The local education authority, if they are satisfied by a report of the school medical officer or otherwise that any child is being employed in such a manner as to be prejudicial to his health or physical development, or to render him unfit to obtain the proper benefit from his education, may either prohibit, or attach such conditions as they think fit to, his employment in that or any other manner, notwithstanding that the employment may be authorized under the other provisions of this act or any other enactment.

(2) It shall be the duty of the employer and the parent of any child who is in employment, if required by the local education authority, to furnish to the authority such information as to his employment as the authority may require, and, if the parent or employer fails to comply with any requirement of the local education authority or willfully gives false information as to the employment, he shall be liable on summary conviction to a fine not exceeding 40 shillings.

16. If any person—

(*a*) Employs a child in such a manner as to prevent the child from attending school according to the education acts and the by-laws in force in the district in which the child resides; or

(*b*) Having received notice of any prohibition or restriction as to the employment of a child issued by a local education authority under this act, employs a child in such a manner as to contravene the prohibition or restriction; or

(*c*) Employs a young person in such a manner as to prevent the young person attending a continuation school which he is required to attend under this act; or

(*d*) Employs a young person at any time when, in pursuance of any requirement under this act issued by a local education authority, the employment of that young person must be suspended;

he shall be deemed to have employed the child or young person in contravention of the Employment of Children Act, 1903, and subsections (1) and (2) of section 5 and section 6 and section 8 of that act shall apply accordingly as if they were herein reenacted and in terms made applicable to children and young persons within the meaning of this act as well as to children within the meaning of that act.

Extension of Powers and Duties.

17. For the purpose of supplementing and reinforcing the instruction and social and physical training provided by the public system of education, and without prejudice to any other powers, a local education authority for the purposes of Part III of the Education Act, 1902, as respects children attending public elementary schools, and a local education authority for the purposes of Part II of that act as respects other children and young persons and persons over the age of 18 attending educational institutions may, with the approval of the Board of Education, make arrangements to supply or maintain or aid the supply or maintenance of—

(*a*) Holiday or school camps, especially for young persons attending continuation schools;

(*b*) Centers and equipment for physical training, playing fields (other than the ordinary playgrounds of public elementary schools not provided by the local education authority), school baths, school swimming baths;

(*c*) Other facilities for social and physical training in the day or evening.

18. (1) The local education authority for the purposes of Part II of the Education Act, 1902, shall have the same duties and powers with reference to making provision for the medical inspection and treatment of children and young persons attending—

(*i*) Secondary schools provided by them;

(*ii*) Any school to the governing body of which, in pursuance of any scheme made under the Welsh Intermediate Education Act, 1889, any payments are made out of any general fund administered by a local education authority as a governing body under that act, and any school of which a local education authority are the governing body under that act;

(*iii*) Continuation schools under their direction and control; and

(*iv*) Such other schools or educational institutions (not being elementary schools) provided by them as the board direct;

as a local education authority for the purposes of Part III of the Education Act, 1902, have under paragraph (*b*) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, with reference to children attending public elementary schools, and may exercise the like powers as respects children and young persons attending any school or educational institution, whether aided by them or not, if so requested by or on behalf of the persons having the management thereof.

(2) The Local Education Authorities (Medical Treatment) Act, 1909, shall apply where any medical treatment is given in pursuance of this section as it applies to treatment given in pursuance of section 13 of the Education (Administrative Provisions) Act, 1907.

19. (1) The powers of local education authorities for the purposes of Part III of the Education Act, 1902, shall include power to make arrangements for—

(*a*) Supplying or aiding the supply of nursery schools (which expression shall include nursery classes) for children over 2 and under 5 years of age, or such later age as may be approved by the Board of Education, whose attendance at such a school is necessary or desirable for their healthy physical and mental development; and

(*b*) Attending to the health, nourishment, and physical welfare of children attending nursery schools.

(2) Notwithstanding the provisions of any act of Parliament the Board of Education may, out of moneys provided by Parliament, pay grants in aid of

nursery schools, provided that such grants shall not be paid in respect of any such school unless it is open to inspection by the local education authority, and unless that authority are enabled to appoint representatives on the body of managers to the extent of at least one-third of the total number of managers, and before recognizing any nursery school the board shall consult the local education authority.

20. A local education authority shall make arrangements under the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914, for ascertaining what children in their area are physically defective or epileptic within the meaning of those acts, and the provisions of the Elementary Education (Defective and Epileptic Children) Act, 1914, relating to mentally defective children, shall be extended so as to apply to physically defective and epileptic children, and accordingly that act shall have effect as if references therein to mentally defective children included references to physically defective and epileptic children.

21. Where a local education authority for the purposes of Part III of the Education Act, 1902, are satisfied in the case of any children that, owing to the remoteness of their homes or the conditions under which the children are living, or other exceptional circumstances affecting the children, those children are not in a position to receive the full benefit of education by means of the ordinary provision made for the purpose by the authority, the authority may, with the approval of the Board of Education, make such arrangements, either of a permanent or temporary character, and including the provision of board and lodging, as they think best suited for the purpose of enabling those children to receive the benefit of efficient elementary education, and may for that purpose enter into such agreement with the parent of any such child as they think proper: *Provided*, That where a child is boarded out in pursuance of this section the local education authority shall, if possible, and, if the parent so requests, arrange for the boarding out being with a person belonging to the religious persuasion of the child's parents.

22. Section 1 of the Education (Choice of Employment) Act, 1910, which confers on certain local education authorities the power of assisting boys and girls with respect to the choice of employment, shall have effect as if "18 years of age" were therein substituted for "17 years of age."

23. With a view to promoting the efficiency of teaching and advanced study, a local education authority for the purposes of Part II of the Education Act, 1902, may aid teachers and students to carry on any investigation for the advancement of learning or research in or in connection with an educational institution, and with that object may aid educational institutions.

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25. A local education authority shall not, in exercise of the powers conferred upon them by paragraph (*b*) of subsection (1) of section 13 of the Education (Administrative Provisions) Act, 1907, or by this act, establish a general domiciliary service of treatment by medical practitioners for children or young persons, and in making arrangements for the treatment of children and young persons a local education authority shall consider how far they can avail themselves of the services of private medical practitioners.

Abolition of Fees in Public Elementary Schools.

26. (1) No fees shall be charged or other charges of any kind made in any public elementary school, except as provided by the Education (Provision of Meals) Act, 1906, and the Local Education Authorities (Medical Treatment) Act, 1909.

(2) During a period of five years from the appointed day the Board of Education shall in each year, out of moneys provided by Parliament, pay to the managers of a school maintained but not provided by a local education authority in which fees were charged immediately before the appointed day, the average yearly sum paid to the managers under section 14 of the Education Act, 1902, during the five years immediately preceding the appointed day.

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Administrative Provisions.

27. If the governing body of any school or educational institution not liable to inspection by any Government department, or, if there is no governing body, the headmaster requests the Board of Education to inspect the school or institution and to report thereon, the Board of Education may do so, if they think fit, free of cost; but this section shall be without prejudice to the provisions relating to the Central Welsh Board contained in subsection (1) of section 3 of the Board of Education Act, 1899.

28. (1) In order that full information may be available as to the provision for education and the use made of such provision in England and Wales—

(*a*) It shall be the duty of the responsible person as hereinafter defined, in respect of every school or educational institution not in receipt of grants from the Board of Education, to furnish to the Board of Education in a form prescribed by the board—

(i) In the case of a school or educational institution existing at the appointed day, within three months of that day;

(ii) In the case of a school or educational institution opened after the appointed day, within three months of the opening thereof;

the name and address of the school or institution and a short description of the school or institution;

(*b*) It shall be the duty of every such responsible person when required by the Board of Education to furnish to the board such further particulars with respect to the school or institution as may be prescribed by regulations made by the board:

Provided, That the board may exempt from both or either of the above obligations any schools or educational institutions with respect to which the necessary information is already in the possession of the board or is otherwise available.

(2) If the responsible person fails to furnish any information required by this section, he shall be liable on summary conviction to a penalty not exceeding £10, and to a penalty not exceeding £5 for every day on which the failure continues after conviction therefor.

(3) For the purposes of this section "the responsible person" means the secretary or person performing the duty of secretary to the governing body of the school or institution, or, if there is no governing body, the headmaster or person responsible for the management of the school or institution.

(4) Any regulations made by the Board of Education under this section with respect to the particulars to be furnished shall be laid before Parliament as soon as may be after they are made.

29. (1) Notwithstanding anything in the Education Act, 1902, the appointment of all teachers of secular subjects not attached to the staff of any particular public elementary school and teachers appointed for the purpose of giving practical instruction, pupil teachers, and student teachers, shall be made by the local education authority, and it is hereby declared that the local education authority have power to direct the managers of any public elementary

schools not provided by them to make arrangements for the admission of any such teachers to the schools.

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30. (1) The managers of a public elementary school not provided by the local education authority, if they wish to close the school, shall give 18 months' notice to the local education authority of their intention to close the school, and a notice under this provision shall not be withdrawn except with the consent of the local education authority.

(2) If the managers of a school who have given such a notice are unable or unwilling to carry on the school up to the expiration of the period specified in the notice, the schoolhouse shall be put at the disposal of the local education authority, if the authority so desire, for the whole or any part of the period, free of charge, for the purposes of a school provided by them, but subject to an obligation on the part of the authority to keep the schoolhouse in repair and to pay any outgoings in respect thereof, and to allow the use of the schoolhouse and the school furniture by the persons who were the managers of the school to the like extent and subject to the like conditions as if the school had continued to be carried on by those managers.

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31. Where there are two or more public elementary schools not provided by the local education authority of the same denominational character in the same locality, the local education authority, if they consider that it is expedient for the purpose of educational efficiency and economy, may, with the approval of the Board of Education, give directions for the distribution of the children in those schools according to age, sex, or attainments, and otherwise with respect to the organization of the schools; and for the grouping of the schools under one body of managers constituted in the manner provided by subsection (2) of section 12 of the Education Act, 1902: *Provided*, That, if the constitution of the body of managers fails to be determined by the Board of Education under that section, the board shall observe the principles and proportions prescribed by sections 6 and 11 of that act; and that, if the managers of a school affected by and directions given under this section request a public inquiry, the board shall hold a public inquiry before approving those directions.

32. (1) Notwithstanding the provisions of section 6 of the Education Act, 1902, or, in the case of London, subsection (1) of section 2 of the Education (London) Act, 1903, as to the appointment of managers, any public elementary school which in the opinion of the board is organized for the sole purpose of giving advanced instruction to older children may be managed in such manner as may be approved by the local education authority, and, in the case of a school not provided by that authority, also by the managers of the school.

(2) Notwithstanding anything contained in sections 6 and 8 of the Education Act, 1902, or in section 2 of the Education (London) Act, 1903, the provision of premises for classes in practical or advanced instruction for children attending from more than one public elementary school shall not be deemed to be the provision of a new public elementary school, and any class conducted in such premises may be managed in such manner as may be approved by the local education authority.

33. Except as expressly provided by this act, nothing in this act shall affect the provisions of the education acts relating to public elementary schools not provided by the local education authority or the provisions of Part II, of the Education Act, 1902.

34. (1) A local education authority may be authorized to purchase land compulsorily for the purpose of any of their powers or duties under the educa-

tion acts, by means of an order submitted to the Board of Education and confirmed by the board in accordance with the provisions contained in paragraphs (1) to (13) of the First Schedule to the Housing, Town Planning, etc.,, Act, 1909, and those provisions shall have effect for the purpose, with the substitution of the Board of Education for the local government board, of the local education authority for the local authority, and of references to the education acts for references to this act"; *Provided*, That the Board of Education shall not confirm any such order even when unopposed if they are of opinion that the land is unsuited for the purpose for which it is proposed to be acquired.

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(2) The powers given by this section in relation to the compulsory purchase of land by the local education authority shall be in substitution for any other powers existing for that purpose, but without prejudice to any powers conferred by any provisional order confirmed by Parliament before the appointed day.

35. A local education authority may, with the consent of the Board of Education, who shall consult the authority of the area in which the proposed site is situated, provide a public elementary school, in cases where it appears convenient to do so, on a site outside their area for the use of children within their area, and for the purposes of the education acts a school so provided shall be deemed to be situated within the area of the authority.

36. (1) It shall not be obligatory on a county council to charge on or raise within particular areas any portion of such expenses as are mentioned in paragraph (*c*) or paragraph (*d*) of subsection (1) of section 18 of the Education Act, 1902, and accordingly each of those paragraphs shall have effect as if for the word "shall" there was substituted the word "may" and as if the words "less than one-half or" were omitted therefrom; and, where before the passing of this act any portion of such expenses has been charged on or allocated to any area, the county council may cancel or vary the charge of allocation.

(2) Before charging any expenses under section 18 (1) (*a*) of the Education Act, 1902, on any area situate within a borough or urban district the council of which is an authority for the purposes of Part III of the Education Act, 1902, a county council shall consult the council of the borough or urban district concerned.

37. Any expenses incurred by a council in connection with any provisional order for the purposes of the education acts, or any order under this act for the purpose of the acquisition of land, shall be defrayed as expenses of the council under the Education Act, 1902, and the council shall have the same power of borrowing for the purpose of these expenses as they have under section 19 of the Education Act, 1902, for the purpose of the expenses therein mentioned.

38. Any council having powers under the education acts may, subject to regulations made by the Board of Education, defray as part of their expenses under those acts any reasonable expenses incurred by them in paying subscriptions toward the cost of, or otherwise in connection with, meetings or conferences held for the purpose of discussing the promotion and organization of education or educational administration, and the attendance of persons nominated by the council at any such meeting or conference: *Provided*, That—

(*a*) The expenses of more than three persons in connection with any meeting or conference shall not be paid except with the previous sanction of the Board of Education;

(*b*) Payments for traveling expenses and subsistence shall be in accordance with the scale adopted by the council;

(*c*) Expenses shall not be paid in respect of any meeting or conference outside the United Kingdom unless the Board of Education have sanctioned the attendance of persons nominated by the council at the meeting or the conference;

(*d*) No expenses for any purpose shall be paid under this section without the approval of the Board of Education, unless expenditure for the purpose has been specially authorized or ratified by resolution of the council, after special notice has been given to members of the council of the proposal to authorize or ratify the expenditure, or, where a council has delegated its powers under this section to the education committee, by resolution of that committee after like notice has been given to the members thereof.

39. The powers of a local education authority for the purposes of Part III of the Education Act, 1902, shall include a power to prosecute any person under section 12 of the Children Act, 1908, where the person against whom the offense was committed was a child within the meaning of this act, and to pay any expenses incidental to the prosecution.

40. (1) The Board of Education may hold a public inquiry for the purpose of the exercise of any of their powers or the performance of any of their duties under the education acts.

(2) The following provisions shall (except as otherwise provided by the education acts) apply to any public inquiry held by the Board of Education:

(*a*) The board shall appoint a person or persons to hold the inquiry;

(*b*) The person or persons so appointed shall hold a sitting or sittings in some convenient place in the neighborhood to which the subject of the inquiry relates, and thereat shall hear, receive, and examine any evidence and information offered, and hear and inquire into the objections or representations made respecting the subject matter of the inquiry, with power from time to time to adjourn any sitting;

(c) Notice shall be published in such manner as the board direct of every such sitting, except an adjourned sitting, seven days at least before the holding thereof;

(*d*) The person or persons so appointed shall make a report in writing to the board setting forth the result of the inquiry and the objections and representations, if any, made thereat, and any opinion or recommendations submitted by him or them to the board;

(*e*) The board shall furnish a copy of the report to any local education authority concerned with the subject matter of the inquiry, and, on payment of such fee as may be fixed by the board, to any person interested;

(*f*) The board may, where it appears to them reasonable that such an order should be made, order the payment of the whole or any part of the costs of the inquiry either by any local education authority to whose administration the inquiry appears to the board to be incidental, or by the applicant for the inquiry, and may require the applicant for an inquiry to give security for the costs thereof;

(*g*) Any order so made shall certify the amount to be paid by the local education authority or the applicant, and any amount so certified shall, without prejudice to the recovery thereof as a debt due to the Crown, be recoverable by the board summarily as a civil debt from the authority or the applicant as the case may be.

41. The minutes of the proceedings of a local education authority, and, where a local education authority delegate to their education committee any powers

and the acts and proceedings of the education committee as respects the exercise of those powers are not required to be submitted to the council for their approval, the minutes of the proceedings of the education committee relating to the exercise of those powers shall be open to the inspection of any ratepayer at any reasonable time during the ordinary hours of business on payment of a fee of 1 shilling, and any ratepayer may make a copy thereof or take an extract therefrom.

42. (1) For the yearly sum payable to the Central Welsh Board under the scheme regulating the intermediate and technical education fund of any county, as defined by the Welsh Intermediate Education Act, 1889, there shall be substituted—

(*a*) A yearly sum equal to a percentage not exceeding 22½ per cent fixed from time to time at a uniform rate for every county by the Central Welsh Board of the sum produced by a rate of 1 halfpenny in the pound for the preceding year, calculated in the manner provided by subsection (3) of section 8 of the Welsh Intermediate Education Act, 1889; and

(*b*) A yearly sum equal to 5 per cent of the net income for the preceding year of any endowment comprised in the intermediate and technical education fund of the county, or, in the alternative, for each year during such period as may be agreed with the Central Welsh Board, such yearly as that board may agree to accept in lieu thereof.

(2) For the purpose of ascertaining the said net income there shall be deducted from the gross income all proper expenses and outgoings in respect of administration and management of the endowment (including charges for interest on and repayment of loans and replacement of capital), and any sums required by the scheme to be treated as capital, and the term "endowment" shall include augmentations acquired by the investment of surplus income whether derived from endowment or county rate, or from any other source, but not property occupied for the purposes of the scheme.

(3) The power of charging capitation fees for scholars offered for examination conferred on the Central Welsh Board by the scheme of the 13th day of May, 1896, regulating the Central Welsh Intermediate Education Fund, shall cease.

(4) The provisions of this section shall have effect and be construed as part of the schemes regulating the Central Welsh Intermediate Education Fund and the intermediate and technical education funds of counties in Wales and Monmouthshire, and may be repealed or altered by future schemes accordingly.

43. All orders, certificates, notices, requirements, and documents of a local education authority under the education acts, if purporting to be signed by the clerk of the authority or of the education committee, or by the director of, or secretary for, education, shall until the contrary is provided be deemed to be made by the authority and to have been so signed, and may be proved by the production of a copy thereof purporting to have been so signed.

Educational Grants.

44. (1) The Board of Education shall, subject to the provisions of this act, by regulations provide for the payment to local education authorities out of moneys provided by Parliament of annual substantive grants in aid of education of such amount and subject to such conditions and limitations as may be prescribed in the regulations, and nothing in any act of Parliament shall prevent the Board of Education from paying grants to an authority in respect of any expenditure which the authority may lawfully incur.

(2) Subject to the regulations made under the next succeeding subsection, the total sums paid to a local education authority out of moneys provided by Parliament and the total taxation account in aid of elementary education or education other than elementary, as the case may be, shall not be less than one-half of the net expenditure of the authority recognized by the Board of Education as expenditure in aid of which parliamentary grants should be made to the authority, and, if the total sums payable out of those moneys to an authority in any year fall short of one-half of that expenditure, there shall be paid by the Board of Education to that authority, out of moneys provided by Parliament, a deficiency grant equal to the amount of the deficiency, provided that a deficiency grant shall not be so paid as to make good to the authority any deductions made from a substantive grant.

(3) The Board of Education may make regulations for the purpose of determining how the amount of any deficiency grant payable under this section shall be ascertained and paid, and those regulations, shall if the Treasury so direct, provide for the exclusion in the ascertainment of that amount of all or any sums paid by any Government department other than the Board of Education and of all or any expenditure which in the opinion of the Board of Education is attributable to a service in respect of which payments are made by a Government department other than the Board of Education.

* * * * * * *

(5) If, by reason of the failure of an authority to perform its duties under the education acts or to comply with the conditions on which grants are made, the deficiency grant is reduced or a deduction is made from any substantive grant exceeding £500 or the amount which would be produced by a rate of a halfpenny in the pound whichever is the less, the Board of Education shall cause to be laid before Parliament a report stating the amount of and the reasons for the reduction or deduction.

(6) Any regulations made by the Board of Education for the payment of grants shall be laid before Parliament as soon as may be after they are made.

Educational Trusts.

45. (1) His Majesty may by Order in Council constitute and incorporate with power to hold land without license in mortmain one or more official trustees of educational trust property, and may apply to the trustee or trustees so constituted the provisions of the Charitable Trusts Acts, 1853 to 1914, relating to the official trustee of charity lands and the official trustees of charitable funds so far as they relate to endowments which are held for or ought to be applied to educational purposes.

(2) On the constitution of an official trustee or official trustees of educational trust property—

(*a*) All land or estates or interests in land then vested in the official trustee of charity lands which are held by him as endowments for solely educational purposes, and

(*b*) All securities then vested in the official trustees of charitable funds which those trustees certify to be held by them as endowments for solely educational purposes,

shall by virtue of this act vest in the official trustee or trustees of educational trust property upon the trusts and for the purposes for which they were held by the official trustee of charity lands and the official trustees of charitable funds, and, on such a certificate by the official trustees of charitable funds as aforesaid being sent to the person having charge of the books or registers in

which any such securities are inscribed or registered, that person shall make such entries in the books or registers as may be necessary to give effect to this section.

(3) If any question arises as to whether an endowment or any part of an endowment is held for or ought to be applied to solely educational purposes, the question shall be determined by the Charity Commissioners.

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(3) Every assurance of land or personal estate to be laid out in the purchase of land for educational purposes, including every assurance of land to any local authority for any educational purpose or purposes for which such authority is empowered by any act of Parliament to acquire land, shall be sent to the offices of the Board of Education in London for the purpose of being recorded in the books of the board as soon as may be after the execution of the deed or other instrument of assurance, or in the case of a will after the death of the testator.

47. Where, under any scheme made before the passing of this act relating to an educational charity, the approval of the Board of Education is required to the exercise by the trustees under the scheme of a power of appointing new trustees, the scheme shall, except in such cases as the board may otherwise direct, have effect as if no such approval was required thereunder, and the board may by order make such modifications of any such scheme as may be necessary to give effect to this provision.

General.

48. (1) In this act, unless the context otherwise requires—

The expression "child" means any child up to the age when his parents cease to be under an obligation to cause him to receive efficient elementary instruction or to attend school under the enactments relating to elementary education and the by-laws made thereunder;

The expression "young person" means a person under 18 years of age who is no longer a child;

The expression "parent" in relation to a young person includes guardian and every person who is liable to maintain or has the actual custody of the young person;

The expression "practical instruction" means instruction in cookery, laundry work, housewifery, dairy work, handicrafts, and gardening, and such other subjects as the board declare to be subjects of practical instruction;

The expression "school term" means the term as fixed by the local education authority;

The expression "sea service" has the same meaning as in the Merchant Shipping Acts, 1894 to 1916, and includes sea-fishing service;

Other expressions have the same meaning as in the education acts.

(2) In the education acts the expressions "employ" and "employment" used in reference to a child or young person, include employment in any labor exercised by way of trade or for the purposes of gain, whether the gain be to the child or young person or to any other person.

49. Section 120 of the Local Government Act, 1888, which relates to compensation to existing officers, shall apply to officers serving under local education authorities at the passing of this act, who, by virtue of this act or anything done in pursuance or in consequence of this act, suffer direct pecuniary loss by abolition of office or by diminution or loss of fees or salary, subject as follows:

(*a*) Teachers in public elementary schools maintained by a local education authority shall be deemed to be officers serving under that authority.

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(*e*) Any expenses shall be paid by the council under whom the officer was serving at the date when the loss arose out of the fund or rate out of which the expenses of the council under the education acts are paid, and, if any compensation is payable otherwise than by way of an annual sum, the payment of that compensation shall be a purpose for which a council may borrow for the purposes of those acts.

* * * * * * *

52. (1) This act may be cited as the Education Act, 1918, and shall be read as one with the Education Acts, 1870 to 1916, and those acts and this act may be cited together as the Education Acts, 1870 to 1918, and are in this act referred to as "the education acts."

(2) This act shall not extend to Scotland or Ireland.

(3) This act shall come into operation on the appointed day, and the appointed day shall be such day as the Board of Education may appoint and different days may be appointed for different purposes and for different provisions of this act, for different areas or parts of areas, and for different persons or classes of persons: *Provided*, That the appointed day for the purposes of subsections (1) and (2) of section 8 shall not be earlier than the termination of the present war, and for the purposes of paragraph (iii) of subsection (2) of section 13 shall not be earlier than three years after the passing of this act, and that for a period of seven years from the appointed day the duty of the council of a county (other than the London County Council) shall not include a duty to establish certified schools for boarding and lodging physically defective and epileptic children.

SCOTLAND.

THE SCHOOLS DURING THE WAR.

Education in Scotland passed through the same vicissitudes since the outbreak of the war as in England. The Scotch Department of Education, local school board managers, and teachers devoted much energy to minimizing the interference with education created by the new conditions, but the inevitable dislocation occurred. Many of the school buildings during the past two years continued to be under military occupation. This led to the introduction in many places of "double shifts," which, however, did not prove to be a satisfactory experiment educationally. The worst feature was a continuance of irregular attendance and of the granting of exemptions, especially in rural agricultural areas. The number of school boards granting no exemptions was 320 in 1913–14; 263 in 1914–15; 126 in 1915–16; and 112 in 1916–17.

The relaxation of discipline resulted in an increase of juvenile delinquency, which attracted the attention of all interested in the training of the young. Even allowing for the fact that many of the offenses which are statistically set down as crimes are only "childish pranks" or the "assertion of independence of control," the problem became serious. Here, as elsewhere, the establishment

of play centers, supported by Government grants, provided a means for redirecting the youthful energies into right channels. Other agencies such as scouts, brigades and clubs, employment agencies maintained by school boards, played their part in this crisis.

The greater prosperity of the country conduced to an improvement in the general welfare of the children, a fortunate circumstance in view of the difficulties involved in maintaining the school medical service on a normal basis. While there was a considerable decrease in the number of children medically inspected, there was an appreciable increase in the provision and expenditure for medical treatment.

The depletion in the number of available teachers was met by an increase in the size of classes, "by the continuance of teachers who had reached the age for retirement, by the temporary return of women teachers who had given up teaching on their marriage, and by the employment of a limited number of persons of good education likely to be of use in schools for which no technically qualified teacher was available." The output of the teachers' training colleges also appears to have been satisfactory. When the question of salaries became urgent, the Treasury agreed in 1916–17 "to allow a grant of one-half of the bonus paid by the managers, subject to a maximum grant of £5 in the case of teachers in receipt of salaries not exceeding £110 or of £4 in the case of teachers whose salaries exceeded £110 but did not exceed £160." The total grant paid in this way amounted to $164,955. In the following year an additional grant of $2,649,280 for education was made to Scotland, of which $1,970,875 was devoted to the purpose of securing definite increases of salary to replace the bonus. With the amount added by school boards there accrued to teachers an average increase of $90. For the year 1918–19 an additional appropriation was made by Parliament of $2,000,000 for the improvement of teachers' salaries and pensions. In July, 1917, the department appointed a committee on the remuneration of teachers in Scotland, which issued a report later in the same year embodying proposed scales of salaries for teachers and other recommendations. (See pp. 112f.) The department also devoted part of the new grant to increasing the pensions of retired teachers to a minimum of $260 a year.

Intermediate and secondary education showed increasing enrollment and increasing attendance. In 1914–15 the number of pupils in higher grade or intermediate schools was 29,488; in 1915–16, 30,699; and in 1916–17, 31,949. In the grant-earning secondary schools the enrollment in 1915 was 19,866; in 1915–16, 20,317; and in 1916–17, 21,012. Continuation classes and central institutions for technical instruction, both of which are normally attended by older pupils than the full-time intermediate and secondary schools, were adversely

affected by the war and showed considerable decrease in enrollment and attendance. The central institutions, however, directed their attention and resources to war work and also undertook the training of disabled soldiers and sailors in cooperation with local pension committees.

The total net ordinary expenditure of the school boards for 1914–15 was $20,388,730 and the income $20,853,725, of which $9,387,005 came from the department. In 1915–16 all these items indicate an increase; the expenditure was $20,534,460, the income $21,098,730, and the department grant was $9,454,905, a sum which was considerably increased in the following year by the extraordinary grant for the increase of salaries.

TEACHERS' SALARIES.[1]

The effect of the war on salaries of teachers in Scotland was similar to that in England and Wales, with similar attempts to meet the situation by the grant of bonuses. In July, 1917, the Government appointed a departmental committee on the remuneration of teachers in Scotland[2] which considered and reported in November, 1917, on salaries in elementary and secondary schools, and in training colleges. The general considerations determining the report of the committee were as follows:

> In considering the larger and more important part of our reference, viz, the suitable scales of salary for different classes of teachers, we desired to approach the question not solely, nor even mainly, as one involving the interests of a single profession, but as one vitally affecting the welfare of the whole community. That welfare must depend, in increasing measure, upon the efficiency of national education; and the fundamental requirement for securing this is that there should be an adequate supply of teachers of high capacity, proved aptitude, and thorough training. This can not be attained unless the remuneration is such as to make the teaching profession one which may compete with other professions in securing recruits of sufficient capacity, and in repaying these recruits for the time and labor spent in their special training. To attract such recruits it is necessary not only that a fair salary should be offered to begin with, but—and it is an even more vital condition—that sufficiently attractive prospects should be opened to those who have served for a certain number of years.

Following this line of inquiry the committee came to the following general conclusions:

> 1. That not only as a temporary war measure, but as a permanent necessity, in order to maintain an efficient teaching profession in the interests of the country, the general remuneration of teachers must be raised, and that an equalization of the scale of salaries for similar classes of schools over the country is desirable.

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[1] See footnote, p. 57.

[2] Report of a Departmental Committee on the Remuneration of Teachers in Scotland, Edinburgh, 1917.

2. That this can not be attained by any continuation of or extension of the bonus system.

3. That, while an adequate initial salary must be provided, it is even of greater importance that improved prospects should be opened to those who attain a certain length of service, and have proved their competency and their aptitude for the profession.

4. That the scale should take account of—

(*a*) The length and character of the preliminary training.

(*b*) Length of service.

(*c*) The responsibility of the post held and its demands on the capacity and energy of a teacher.

The scales recommended by the committee are in every case higher than those prevailing at present and determined by local and accidental circumstances. While aware of the large increase of expenditure involved, the committee declares it to be its—

firm and considered conviction, however, that the scheme * * * can not be attained except, first, by an extension of school areas; and, secondly, by a very large proportion of the additional amount required being provided by the central authority. * * * Whatever the cost, if it is proved to be necessary for high educational efficiency, we can not afford the ultimate extravagance which is involved in undue parsimony in such a case. It should not be overlooked that the aim of the proposed standard of salaries * * * is not so much to improve the position and prospects of the teaching profession, as to secure in the future, for the benefit of the State, an adequate supply of amply efficient recruits for our educational army.

THE REFORM OF EDUCATION.

The demands for educational reorganization in Scotland have been as insistent as in England and were supported by the public and the teachers. The directions of desirable reforms were summarized in a report[1] of the Scottish education reform committee, an organization representing the Educational Institute, the Secondary Educational Association, and the Class Teachers' Federation. The attitude of the teachers on the desirability of a national program that would unify all branches of education on the basis of national needs is well indicated by the amalgamation of their three principal organizations in the Educational Institute. The professional solidarity thus attained offers a guarantee of educational progress. The education reform committee through a number of subcommittees issued recommendations on administration and finance, general education, the education of women, technical and university education, professional training and status, and moral education. The report is a valuable contribution, and, like similar reports in England, enriches educational thought and furnishes a firm foundation for future reconstruction.

[1] Reform in Scottish Education, being the Report of the Scottish Education Reform Committee. (Edinburgh, 1917.)

The committee urges the abolition of the parish school board system and the substitution of county councils and town councils, acting through education committees. Voluntary and endowed schools should be brought within the scope of the national system. For the purpose of coordinating local and central control of education the appointment is recommended of a national education council, consisting of representatives of (*a*) the Scotch Education Department; (*b*) local education authorities; (*c*) universities, provincial committees, central institutions; (*d*) teachers engaged in the various types of schools; (*e*) other legitimate interests. Such a body would make available the advice of experts on a larger scale than by means of the representation of teachers on the local education committees, which is also advocated. The nationalization of the educational system should, in the opinion of the committee, be stimulated by a revision of the methods of making grants, so that two main purposes will be promoted—the establishment of a national scale of salaries and the encouragement of progress by the assumption of a definite share of other approved expenditure. In addition to these two principles, special aid should be given to the highlands and the islands to equalize the burden of these poorer districts.

On the subject of school organization the committee emphasizes the need of medical inspection and treatment and other provisions for physical welfare. Attendance at school for full time should be made compulsory up to 15, and for part time up to 18. Recommendations are offered on the size of schools and classes. The curriculum should be reviewed in order to determine what subjects are indispensable and to eliminate what is merely traditional and nonessential. The time saved in this way, and by the simplification of spelling and by the introduction of the metric system and decimal coinage, could be utilized for practical work. Emphasis is placed on the importance of religious instruction and moral education, direct, indirect, and incidental, not only in and through the school, but also by the cooperation of all the influences affecting the life of children. "International polity should be one of the aims of moral education, and the ethical code of the individual ought, *mutatis mutandis*, to be that for the nation as well." Differentiation, of course, is urged to meet the needs of girls and of pupils in rural intermediate and secondary schools. Improvements are advocated in the system of external examinations.

Since "the key of all educational reform lies in the improvement of the status, training, conditions of service, and emoluments of the teacher," these subjects receive detailed consideration. The preliminary training of candidates for the profession should be the same as that of other students in secondary schools, and their admission to training colleges should be in the hands of a board of control repre-

senting the provincial committees and the training centers. The training colleges should be affiliated as professional schools with the universities in which the students should pursue their academic studies. The length of the training course should be three years for undergraduates and one year for graduates. Teachers should not be granted certificates before the age of 21, while two years' satisfactory service should be required for the final certificate. Greater freedom for the teachers and their representation on bodies administering education are measures suggested for the improvement both of their status and of education in general, to both of which a national scale of salaries and prospects for advancement to the inspectorate would contribute.

In discussing technical education the report considers the raising of the school leaving age to 15, and compulsory attendance at continuation classes fundamental to the efficiency of apprenticeship, which should be made obligatory wherever practicable. The cooperation of teachers and expert advisers in technical education, the coordination of efforts in the technical schools, central institutions, and universities, close relationships between the trades and technical education, and the promotion of scientific and industrial research are regarded as essential. Similar recommendations are made for commercial education. The universities should cooperate with secondary, technical, and commercial schools, and utilize by affiliation work in other institutions on a university level. More attention should be given to the teaching of pure and applied science, to modern languages, and to education by the establishment of a chair in this subject in each university. Greater autonomy among the universities and specialization of the various universities along different lines should be encouraged. Finally "a university should be the center of its educational area, and should lend all its resources and influence to the higher education of the working population," employing methods that have been attended with so much success in the organization of the Workers' Educational Association in England and the people's high schools in Denmark.

THE SCOTTISH EDUCATION BILL.

The need of some reorganization is perhaps greater in Scotland than in England, which, eliminating the smaller area, developed a sound administrative system in 1902. The remarkable educational tradition of the country has tended to retard the development of an administrative reform more suited to modern needs. Successful as this tradition has been in selecting talent and promoting boys of ability, it has not been effective in raising the general average. As in England, compulsory attendance laws were subject to local exemptions, voluntary measures for educating adolescent boys and girls

were not successful, and in many parts of the country accessible secondary schools were not provided. Under the existing system there are nearly 1,000 school boards elected *ad hoc* in the burghs and parishes; each voluntary and endowed school is under its own administrative authority; while secondary education since 1908 is administered by nearly 40 secondary school committees.

At the close of 1917 a bill to reduce this system to some more unified plan of organization was introduced in Parliament by the Secretary for Scotland. The bill followed the English administrative system somewhat—each county council and the councils of the five chief burghs (Edinburgh, Glasgow, Aberdeen, Dundee, and Leith), were to be the education authorities of their respective areas, assisted by district education committees and local school committees. This proposal met with considerable opposition, the fear being expressed that the administration of education would be reduced to the level of that of sewers, water, and gas. If the smaller local school board must surrender its functions to a board covering a wider area, that board, too, should be elected *ad hoc* and in this way make use of the accumulated experience of the older school board members. On August 6, 1918, a new bill was substituted, giving effect to this demand for *ad hoc* boards.

The central administration is to continue as hitherto in the hands of the Scotch Education Department, which is empowered to establish an advisory council consisting, to the extent of not less than two-thirds of its membership, of persons qualified to represent the interests of education. The function of the council will be to advise and make recommendations to the department.

The counties and the five large burghs are set up as education authorities administered by boards specially elected for the purpose by the local government electors. The number of electoral districts and the constitution of each education authority are to be determined by the Secretary for Scotland. Each education authority will be required to present a scheme for the approval of the Scotch Education Department for the establishment of school management committees, including a representative of the authority, one teacher, and local representatives, for the general management and supervision of schools, but without any financial powers.

The education authority will be required to raise money for education and control the expenditure; appoint, transfer, or dismiss teachers; establish or discontinue intermediate or secondary schools or control institutions for advanced technical instruction; and provide bursaries and facilitate attendance at secondary and higher schools. Further, the education authority is charged with the duty of preparing schemes for the adequate provision of free elementary, intermediate, and secondary schools, and for the support of certain

schools charging fees, and of drawing up schemes of scales of salaries on the basis of a minimum national scale recommended by a departmental committee. (See pp. 112f.)

Contributions must also be made by education authorities toward the maintenance of the training colleges for teachers in proportion to the number of fully qualified teachers in their areas, and aid may also be extended to central institutions and universities, provided reasonable representation on their governing bodies is granted. "As an ancillary means of promoting education" an authority may furnish books for general reading not only to children and young persons but also to adults, and in this service is to cooperate financially and otherwise with public libraries, where they exist. Each education authority is required to establish an advisory council of persons qualified to represent the interests of education, whose duty shall be to advise and make recommendations for the consideration of the authority. For the purpose of developing a national system of administration the bill permits the managers and trustees of voluntary or denominational schools to transfer such schools to the education authorities. A school so transferred will become a public school, receiving the same grants as a public school. The teachers of such a school must be taken over by the authority and paid the same scale of salaries as public-school teachers, provided that the department is satisfied with their qualifications and the church or denomination concerned with their religious character. The same time will be devoted after the transfer as before it to religious instruction, which is to be placed under an approved supervisor. Public grants will not be paid to voluntary schools not transferred to the education authorities within two years of the passing of the bill.

If it is found 10 years after the transfer has been made that the religious character of the district served by a transferred school has changed, such a school by authority of the department may become a public school in all respects. On the other hand, on the representation of parents as to the need of accommodation for the children of any denomination the department may approve the erection of new schools of the same character as a transferred school. This provision is likely to encounter the severest opposition. It is argued that every denomination except that which preponderates in Scotland would be enabled by the proposal to have its own sectarian belief propagated in schools maintained by public funds. The situation is similar to that established in England by the education act of 1902, and the history of education across the border since that date may help to remove the danger of organized opposition to the bill in general on the ground of this provision alone.

The schools are to be maintained by grants, loans, and an annual levy of an education rate to meet any deficiency that may occur.

The rate is to be apportioned to each parish in an educational area in accordance with the local valuations. The State grants will consist of the education fund established in 1908, an annual appropriation equal to the educational estimates for the financial year 1913–14, which is to be considered for purposes of the law as the standard year, and a sum equal to eleven-eightieths of the excess of the annual estimates for education in England and Wales over the sums expended in the standard year.

The bill provides for the establishment of nursery schools for children between the ages of 2 and 5, in which attention must be given to health, nourishment, and physical welfare. Compulsory school attendance begins at the age of 5 and is extended by the bill to the age of 15, the pupils entering and leaving school on definitely fixed dates. No exemptions from school attendance may be granted to pupils under the age of 13. Child labor on school days between the hours of 6 o'clock in the evening and 8 o'clock in the morning is entirely prohibited, and children between 13 and 15 may be employed only if definitely exempted from school attendance. Street trading by children under 17 is forbidden, while no child under 15 may be employed in factories, workshops, mines, or quarries.

Children leaving elementary schools at the age of 15, and not exempted by virtue of attendance at an intermediate or secondary school or of having reached the age of 17 and an equivalent educational standard, will be compelled, if the bill passes, to attend a continuation school up to the age of 18. For the present the compulsory age limit will be 16 within one year of the date on which the bill, if enacted, comes into operation, to be raised to 18 as soon thereafter as the department may decide. Attendance will be required between the hours of 8 o'clock in the morning and 7 o'clock in the evening for 320 hours a year without increasing the total period of employment permitted for young persons by Parliament.

The education authorities, who are permitted to delegate the management and supervision of continuation schools to school management committees or to appoint special committees for the purpose, on which they are represented, are required, after consultation with and with the cooperation of associations and committees of employers and workmen in commerce and trades, to draft schemes for continuation schools. Such schemes must include English language and literature and such other parts of a general education as may be deemed desirable, physical exercises, and special instruction intended to promote efficiency in the vocation in which the young persons may be engaged. Fines for irregular attendance are to be imposed on the young persons concerned and on employers who do not afford the necessary opportunity for regular and punctual attendance at continuation schools.

The bill makes no special provision for secondary or higher education, but authorities are indirectly required to increase the facilities by the provision that "no child or young person resident in their education area who is qualified for attendance at an intermediate or secondary school, and in their opinion shows promise of profiting thereby, shall be debarred therefrom by reason of the expense involved." An education authority is accordingly required to furnish the necessary assistance in such cases by the payment of fees, traveling expenses, scholarships, or maintenance allowances to encourage attendance not only at intermediate or secondary schools, but also at universities, teachers' training colleges, or central institutions for technical instruction.

The bill was passed in November, 1918. The amendment of the original plan of administration cleared one of the chief subjects of contention out of the way. Any obstacles that might have been raised to the enactment of the continuation school measure had already been removed by the discussions on the similar provision in the English act. The unanimous support of the teachers was assured by the refusal to grant recognition to any schools in which the minimum national scale of salaries has not been adopted. The only difficulty that remains, and one which has always proved a serious stumbling block, is the revival of the religious difficulty involved in the transfer of the voluntary schools. The probability is, however, that the national needs of the moment will prove sufficient to secure the solidarity necessary for the enactment of the bill.

EDUCATION (SCOTLAND) ACT, 1918.

[8 and 9 Geo. 5. Ch. 48.]

ARRANGEMENT OF SECTIONS.

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CHAPTER 48.

An Act to make further provision with respect to education in Scotland and for purposes connected therewith. [21st November, 1918.]

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

Education Authorities.

1. A local authority for the purposes of education (in this act called the "education authority") shall be elected in and for each of the following areas (in this act called "education areas"), that is to say, in and for—

(*a*) Each of the burghs mentioned in the first schedule to this act (in this act called the "scheduled burghs"); and

(*b*) Every county, including every burgh situated therein not being one of the scheduled burghs.

2. (1) For the purpose of such elections, the Secretary for Scotland shall, as soon as may be after the passing of this act, by order divide each education area into electoral divisions, and in determining the boundaries thereof, he shall have regard, so far as may be, to the boundaries of wards in scheduled burghs, and of districts, burghs, and parishes in counties.

(2) The Secretary for Scotland shall also by order determine the number of members to be elected to each education authority, and shall apportion them among the electoral divisions of the education area. In making such determination and apportionment the Secretary for Scotland shall have regard to

the population, area, and other circumstances of the scheduled burgh or county, as the case may be, and the electoral divisions thereof.

(3) Before making an order under this section, the Secretary for Scotland shall cause the proposed order to be published in such manner as to make the same known to all persons interested, and shall, after considering any objections and representations respecting the proposed order, and causing a local inquiry to be held if he sees fit to do so, thereafter make the order and cause the same to be forthwith published in the Edinburgh Gazette and in a newspaper circulating in the education area.

3. (1) It shall be the duty of every education authority to prepare and submit to the department for their approval a scheme or schemes for the constitution of committees (in this act called "school management committees") for the management of schools or groups of schools under their control throughout their education area.

Every such scheme shall contain provision—

(*a*) For the due representation on each school management committee of the education authority and of the parents of the children attending the schools under the management of such committee; and

(*b*) For the appointment thereto, on the nomination of the teachers engaged in the schools under the management of such committee, or, failing such nomination, directly, of at least one such teacher; and also

(*c*) In the case of a school management committee having under its management one or more transferred schools, for the appointment thereto of at least one member in whose selection regard shall be had to the religious belief of the parents of the children attending such school or schools.

Further, in the case of a county, every such scheme shall have regard to the desirability of constituting separate school management committees for individual burghs and parishes, and shall provide for the appointment thereto, on the nomination of local bodies (including town and parish councils and at the first constitution outgoing school boards), or, failing such nomination, directly, of persons resident in the locality and otherwise qualified to represent local interests in school management.

(2) A school management committee shall, subject except as hereinafter provided to any regulations and restrictions made by the education authority, have all the powers and duties of that authority in regard to the general management and supervision of the school or group of schools, including attendance thereat: *Provided*, That in the case of a county a school management committee having under its management a secondary school shall have all the said powers and duties not subject to any such regulations or restrictions: *Provided further*, That the education authority shall in every case themselves retain, exercise, and perform all their powers and duties in regard to—

(*a*) The raising of money by rate or loan and the general control of expenditure;

(*b*) The acquisition or holding of land;

(*c*) The appointment, transfer, remuneration, and dismissal of teachers;

(*d*) The appointment of bursars and the exercise of the powers conferred by the section of this act relating to power to facilitate attendance at secondary schools and other institutions; and

(*e*) The recognition, establishment, or discontinuance of intermediate or secondary schools or of centers of advanced technical instruction.

Powers and Duties of Education Authorities.

4. (1) It shall be lawful for an education authority, with a view to securing that no child or young person resident in their education area who is qualified for attendance at an intermediate or secondary school, and in their opinion formed after consideration of a report from the teachers concerned shows promise of profiting thereby, shall be debarred therefrom by reason of the expense involved, to grant assistance in the case of any such child or young person by payment of traveling expenses, or of fees, or of the cost of residence in a hostel, or of a bursary or maintenance allowance, or any combination of these forms of assistance, or otherwise, as the authority think fit. And it shall also be lawful for an education authority similarly to assist any duly qualified person resident in their education area to enter or attend a university, or a training college, or a central institution (including classes affiliated thereto), or in special cases any other educational institution approved for the purpose by the department.

(2) It shall further be lawful for an education authority to grant assistance by payment of traveling expenses necessarily incurred in the case of any person resident in their education area in attending continuation classes under a scheme for instruction in such classes as in this act provided.

(3) Any assistance granted under this section shall be such as the education authority consider proper and necessary, having regard to the circumstances of each case, including the circumstances of the parents.

5. It shall be lawful for the education authority of a county, as an ancillary means of promoting education, to make such provision of books by purchase or otherwise as they may think desirable, and to make the same available not only to the children and young persons attending schools or continuation classes in the county, but also to the adult population resident therein.

For the purposes of this section an education authority may enter into arrangements with public libraries, and all expenses incurred by an education authority for those purposes shall be chargeable to the county education fund. * * *

6. (1) It shall be the duty of every education authority within 12 months after the appointed day to prepare and submit for the approval of the department—

(*a*) A scheme for the adequate provision throughout the education area of the authority of all forms of primary, intermediate, and secondary education in day schools (including adequate provision for teaching Gaelic in Gaelic-speaking areas) without payment of fees, and if the authority think fit for the maintenance or support (in addition and without prejudice to such adequate provision as aforesaid) of a limited number of schools where fees are charged in some or all of the classes;

(*b*) A scheme for the exercise by the education authority of their powers under the section of this act relating to power to facilitate attendance at secondary schools and other institutions, together with an estimate of the expenditure involved therein; and

(*c*) A scheme of scales of salaries for the teachers employed by the authority satisfying such conditions as to minimum national scales of salaries for teachers as may be laid down by the department after consultation with representatives of the education authorities and of the teaching profession: *Provided*, That such minimum scales of salaries shall be independent of any payment made to teachers out

of any bequest or endowment, the object of which is to secure special emoluments to any class of teachers or to the teachers of any special locality.

(2) Every education authority may at any time, and shall if and when so required by the department, prepare and submit for the approval of the department a revised scheme or modifications of an existing scheme under this section.

(3) Schemes prepared and submitted under this section shall include transferred schools.

7. Whereas it has been the custom in the public schools of Scotland to give instruction in religion to children whose parents did not object to the instruction so given, but with liberty to parents, without forfeiting any of the other advantages of the schools, to elect that their children should not receive such instruction, be it enacted that education authorities shall be at liberty to continue the said custom, subject to the provisions of section 68 (Conscience Clause) of the Education (Scotland) Act, 1872.

8. It shall be lawful for every education authority to make arrangements for—

(*a*) Supplying or aiding the supply of nursery schools for children over 2 and under 5 years of age (or such later age as may be approved by the department) whose attendance at such a school is necessary or desirable for their healthy physical and mental development; and

(*b*) Attending to the health, nourishment, and physical welfare of children attending nursery schools.

9. (1) It shall be lawful for every education authority to contribute to the maintenance of any school not under their own management which is included in the scheme for the provision of education within the education area of that authority approved by the department, and in which the teachers are remunerated at a rate not lower than the rate for teachers of similar qualifications employed by the authority, as also to the maintenance of any central institution or university, and to make a reasonable representation of the authority on the governing body of any such school or central institution (where such representation is not already provided for) a condition of any contribution other than a contribution required by the following subsection:

(2) Every education authority shall continue to contribute to the maintenance of any school within their education area but not under their own management which at the passing of this act was recognized by the department as an intermediate or secondary school, so long as such school continues to be so recognized, an amount not less than the contribution made to such school in terms of subsection (4) (*a*) and (*b*) of section 17 of the Education (Scotland) Act, 1908, in respect of the financial year ending on the 15th day of May, 1914, by any secondary education committee whose powers and duties are by this act transferred to that education authority: *Provided*, That the amount of the contribution required to be made under this subsection shall not exceed the amount by which the income of such school from all other sources falls short of the expenditure.

Any question arising as to the application of this subsection to any school or as to the amount of any contribution so made or to be made shall be determined by the department, whose determination shall be final.

(3) Every education authority shall contribute in each year toward the aggregate expense of maintenance of the training colleges throughout Scotland such sum as the department may determine, being a sum proportioned to the number of fully qualified teachers in the service of each education authority on the 31st day of March in each year.

(4) It shall be lawful for every education authority with the sanction of the department to contribute to the maintenance of any educational institution or agency, where such contribution appears to the department desirable for the educational benefit of persons resident within the education area of the authority.

10. Where an education authority or any other governing body provide and maintain a school, not conducted for profit, which is recognized by the department, and is attended by children whose parents are resident outwith the education area in which the school is situated, there shall be paid in each year to that authority or to that governing body, as the case may be, out of the education fund of each education area in which any such parents are so resident, a sum equal to the cost of the education of such children (including in such cost repayment of and interest on loans for capital expenditure) after deduction, (*a*) in the case of a school maintained by an education authority, of income from all sources of income other than education rate, and (*b*) in the case of a school maintained by any other governing body, of income from grants made by the department and from fees: *Provided*, That no payment shall be made under this section out of the education fund of any education area in respect of any child for whom it is shown to the satisfaction of the department that accessible accommodation is available in a suitable school provided within that area, regard being had to all the circumstances, including the religious belief of his parents.

11. (1) An education authority may from time to time, for the purposes of any of their powers and duties under the education acts, acquire, purchase, feu, or take on lease any land.

* * * * * * *

(3) An education authority may be authorized to purchase land compulsorily by means of an order submitted to and confirmed by the department in accordance with the provisions contained in the first schedule to the Housing, Town Planning, etc., Act, 1909, as applied to Scotland.

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13. (1) The expenses of an education authority (including the expenditure incurred by school management committees and local advisory councils in the performance of their duties and approved by the authority) shall be paid out of the education fund of the education area, which shall come in place of the school fund referred to in section 43 of the Education (Scotland) Act, 1872, and of the district education fund referred to in section 17 of the Education (Scotland) Act, 1908.

There shall be carried to the education fund all money received as grants from the department, or raised by way of loan, or transferred to the education authority under this act, or otherwise received by the education authority for the purposes of that fund, and not by this act or otherwise specially appropriated, and any deficiency in that fund, whether for satisfying present or future liabilities, shall be raised by the education authority as hereinafter provided.

(2) Every education authority shall annually ascertain the amount of such deficiency, and, unless and until Parliament otherwise determine in any statute amending the law of rating in Scotland, shall allocate and apportion the same among the parishes comprised in the education area, according to their respective valuations in the valuation roll, and shall, annually on or before a date to be fixed jointly by the department and the local government board for Scotland, certify to the parish council of each such parish the amount so allocated and apportioned thereupon, and the parish council may and shall impose, levy, and collect the same within such parish, under the name of "education rate,"

in the manner prescribed by section 34 of the Poor Law (Scotland) Act, 1845, with respect to the poor rate, and along with but as a separate assessment from that rate, and shall, from time to time as they collect it, pay over the amount collected to the education authority, without any deduction on account of the cost of levying and collecting the same; and the laws applicable for the time being to the imposition, collection, and recovery of the poor rate shall be applicable to the education rate.

* * * * * * *

(3) In ascertaining the amount of the deficiency in the education fund, and allocating and apportioning the same among the parishes comprised in the education area, the education authority shall take into account and have regard to—

(*a*) Any income, revenue, or contribution paid to the authority in pursuance of section 46 of the Education (Scotland) Act, 1872;

(*b*) Any money (not included in the preceding paragraph) arising from a trust or endowment, and paid to the authority for behoof of any school in any parish within the education area, or for the promotion of education in any such school, or for or toward the income of any teacher therein;

(*c*) The restriction contained in the proviso to the section of this act relating to provision of books for general reading; and

(*d*) The direction contained in this act as to any surplus or deficiency shown in the accounts of a school board made up and balanced as at the appointed day.

(4) Any surplus of education rate which may arise in any one year shall be applied for the purposes of the ensuing year, and in like manner any deficiency which may occur in any year shall be included in the rate for the ensuing year.

(5) In the foregoing subsections of this section the expression "parish" includes a portion of a parish, and where a parish is comprised in two or more education areas, the education authority for each such area shall, in allocating and apportioning the amount of the deficiency in the education fund as hereinbefore provided, take into account and have regard to that portion only of such parish which is comprised within their own education area; and no education rate shall be imposed, levied, or collected in any parish or portion of a parish other than the education rate for the education area in which such parish or portion of a parish is comprised.

Extension of School Age—Continuation Classes—Employment of Children and Young Persons.

14. (1) The duty of every parent to provide efficient education for his children shall continue in respect of each child until that child has attained the age of 15 years, and exemption from attendance at school shall not be granted to any child who has not attained the age of 13 years; and the provisions of the education acts which relate to that duty and to such exemption are hereby amended accordingly, that is to say:

In sections 2 and 3 of the Education (Scotland) Act, 1901, and in section 7 of the Education (Scotland) Act, 1908, the word "thirteen" shall be substituted for the word "twelve" and the word "fifteen" for the word "fourteen" respectively wherever those words occur in those sections, and the word "fifteenth" shall be substituted for the word "fourteenth" in subsection (3) of the said section 7.

(2) It shall be the duty of every education authority to exercise the power of prescribing (subject to the approval of the department) dates of commencing

and terminating school attendance conferred by subsection (2) of the said section 7.

(3) Nothing in this section shall—

(*a*) Prevent any employer from employing any child who is lawfully employed by him or by any other person before the appointed day; or

(*b*) Affect any exemption from attendance at school granted before the appointed day; or

(*c*) Affect the provisions of the Education of Blind and Deaf-mute Children (Scotland) Act, 1890, the Education of Defective Children (Scotland) Act, 1906, as read with the Education (Scotland) Act, 1908, or the Mental Deficiency and Lunacy (Scotland) Act, 1913, relating to the attendance at school of the children to whom those acts apply.

15. Sections 9 and 10 of the Education (Scotland) Act, 1908, are hereby repealed and in lieu thereof—

(1) Every education authority shall, after due inquiry and consultation with persons concerned in local crafts and industries and with due regard to local circumstances generally, prepare and submit for the approval of the department a scheme or schemes for the part-time instruction in continuation classes of all young persons within the education area of the authority who may under this act be required to attend such classes.

(2) (*a*) Every education authority shall prepare and submit for the approval of the department under this section—

(i) Within one year after the appointed day a scheme applicable to young persons under the age of 16 years; and

(ii) As soon thereafter as the department may require a scheme or schemes applicable to young persons of any age greater than 16 but not exceeding 18 years.

(*b*) When a young person to whom any such scheme applies attains the age of 16 years or any greater age as the case may be during any continuation class session, he shall for the purposes of this section be deemed not to have attained such age until the close of such session, so, however, that a young person shall not by reason of this provision be required to attend continuation classes for more than three months after he has attained such age.

(3) For the better preparation and carrying into effect of schemes under this section, and in particular for the registration and classification of young persons within their areas, it shall be the duty of education authorities to communicate and cooperate with associations or committees of employers and workmen concerned in the registration or supervision of apprentices in trades where apprentices are employed, or with similar associations or committees in trades or businesses where young persons, though not apprenticed thereto, have the prospect of regular employment therein in later years, and to encourage the formation of such associations or committees, and to register and classify young persons within their areas according to their employment in such trades or businesses or in occupations which do not afford the prospect of such regular employment, and to have regard to the educational requirements of such young persons with respect alike to their present and to their prospective employments.

(4) Every such scheme shall provide for—

(*a*) Instruction in the English language and literature, and in such other parts of a general education as may be deemed desirable;

(*b*) Special instruction conducive to the efficiency of young persons in the employment in which they are engaged or propose to be engaged; and

(*c*) Instruction in physical exercises adapted to age and physique: *Provided*, That for this purpose account may be taken of instruction in such exercises afforded at holiday camps or in connection with boys' brigades or kindred organizations if the instruction so afforded is approved by the education authority as satisfactory.

(5) The instruction given in continuation classes under any such scheme shall amount for each young person to an aggregate of at least 320 hours of attendance in each year distributed as regards times and seasons as may best suit the circumstances of each locality.

Provided, That no attendance at classes held between the hours of 7 in the evening and 8 in the morning shall be reckoned as part of the necessary aggregate of 320 hours of attendance, except in circumstances and to the extent specially approved by the department.

(6) The obligation to attend continuation classes under any such scheme shall not apply to any young person who—

(i) Is above the age of 14 years on the appointed day; or

(ii)—(*a*) Is in full-time attendance at a recognized primary, intermediate, or secondary school; or

(*b*) Is shown to the satisfaction of the education authority to be receiving suitable and efficient instruction in some other manner; or

(iii)—(*a*) Has been in full-time attendance at a recognized intermediate or secondary school until the close of the school session in which he has attained the age of 17 years and is certified by the school authorities to have completed the post-intermediate course; or

(*b*) Has attained the age of 17 years and is shown to the satisfaction of the education authority to have completed a course of instruction equivalent in value to the post-intermediate course; or

(*c*) Has satisfactorily completed a course of training for, and is engaged in, the sea service, in accordance with the provisions of any national scheme which may hereafter be established, by Order in Council or otherwise, with the object of maintaining an adequate supply of well-trained British seamen, or, pending the establishment of such scheme, in accordance with the provisions of any interim scheme approved by the department.

The obligation to attend continuation classes under any such scheme shall not, within a period of three years from the appointed day on which the provisions of this section come into force, apply to young persons between the ages of 16 and 18, nor after such period to any young person who has attained the age of 16 before the expiration of that period.

(7) Whenever a scheme has been approved by the department the education authority shall, in such manner as the department may by order prescribe, require every young person to whom the obligation to attend continuation classes under such scheme applies to attend with due regularity for instruction in accordance with the scheme at such times and places as the education authority may appoint: *Provided*, That an education authority may, upon such conditions as they think fit, exempt any young person from the obligation to attend continuation classes where, after due inquiry, the authority are satisfied that the circumstances justify such exemption, and the provisions of section 3 of the Education (Scotland) Act, 1901, relating to the keeping of a register and to the power of the department, shall, with the necessary modifications, apply to exemptions granted under this provision.

(8) If it appears to an education authority that any young person of the age of 15 years and upward is neglecting or failing without reasonable excuse to comply with any such requirement of the authority, it shall be lawful for that

authority, after due warning to such young person and to his parent and employer (if any), to summon the young person, with or without his parent or employer, to appear before the authority at any meeting thereof, and to require from him or them every information and explanation respecting such neglect or failure; and if such young person or his parent or employer, or some person on his or their behalf, either does not appear or appears and does not satisfy the authority that there is reasonable excuse for such neglect or failure, it shall be lawful for the authority to order in writing that such young person shall comply with such requirement, or with such other requirement as to attendance as the authority may direct. The authority shall cause a copy of any such order to be served by post on the young person to whom it relates, and if the young person fails to comply with the order he shall be liable, on summary conviction, to a penalty not exceeding 5 shillings.

(9) Every employer of labor shall afford to every young person in his employment any opportunity necessary for attendance at continuation classes in accordance with the requirements of the education authority, including time for traveling, and the hours of employment of any young person when added to the time necessary for such attendance, including time for traveling, shall not in the aggregate exceed in any day or week, as the case may be, the period of employment permitted for such young person by any act of Parliament.

Every employer who fails to afford the opportunity aforesaid, or who employs a young person contrary to the provisions of this subsection, shall be liable, on summary conviction, to a penalty not exceeding 20 shillings, or in case of a second or subsequent offense whether relating to the same or to another young person, not exceeding £5, and every parent of a young person who has conduced to the commission of such an offense by an employer, or to the failure of such young person to observe any requirement of the education authority under this section, shall be liable on summary conviction to the like penalties.

(10) An education authority may, in any scheme under this section, make provision for the attendance at continuation classes of persons of any age who desire to attend such classes although not required by the authority so to do.

(11) An education authority may in any scheme under this section, or by a separate scheme or schemes similarly submitted and approved, provide for the delegation by the authority, subject to any regulations and restrictions made by them, of any of their powers and duties relating to the management and supervision of continuation classes (including attendance thereat) within their education area or any part thereof to any school management committee or combination of such committees within their area, or to a committee or committees appointed by the authority for the purpose, consisting in whole or in part of members of the authority, and any such school management committee or other committee may exercise and shall perform all the powers and duties so delegated to them: *Provided*, That an education authority shall not so delegate any of the powers and duties which, by the section of this act relating to school management committees, the authority are required themselves to retain, exercise, and perform.

(12) Where continuation classes provided by the education authority in any education area are attended by persons resident without that area, there shall be paid in each year to that authority out of the education fund of the education area in which any such persons are so resident a sum equal to the cost of the instruction of such persons in those classes (including in such cost repayment of and interest on loans for capital expenditure) after deduction of income from all sources of income other than education rate: *Provided*, That no payment shall be made under this subsection out of the education fund of any education area in respect of any person for whom it is shown, to the

satisfaction of the department, that suitable instruction is available in accessible continuation classes within that area, regard being had to all the circumstances.

(13) The provisions of section 4 of the Education (Scotland) Act, 1908, which relates to the medical inspection of children, shall apply, with the necessary modifications, to the medical examination and supervision of young persons under the obligation to attend continuation classes under this section.

(14) If a young person over the age of 16 or the parent of a young person under the age of 16 represents in writing to the local education authority that he objects to any part of the instruction given in the continuation classes which the young person is required to attend, on the ground that it is contrary to his religious belief, or likely to give offense to his religious feelings, the obligation under this act to attend those classes for the purpose of such instruction shall not apply to him, and the local education authority shall, if practicable, arrange for him to receive other instruction in lieu thereof or attend other classes.

(15) In this section the expression "young person" includes any person between the ages of 15 and 18 years and also any child under the age of 15 years who has been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school; the expressions "employ" and "employment" include employment in any labor exercised by way of trade or for purposes of gain whether the gain be to the young person or to any other person; and the expression "employer" includes a parent so employing his children.

16. The Employment of Children Act, 1903, so far as it relates to Scotland, shall be amended as follows:

(1) For subsection (1) of section 3 the following subsection shall be substituted—

A child under the age of 13 shall not be employed on any day on which he is required to attend school before the close of school hours on that day nor on any day before 8 o'clock in the morning or after 6 o'clock in the evening, nor shall any child who is of the age of 13 be so employed unless he has been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school: *Provided*, That any local authority may by by-law vary these restrictions, either generally or for any specified occupation.

(2) for subsection (2) of section 3 the following subsection shall be substituted—

No child or young person under the age of 17 shall be employed in street trading.

(3) To section 14 the following definition shall be added—

The expression "child" means a person under the age of 15 years, and for the purposes of this act a child attending school shall be deemed to attain that age on the date prescribed for terminating school attendance next succeeding the fifteenth anniversary of his birth.

(4) References to the Education (Scotland) Act, 1901, shall be construed as references to that act as amended by this act.

17. No child or young person under the age of 15 years who has not been exempted under the Education (Scotland) Act, 1901, from the obligation to attend school shall be employed [as in Fisher Act, sec. 14, p. 100].

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Voluntary or Denominational Schools.

18. (1) It shall be lawful at any time after the first election of education authorities under this act for the person or persons vested with the title of

any school which at the passing of this act is a voluntary school within the meaning of the Education (Scotland) Act, 1897, with the consent of the trustees of any trust upon which such school is held, to transfer the school, together with the site thereof and any land or buildings and furniture held and used in connection therewith, by sale, lease, or otherwise, to the education authority, who shall be bound to accept such transfer, upon such terms as to price, rent, or other consideration as may be agreed, or as may be determined, failing agreement, by an arbiter appointed by the department upon the application of either party.

(2) Any grant payable to a transferred school which has accrued in respect of a period before the date of transfer shall be paid by the department to the education authority to whom the school is transferred, and shall be applied by that authority in payment of any liabilities on account of the school then outstanding and, so far as not required for that purpose, toward the maintenance of the school.

(3) Any school so transferred shall be held, maintained, and managed as a public school by the education authority, who shall be entitled to receive grants therefor as a public school, and shall have in respect thereto the sole power of regulating the curriculum and of appointing teachers: *Provided*, That—

(i) The existing staff of teachers shall be taken over by the education authority and shall from the date of transfer be placed upon the same scale of salaries as teachers of corresponding qualifications appointed to corresponding positions in other schools of the same authority.

(ii) All teachers appointed to the staff of any such school by the education authority shall in every case be teachers who satisfy the department as to qualification, and are approved as regards their religious belief and character by representatives of the church or denominational body in whose interest the school has been conducted.

(iii) Subject to the provisions of section 68 (conscience clause) of the Education (Scotland) Act, 1872, the time set apart for religious instruction or observance in any such school shall not be less than that so set apart according to the use and wont of the former management of the school, and the education authority shall appoint as supervisor without remuneration of religious instruction for each such school, a person approved as regards religious belief and character as aforesaid, and it shall be the duty of the supervisor so appointed to report to the education authority as to the efficiency of the religious instruction given in such school. The supervisor shall have the right of entry to the school at all times set apart for religious instruction or observance. The education authority shall give facilities for the holding of religious examinations in every such school.

(4) Any question which may arise as to the due fulfillment or observance of any provision or requirement of the preceding subsection shall be referred to the department, wohse decision shall be final.

(5) After the expiry of two years from the passing of this act no grant from the Education (Scotland) Fund shall be made in respect of any school to which this section applies unless the school shall have been transferred to the education authority, and as from the expiry of that period the Education (Scotland) Act, 1897, shall cease to have effect: *Provided*, That the department may extend the said period in any case where, in the opinion of the department, further time is required for the completion of a transfer.

(6) This section shall not apply to any residential institution which is either—

(*a*) A school for blind, deaf, or defective children, shown to the satisfaction of the department by the person or persons vested with the title of

the school to be attended largely by children whose parents or guardians are resident outwith the education area in which the school is situated; or

(*b*) An orphanage shown to the satisfaction of the department by the person or persons vested with the title of the orphanage to be required for the proper education of children destitute of efficient guardianship.

(7) A school established after the passing of this act to which this section would have applied had the school been in existence at that date may, with the consent of the department, be transferred to the education authority, and the provisions of this section shall, with the necessary modifications, apply to any such transfer and to any school so transferred.

(8) In any case where the department are satisfied, upon representations made to them by the education authority of any education area, or by any church or denominational body acting on behalf of the parents of children belonging to such church or body, and after such inquiry as the department deem necessary, that a new school is required for the accommodation of children whose parents are resident within that education area, regard being had to the religious belief of such parents, it shall be lawful for the education authority of that area to provide a new school, to be held, maintained, and managed by them subject to the conditions prescribed in subsection (3) of this section, so far as those conditions are applicable; the time set apart for religious instruction in the new school being not less than that so set apart in schools in the same education area which have been transferred under this section.

(9) If at any time after the expiry of 10 years from the transfer of a school under this section or from the provision of a new school as aforesaid, the education authority by whom the school is maintained are of opinion that the school is no longer required, or that, having regard to the religious belief of the parents of the children attending the school, the conditions prescribed in subsection (3) of this section ought no longer to apply thereto, the authority may so represent to the department, and if the department, after such inquiry as they deem necessary, are of the same opinion and so signify, it shall be lawful for the education authority thereafter to discontinue the school, or, as the case may be, to hold, maintain, and manage the same in all respects as a public school, not subject to those conditions: *Provided*, That in the case of any school which has been transferred to an education authority under this section, that authority shall in either of those events make to the trustees by whom the school was transferred, or to their successors in office or representatives, such compensation (if any) in respect of the school or other property so transferred as may be agreed, or as may be determined, failing agreement, by an arbiter appointed by the department upon the application of either party.

(10) Section 39 of the Education (Scotland) Act, 1872 (which relates to consent to transfers of certain schools under section 38 of that act), shall, with the necessary modifications, apply to transfers under this section as it applies to transfers under the said section 38.

Reformatory and Industrial Schools.

19. After the passing of this act it shall be lawful for the Secretary for Scotland, with the consent of the Treasury, from time to time to make an order transferring to the department any powers relating to reformatory or industrial schools in Scotland for the time being possessed by the Secretary for Scotland under the Children Act, 1908, or any local act (including any powers which have been or may be transferred to the Secretary for Scotland under the said

act of 1908), and by such order to make any adjustment consequential on the transfer and to provide for any matter necessary or proper for giving full effect to the transfer, and on any such order being made the powers so transferred shall be exerciseable by the department.

Advisory Council.

20. It shall be lawful for His Majesty in Council by order to establish an advisory council consisting, as to not less than two-thirds of the members, of persons qualified to represent the views of various bodies interested in education, for the purpose of advising the department on educational matters, and the department shall take into consideration any advice or representation submitted to them by the advisory council.

Education Grants.

21. (1) In respect of the year commencing the 1st day of April, 1919, and every subsequent year, in addition to the sums payable out of the Local Taxation (Scotland) Account into the Education (Scotland) Fund under section 15 of the Education (Scotland) Act, 1908, there shall be paid into that fund out of moneys provided by Parliament:

(i) A sum equal to the amount of the sums applicable to education in Scotland (other than the Royal Scottish Museum grant, the capital grant for the training of teachers, sums spent on the superannuation of school-teachers and any sums paid under section 2 or section 50 of the Education (Scotland) Act, 1872), shown by the appropriation account to have been expended from the parliamentary vote for education in Scotland in the year ended the 31st day of March, 1914 (hereinafter in this section referred to as "the standard year"); and

(ii) Eleven-eightieths of the excess of the amount of the sums estimated to be expended in each year from the vote for education in England and Wales (except so far as such sums represent expenses of general departmental administration or sums spent on the superannuation of teachers or expenses of services for which in the opinion of the Treasury after consultation with the department Scotland already receives an equivalent by way of direct contribution or of common benefit) over the amount of the sums shown by the appropriation account to have been so expended in the standard year (with the like exception): *Provided*, That if the amount of the sums (with the exception aforesaid) actually expended in any year from the vote for education in England and Wales, as shown by the appropriation account, exceeds or falls short of the corresponding estimate, the sum to be paid into the Education (Scotland) Fund in terms of paragraph (ii) of this subsection in the year commencing the 1st day of April next following the day on which such appropriation account is presented to Parliament shall be increased or reduced as the case may be by eleven-eightieths of the difference between such expenditure and estimate.

(2) (*a*) After providing for the payments mentioned in subsection (1) of sction 16 of the Education (Scotland) Act, 1908, the balance of the Education (Scotland) Fund that may remain in any year shall be applied as nearly as may be in making grants in aid of the expenditure of education authorities (or outgoing school boards and secondary education committees) and managers of schools in accordance with minutes of the department laid before Parliament.

Provided that no minute of the department framed under this section shall come into force until it has lain for not less than one month on the table of both Houses of Parliament.

(*b*) Subsections (2), (3), and (4) of section 16, and sections 17 and 18 of the Education (Scotland) Act, 1908, shall cease to have effect.

Election and Proceedings of Education Authorities.

22. The members for an electoral division of an education area shall be elected by the persons registered as local government electors for that division under the Representation of the People Act, 1918.

23. The voting at any contested election of members of an education authority shall be according to the principle of proportional representation, each elector having one transferable vote as defined by this act.

24. (1) No resolution of an education authority for the dismissal of a certificated teacher from their service shall be valid unless—

(*a*) Written notice of the motion for his dismissal shall, not less than three weeks before the meeting at which the resolution is adopted, have been sent to the teacher and to each member of the education authority; and

(*b*) Not less than one-half of the members of the education authority are present at the meeting; and

(*c*) The resolution is agreed to by two-thirds of the members so present.

(2) Notwithstanding anything in this act, it shall be lawful for any school management committee summarily to suspend any teacher from the exercise of his duties in any school or schools under their management; but such suspension shall not affect the teacher's rights to the salary or other emoluments attached to his office.

* * * * * * *

25. It shall be the duty of every education authority within three months after the first election thereof to establish an advisory council (in this act called a "local advisory council"), consisting of persons qualified to represent the views of bodies interested in education, for the purpose of advising the authority on matters of educational interest relating to the education area, and the authority shall take into consideration any advice or representation submitted to them by the local advisory council.

26. The department, on the application of an education authority, may within 12 months after the first election of such authority, from time to time make such orders as appear to them necessary for bringing this act into full operation as respects the authority so applying, and such order may modify any enactment in this or any other act, whether general or local, so far as may appear to the department necessary for the said purpose.

General.

27. (1) The department may, after considering any representations made to them on the subject, approve any scheme or revised scheme or modification of an existing scheme submitted to them under this act by an education authority, and thereupon it shall be the duty of the education authority to carry the same into effect as so approved.

(2) If the department are of opinion that a scheme does not make adequate provision in respect of all or any of the purposes to which the scheme relates, and the department are unable to agree with the authority as to what amendments should be made in the scheme, they shall offer to hold a conference with the representatives of the authority, and if requested by the authority shall hold a public inquiry in the matter. The expenses of any such inquiry as certified by the department shall be paid by the authority.

(3) If thereafter the department disapprove a scheme they shall notify the authority and if, within one month thereafter, an agreement is not reached they shall lay before Parliament the report of the public inquiry (if any) together with a report stating their reasons for such disapproval and any action they intend to take in consequence thereof by way of withholding or reducing any grants payable to the authority.

28. A woman shall not be disqualified either by sex or marriage from being a member of any education authority, or committee thereof, or school management committee, or school committee, or advisory council, or any other body constituted, elected, nominated, or appointed for educational purposes under or in pursuance of this act.

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30. The Scotch Education Department shall be known as the Scottish Education Department.

33. (1) This act shall extend to Scotland only.

(2) This act shall, except as otherwise expressly provided, come into operation on the appointed day, and the appointed day shall be such day as the department may appoint, and different days may be appointed for different purposes and for different provisions of this act (including the repeal of different enactments), for different areas or parts of areas, and for different persons or classes of persons.

IRELAND.

In spite of the political unrest that has prevailed in Ireland during the past few years, the country has been affected by the educational progress of England, Wales, and Scotland. If the pressure of circumstances has emphasized the demands for increases of salary, that problem is intimately associated with the desire to improve the professional status of teachers and thereby to improve the schools. It is beginning to be recognized that Ireland's greatest need in education is not so much the reform of this or that branch of education as a unification of the different interests into a national system. Few countries can produce a parallel to the tripartite scheme of administration that must inevitably retard educational progress in Ireland. Even though the functions of the Commissioners of National Education, who have charge of elementary education, the Intermediate Education Board, which administers secondary education, and the Department of Agricultural and Technical Education do not as a rule overlap, they necessarily lead to a conception of education by compartments, which is difficult from the administrative standpoint and unjustifiable on public grounds. To these difficulties must be added the sectarian situation, which is another factor that militates against any plans for a successful national scheme. The political element, disturbing as it is for national welfare, has not affected the course of education recently, and it is probable that education is the one question on which all political parties could cooperate, just as all parties and creeds appear to speak with one voice on the inadequacy of the

sums received from the imperial treasury in its relation to Irish education.

The association of some teachers with the Sinn Fein rebellion of 1916 gave rise to a general charge against the character of the teaching in the national schools. As the result of an inquiry, conducted by the Commissioners of National Education, the conclusion was reached that the amount of disaffection among teachers was very slight, and that "even in districts where it might be supposed that disaffection would be apparent, they found many signs in the pupils' exercises that distinctly loyal ideas had been encouraged by the teachers." It might be pointed out, however, as the commissioners did, that national teachers are forbidden to take part in political agitation. The charges that were leveled against the teachers were extended to the textbooks in history; on examination of these books the commissioners ordered that the use of some of them should be discontinued. Textbooks are issued by commercial publishers, and their use is sanctioned by the commissioners.

During the period of the war school attendance has declined somewhat as a result of the exploitation of child labor. In order to encourage pupils to remain at school at least until the completion of the sixth grade instead of drifting away into blind-alley occupations, the national commissioners in June, 1916, inaugurated the experiment of introducing an examination for the higher grade certificates for boys and girls who have passed the sixth grade. The experiment was successful in Belfast and is to be extended to Dublin and Cork. It is hoped that the certificates will come to be recognized by larger employers as the minimum educational qualifications for employment.

The course of the war imposed large economies on educational expenditure, particularly in such matters as buildings, printing, and the collection of statistics. The rapid rise in the cost of living worked particular hardship on teachers of all grades, since salaries in many cases fell below the minimum standard wage of $6 a week paid to agricultural laborers. In July, 1914, a new scale of salaries, with annual instead of the prevailing triennial increments, was promised to elementary school-teachers, but was not put into force owing to the outbreak of war. From July 1, 1916, a war bonus came into effect for those in receipt of salaries below $15 a week; the total cost of this increase for the year was $825,000, giving an average bonus of about 80 cents a week. This did not quell the agitation, which seemed to divert the energies of Irish teachers from their real function. In September, 1917, largely as a result of the example set by Mr. Fisher's additional grant to English education, the sum of $1,920,000 was granted for Irish elementary education over and above the ordinary estimates, as the equivalent of Ireland's share in the imperial taxation. A large share of this sum is to be devoted to salary increases.

More extensive reforms are needed, however, than the improvement of the teachers' status. Something has been done to develop school gardens, and special courses in horticulture are given to teachers in training to promote this work. Medical inspection of school children has hardly had a beginning, and, although funds are provided since 1914 for the payment of grants for dental clinics, they have as yet shown no development, since local authorities are unable to levy local rates for the purpose. In 1914 power was given to provide meals to necessitous children in the schools, but this measure is also likely to languish, owing to the inertia of local bodies. Attempts to expand the curriculum by the introduction of woodwork for boys and domestic science for girls are blocked not only by lack of funds locally, but by the inability to secure more money from the Treasury. A revision of the school programs is under way, and the need is felt of making them more adaptable to the demands of industrial and rural centers. Conferences have been conducted with teachers, inspectors, principals of secondary and technical schools, and chambers of commerce. Especially urgent is the provision of more opportunities for boys and girls between the ages of 12 and 16. Other needs that are recognized are the provision of pensions, increased grants for teacher-training colleges, the establishment of higher elementary schools and day and evening continuation schools, the appointment of divisional inspectors, the supply of books and stationery for pupils, and residence grants for teachers. It is estimated that these reforms would require additional grants rising from about $4,000,000 to $5,000,000 a year. But the realization of even these plans of reorganization would only be a very partial installment of the complete revision that Irish education needs to-day to stimulate local effort, to develop local systems of administration, and to articulate all branches of education from the infant schools to the universities.

Secondary or intermediate education shows in Ireland, as elsewhere in the British Isles, increased attendance; and each year produces a larger number of candidates for the examinations conducted by the Intermediate Education Board. Since 1908 the examination system which was established in 1878, and upon the results of which grants are paid by the board to the schools, has been supplemented by a system of inspection. In 1913 the examination of pupils below the age of 14 was abolished. During the past four years there has been a recrudescence of the criticism periodically leveled against the system. The board states in its report for 1916 that the system has its limitations, and that an examination conducted once a year is not a test. The board has only a fixed sum to devote to the support of intermediate education, and the success of one school means the diminution of the grant to another. Struggling schools can not be assisted, new

ones can not be established without reducing the grants, and facilities can not be extended to encourage elementary school pupils to continue to a higher education. Finally, the board had until recently no power of investigating schools which may still produce successful results in the examinations without being efficient in other desirable respects. The board is inclined to favor two examinations, the one leading to the intermediate certificate at about the age of 16, and the other to the leaving certificate at the age of 19. The grants should not depend primarily on examination results but should be distributed on a capitation basis to schools meeting certain standards of efficiency; for example, in such matters as the maintenance of regular attendance, the qualifications of teachers, and the number of pupils presented for the two examinations mentioned. Only in some such way could adaptation to modern needs be encouraged.

Similar recommendations have been urged by the teachers, who, although actuated primarily by the urgent need for an improvement in their economic and professional status, are also ready to promote the new tendencies. As in the case of elementary education, the reform of secondary education is closely dependent on financial considerations. Intermediate education is supported by the local taxation duties and certain funds resulting from the disestablishment of the Irish church. These sums are decreasing, while the number of schools and pupils is constantly increasing. Ireland demands a share in the imperial revenue equivalent to those given to England and Wales and Scotland. It is variously estimated that this share would amount to about $500,000. In 1917 an equivalent grant of $250,000 was secured for Irish intermediate education, part of which was for the establishment of courses for teachers, part set aside for aiding buildings and equipment, and the rest to be distributed as a capitation grant among the schools complying with certain conditions. The most important of these conditions is that a school must employ a qualified teacher for the first 40 pupils and an additional teacher for each additional 20 pupils. Such teachers must be paid $100 a year over the minimum set down in the regulations governing the distribution of the Birrell grant of $200,000 a year, passed in 1914. These regulations require that lay teachers for purposes of this grant, which was intended for the increase of salaries, must hold a university degree or have had two years of experience, and be paid a minimum salary of $700 a year, if men, and $450 a year, if women. Much dissatisfaction has attended the distribution of the Birrell grant, and the increases of salary of qualified lay teachers have been slight; the situation is well indicated by the fact that the highest salary paid to a lay teacher in a Roman Catholic school is $800 a year, while only a few receive over $1,000 and still fewer over $1,500 a year in Protestant schools.

The teachers have, however, an opportunity of developing professional solidarity which should in time lend weight to their recommendations. The Birrell Act of 1914 provided for the establishment of a registration council for intermediate teachers. A council was appointed in 1915 and, although it drafted rules in the same year, nothing further was accomplished until April, 1918, when the intermediate board assumed its functions and issued rules in the following month. Until 1925 it is expected that existing teachers can be registered without much difficulty. Ultimately the qualifications for registration required will be raised to include a university degree or its equivalent, a diploma indicating a year of professional training, and three years of experience. These requirements should stimulate the professional training of secondary school teachers, especially men, as nothing else has done. With a trained teaching profession it seems hardly possible that the present system should continue unaltered.

The view has already gained wide acceptance that future progress of Irish education requires the establishment of a ministry of education with three divisions, for elementary, secondary, and technical education, and an advisory council for each. The needed reforms in secondary education have been summarized in the report made in July, 1917, by its education committee to the senate of Queen's University, Belfast:

> That this committee is convinced that the time has come for a thorough reorganization of secondary education in Ireland; (1) in order to improve the tone and character of education by limiting the pressure of examinations, and giving, subject to proper superintendence, greater freedom to the teachers and managers of schools; (2) in order to raise the status and add to the remuneration of secondary-school teachers, so as to attract able and highly trained persons to the profession; (3) in order to obtain a close coordination of primary and secondary systems of education by placing them under one control; that to secure these ends much larger financial provision for education should be made by the State; and that the grant to Ireland should be proportionately equivalent to that which is proposed for England and Scotland.

This report, combined with the statement by the Intermediate Education Board of the limitations of the system that it administers, should be far-reaching in their effects. Such considerations need to be further supplemented by inquiries into the possible sources of aid from local authorities which hitherto have given very little support to secondary education, slight support to elementary education, and comparatively large assistance to technical education. Committees of inquiry, though limited to investigations of the status of teachers, were appointed during 1918. Neither of these can go very far in the consideration of their problems without branching out into the larger and more important problem that is still far from solution—the reconstruction of Irish education in all its phases.

CHAPTER II.

EDUCATION IN PARTS OF THE BRITISH EMPIRE.

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Canada: General educational activities—The language issue; agricultural instruction; vocational work for returned soldiers; Dominion Educational Association. The Maritime Provinces—Legislation; Nova Scotia; Prince Edward Island. Quebec—Two-fold organization of public-school system; public interest; need of rural teachers. Ontario—Superannuation act; school-attendance bill; effects of the war; continuation schools; industrial, technical, and agricultural education. Manitoba—Democratic methods; advisory board; consolidation; attendance; teachers; high schools; the university. Saskatchewan—Centralization of administration; survey of 1917; school-attendance act; short-term schools; agricultural instruction; teachers; health promotion. Alberta—Graded and ungraded schools; school-attendance act. British Columbia—Rural high schools; school districts.
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EDUCATIONAL DEVELOPMENTS IN THE DOMINION OF CANADA.

By WALTER A. MONTGOMERY,

Specialist in Foreign Educational Systems, Bureau of Education.

GENERAL EDUCATIONAL ACTIVITIES.

Certain educational activities are common to most, if not all, of the Provinces of the Dominion; and these will be considered in their general bearings before the local and individual problems of the several Provinces are taken up. Chief of these general movements are the following:

THE LANGUAGE ISSUE.

Having its roots deep in what is perhaps the greatest diversity of racial origins in the world, Canada's problem of solving the question of permitting the establishment and maintenance of schools giving instruction in other tongues than English presents difficulties even more complex than in any State of the American Union. According to immigration statistics, Canada has within the past 10 years

received waves of immigration from 26 distinct racial entities. Fortunately, there is not to be noted a corresponding number of divisions of the language problem. The great majority are too few in number to segregate themselves solidly apart from the English and French populations. The groups which distinctively show and carry out such a tendency are the German, Polish, and Ruthenian. The bearings of the question on the social, economic, and political sides are, of course, manifold; but this treatment concerns itself only with its bearings upon education, and essentially upon the elementary phase. This field alone shows such diversity in the ways the problem must be solved by the individual Provinces as to call for a survey separately or by groups.

The situation in the Maritime Provinces of Prince Edward Island, New Brunswick, and Nova Scotia may be dismissed with slight notice. This group differs fundamentally from all the others in being essentially homogeneous in population. From considerations of geography, climate, and pursuits, immigration has uniformly passed them by. The situation is therefore the simple one of rivalry between the French and the English language. Despite a large proportion of Acadians left in each of these three Provinces, the religious and educational relations between the French and English have always been so amicable, and legal compromises have been so skillful, as to forestall all friction. Nova Scotia's settlement of the problem may be taken as typical. In that Province a special inspector (an Acadian) is provided for Acadian schools; brief summer courses in colloquial English are provided in the Provincial Normal College at Truro for French-speaking teachers; in the first four grades French readers are provided for French-speaking children, with instruction in colloquial English, and English-speaking teachers are not required to know French.

Proceeding westward, Quebec presents the problem of bilingual instruction distinctively along the line of religious faith; and her solution is eminently satisfactory of what might be, with less tactful handling, the most dangerous combination of religious and racial jealousies. The general line of cleavage adopted is, as may be expected, English for and in the Protestant schools, and French for and in the Roman Catholic schools, though a confusing element intervenes in the English-speaking Irish population of Quebec and Montreal. By wise provisions of the Protestant committee of the provincial board of education, French courses of study are included in those of the Protestant schools, being required from the fourth to the eleventh grade, and in the comparatively few French Protestant schools French is the language of instruction, with required courses in English. Similarly, the committee of Catholic schools

provides for the use of French for instruction, and requires English from the first year in the great majority of such schools; and in the Catholic schools of Irish and English communities the converse provision is made. In the populous centers some Catholic schools use one language for instruction in the morning and the other in the afternoon; and in the Catholic superior schools the training in English is notably fine. The key which simplifies the situation is that the racial elements in Quebec are locally distinct. The hope expressed by the superintendent of public instruction the month the war broke out that local good sense and patriotism would overcome any difficulty has been amply fulfilled.

Geographically and in population Ontario has many points of resemblance to Quebec; but an important dissimilarity lies in the overwhelming majority of the English-speaking population (about 2,000,000) over the minority of all those speaking other languages (about half a million). Without anticipating the treatment of the strictly educational system of Ontario, it may be said that, barring the independence of religious schools found in Quebec, Ontario allows much the same language privileges to the minority. Historic traditions of sentiment and race loyalty clustering around the city of Quebec have always deeply impressed the French-speaking population in Ontario as well, and this feeling is even intensified by their being unable to have enacted into law such concessions as those enjoyed by their kinsmen in the Province of Quebec. Furthermore, a steady tide of the latter set in a generation ago into Ontario. The displacement of English-speaking farmers that followed served still further to widen the breach of race and language. Regulations of increasing severity requiring the teaching of English in all schools, passed by the Department of Education on the basis of recommendations made by a commission of inquiry, led in 1915 and 1916 to acute and in some localities disastrous situations in French schools and school boards. The trouble was settled in November, 1916, by the judgment of the Privy Council of the Dominion, which held that the right to the use of a certain language concerns only legislative or court use, and does not relate to education, but that the right to manage schools, as well as that to determine the language to be used in them, are alike subject to the regulations of the provincial education department.

In sharp contrast to the homogeneous character of the Maritime Provinces and to the absence of a serious language problem there, the prairie Provinces of Manitoba, Saskatchewan, and British Columbia show great racial diversity, due to successive waves of immigration which followed each other too rapidly to be assimilated. In Manitoba's estimated one million people are to be counted 19 racial units not speaking English, of which 6 number more than 50,000

each, with the aggregate estimated at 60 per cent of the total population of the Province. Some idea of the race diversity may be gained from the statement that the Bible is sold in Winnipeg in 58 different dialects. Of those speaking a language other than English, the most serious problem is presented by the German Mennonites, the Poles, the Russian Doukhobors, and the Ruthenians.

Manitoba, largely under the influence of the educational thought of the States of the American Union just to the south, frankly made no legal allowance for any system of public instruction other than the purely nondenominational; and she could therefore offer no such solution of the language problem as that reached by Quebec and Ontario. In 1896 a compromise was adopted by which, in localities where 10 pupils spoke French or other language than English (predomantly Mennonite), bilingual teaching must be provided; but the French Roman Catholics were not satisfied, and at Winnipeg and Brandon maintained separate parochial schools, besides paying regular taxes for public schools.

When the tremendous tide of immigration set in about 1902, each racial group took advantage of its legal rights under the above compromise. The climax was reached in 1915 when nearly one-sixth of the schools of Manitoba were bilingual—143 teaching French, 70 German, 121 Polish or Ruthenian, all in addition to English. The unwisdom (noted at the time) of the failure to adopt compulsory school attendance in Manitoba was now made apparent, especially in Ruthenian communities. The first relief afforded was the outright repeal (1915) of the clause requiring bilingual teaching when demanded by the parents of as many as 10 children. In Manitoba, then, as the situation now stands, no more bilingual teaching certificates are issued, and present holders are permitted to teach on the old ones until June, 1919, when they will be invited to qualify for regular certificates. English examinations for entrance to normal schools have been required since 1917, the substitutes of French or German grammar and composition having been abolished.

In Saskatchewan matters are similar to those in Manitoba. Of the alien elements, the Colony Mennonites, the Colony Doukhobors, the Ruthenians, and the Germans retarded unification by declining to send their children to the public schools which the law provides that the community itself may organize. Educational and social leaders have thought it best not to compel them, but to wait for the influence of new-world surroundings and the example of the independent branch of each religious sect to do their disintegrating work. The Ruthenians, who constitute the largest population in the northern part of the Province, and the Mennonites, among whom entire communities formerly evaded the law by simply not organizing the legal school district but establishing private parochial schools, offer

each of them distinctive phases of the problem to be solved. Over these the provincial inspectors had up to 1917 no power whatsover. The new school-attendance act of that year, however, gave the department of education power to investigate all nonpublic schools and to apply legal pressure when needed, though the law leaves a serious loophole for evasion in not requiring "the parent or guardian to send the child to public school if the child is under instruction in some other satisfactory manner." Controversy over the interpretation of this clause must continue until further legal action settles it.

In Alberta the very large number of groups speaking other languages than English led to the appointment in 1914 of a supervisor of foreign schools, vested with large power of supervision and interference. Here, as elsewhere, the Ruthenian group gave most trouble, as they clung most tenaciously to their parochial schools. Because of the widely varying degrees of excellence found in the latter, the Government has steadily refused to recognize attendance at such schools as fulfilling the compulsory educational requirements. This policy, tactfully and yet unswervingly adhered to, has resulted in the closing of almost all the Ruthenian schools and of many German-Lutheran private parochial schools conducted by theological students from Lutheran colleges in the United States, which were considered as not reaching the prescribed standard of efficiency.

Last of all, and strange to say, parallel to the situation in the Maritime Provinces of the east, the extreme western Province of British Columbia presents no language problem, though showing wide diversity of racial groups, each of which is so small in numbers as to offer no trouble in the matter of language instruction in the public schools.

It may safely be concluded that the question of the language of instruction throughout the Dominion has steadily tended to a satisfactory adjustment since its injection as an issue of extremely bitter controversy six years ago. At one time threatening to disrupt boards and schools, notably in Ontario, it came to have applied to it the spirit of fair play characteristic of western democracy, and the general principle of the rule of the majority, tempered with concessions to local sentiment.

AGRICULTURAL INSTRUCTION.

Federal interest in agriculture has expressed itself in two parliamentary enactments:

1. The Agricultural Aid Act, passed in 1912, by the provisions of which the sum of $500,000 was distributed among the Provinces of Canada on the basis of population. While partly educational, the objects of this grant were also of a general social and economic character, with rural conditions fundamentally in view.

2. The Agricultural Instruction Act, passed in 1913, by the provisions of which ten million dollars was set apart to be divided among the Provinces for agricultural instruction during the ten years ending March 31, 1923. As the name implies, this act is preeminently educational, and its work falls under four divisions:

(1) The teaching in the public schools of the first principles of the sciences related to agriculture.

(2) The teaching of more advanced agriculture in agricultural colleges and schools devoting their attention to the training of teachers, investigators, and community leaders.

(3) The carrying on of extension work, having for its object the instruction of farmers by acquainting them through demonstrations and by other means with the results of scientific investigation and research.

(4) The amelioration of the conditions of rural life, particularly in so far as women and children are concerned.

These objects have been variously carried out in the several Provinces, but in them all the nature of the stimulus given to agricultural instruction has been much the same, being guided by the advice of local authorities who have in view urgent local and provincial needs.

VOCATIONAL WORK FOR RETURNED SOLDIERS.

The care of the returned Canadian soldier has devolved entirely upon the Military Hospitals Commission, established and given extensive powers by successive orders in council. This commission works together with a committee of both houses of the Canadian Parliament in the training and reeducation of wounded, disabled, and convalescent soldiers. In the system adopted, the training for new occupations of men who can not resume their former occupations—vocational reeducation—is the phase of deepest educational significance. Under this head, and responsible to the commission first named, nearly every Province has the following organizations:

1. A Provincial Disabled Soldiers' Training Board, which determines who are fit subjects for vocational reeducation.

2. A body having generally advisory powers for securing the coordination of local efforts and the cooperation of educational institutions.

3. Vocational officials in immediate charge of work in each locality under the Vocational Secretary of the Dominion, with headquarters at Ottawa.

4. Various organizations, such as the Returned Soldiers' Employment Commission, which have charge of placing the men in breadwinning occupations.

The efficiency with which all these agencies cooperate necessarily varies widely in the several Provinces; perhaps the finest illustration of the practical working of the general plan is to be seen in the

western Province of Alberta, from which many of the first enlistments in the Canadian expeditionary force came. At the Military Convalescent Hospital at Ogden, military organization and discipline prevail. In addition to systematic treatment involving occupational therapy of the most modern type, specialized vocational reeducation is given in—

(1) Commercial courses of six months;

(2) Instruction of disabled soldiers, foreigners who had enlisted in the Canadian forces, in English;

(3) Civil-service examination courses;

(4) Manual arts;

(5) Gardening and poultry raising;

(6) Industrial trades along the line of the vocational survey of the Province of Alberta projected just as the war broke out, with instruction at the Provincial Institute of Technology and Art at Calgary, organized as a link in the general system of public instruction in Alberta, and for the present turned over exclusively to disabled soldiers.

Many problems of vocational training are here being worked out with remarkable success. The caliber of the students and the relation between them and the educational authorities may be seen in the fact that a students' council at the institute has powers of self-government, works out programs of study, recently voted for in increase in daily hours of work, and has frequently been asked for advice on the contents of courses. In March, 1918, the vocational training branch of the Provincial Invalid Soldiers' Commission had under its instruction more than 3,000 returned soldiers.

Dominion-wide interest in this world problem did not cease with the cessation of hostilities. At the convening of the Canadian Parliament in February, 1919, it was announced in the speech from the throne that bills would be submitted for the further promotion of vocational education in all its phases, and that a recent order in council had provided substantial increase of vocational pay and allowances to returning soldiers while undergoing such reeducation.

THE DOMINION EDUCATIONAL ASSOCIATION.

Perhaps the most vital bond of union between the Provinces from the point of view of teaching is the Dominion Educational Association. This includes representatives from each Province, meets annually in November, in Ottawa, and constitutes a clearing house for the interchange of educational ideas, besides contributing substantially to the growing federalistic consciousness. A few of the salient subjects discussed at its 1918 meeting will show the very valuable part it serves in educational progress: "The Improvement of School

Administration and Its Dependence on Changes in Legislation"; "The Fisher Bill of England"; "The Adolescent School Attendance Act of Ontario"; "Uniform Textbooks for Canadian Schools"; "The Relation of Technical to Complete Education"; "Education for the New World after the War"; "The Returned Soldier—What Can We Do for Him?"; "The Federal Government and Statistics on Education in Canada." Of late years it has invited leading educational thinkers of the United States to address it, notably the Commissioners of Education, and thus has come to have a distinctly international character.

THE MARITIME PROVINCES.

The three Provinces of New Brunswick, Nova Scotia, and Prince Edward Island, by reason of similarity of climate, industries, and population, constitute a distinct unit. Their educational problems and methods of solution are closely akin, as is evidenced by the flourishing maritime educational convention held annually for the discussion of topics of common importance, and marking each year a distinct growth toward solidarity. In many respects New Brunswick may be regarded as most progressive; and a survey of educational progress there will be largely representative of the other two. As in all the other Provinces, the service of the teachers and the educational machinery in the winning of the war continued unabated until the end, especial interest being taken in the organization of the Dominion work in education for Canadian soldiers overseas and in the projected establishment of educational facilities in England for soldiers detained there after the war.

The school laws passed within the two years showed marked increase in educational interest. The powers and responsibilities of school trustees were largely increased; the attendance of district representatives upon county or provincial teachers' or trustees' institutes was encouraged by defraying their expenses; reciprocity of teachers of corresponding grades with Nova Scotia, safeguarded by the certification of one of the other superintendents of instruction, was established; and superior schools in the seventh grade and upward were declared free to all pupils residing within the parish or parishes concerned. Most important of all, however, is the legislative act of 1918, defining vocational and prevocational education and schools, providing for provincial and local administration and control by a committee consisting of the Superintendent of Education, the Principal of the Normal School, the Secretary of Agriculture, the Director of Elementary Agricultural Education, and three others, including one representing capital and one labor, outlining the method of establishing schools and departments of vocational education, allowing provincial grants on the basis of equal appropria-

tions of local taxes for designated instructions in this field; and finally, providing that no part of the annual vocational grant shall be given to any district, town, or city unless a compulsory school-attendance law has been adopted therein.

Closely related is the project having for its object the establishment of home efficiency clubs throughout the Province and the stimulation of the production of home-canned fruits and vegetables. Upon the inauguration of the system late in 1917 one hundred clubs were formed, with a total membership of 1,700 girls between the ages of 10 and 18 years. The aggregate production of these clubs was estimated in 1918 at 50,000 quarts of food canned or otherwise preserved. In May, 1918, the Board of Education formally recognized the movement by the appointment of a woman supervisor for girls' clubs. This official by the end of 1918 had over 200 active organizations under her direction. A striking feature of the movement also was the fact that many domestic-science teachers of the Province volunteered to help in this general work by giving up three weeks of their summer vacation. In 1918 these teachers were regularly employed by the Department of Education to visit the clubs during July and August. In preparation for this, short courses were provided in the normal school, with special regard to the local products and conditions of the districts to which individual teachers were assigned.

In the matter of increased production the Dominion-wide movement was promoted in New Brunswick by the schools in cooperation with the agricultural department. The inspectors were summoned to a conference, and the Province organized by the selection of the most suitable centers in each inspectorial district and the appointment of a committee in each. A stimulus was given to good scholarship by the provision that only boys whose school standing was satisfactory should be allowed to volunteer for this work.[1] Assistance was also lent by the Department of Education through the district organizations in the distribution of circular and seed-card estimates sent out by the Department of Agriculture.

With the purpose of securing data at first hand upon the extent and methods of free textbook distribution—always a much-mooted question in the Dominion—the superintendent of education in 1917 visited all the western Provinces, and embodied his findings in a report containing many other points of interest besides that of his immediate object. He found that free readers were supplied in all the Provinces west of Ontario, and free materials in some, free arithmetics, agriculture texts, atlases, and libraries in others; that Ontario supplied hand-books in each subject to each

[1] Similar departmental regulations were also issued in Nova Scotia.

teacher; that British Columbia was the only Province supplying free textbooks throughout; that in Manitoba each district or municipality was allowed by law to supply its own texts free, with the prospect that this would shortly become compulsory; that an interesting sign of closer unity was seen in the fact that the four western Provinces had tentatively agreed to appoint composite committees to select uniform textbooks for all.

NOVA SCOTIA.

Noteworthy in the educational history of Nova Scotia is the regulation adopted by the council of public instruction, compulsory from August 1, 1919, guaranteeing the raising of teachers' salaries and basing the minimum salary upon the average annual salary paid for the five years ended July, 1917. Ranging from $200, the lowest hitherto paid, up to $750, increases are graduated according to various percentages, assuring a minimum of $400 in future. The act is effectively safeguarded by the provision that—

> the license of any teacher engaging to teach in any section at a less salary than that defined above shall at once be suspended, and if any section engage a teacher at less salary than the above specified, such section shall forfeit its share of the muncipal fund and shall not be regarded as having a legal school.

PRINCE EDWARD ISLAND.

Legislation in this Province showed marked progress in the following amendment to the section of the Public Schools Act designating the requirements of voters at school meetings:

> Notwithstanding anything in this act or amendments thereto, every married woman or widow having one or more children of school age in actual attendance at the school shall be a qualified voter at all school meetings in respect of all matters and things cognizable by a school meeting and shall be eligible for election as school trustee.

In accordance with this amendment women have been elected and promptly qualified and have thus come in closer touch with the needs and improvement of the schools.

The compulsory attendance clause of the school act has also been strengthened by the following amendment:

> Every person having under his control a child between the ages of 8 and 14 shall annually during the continuance of such control send such child to some public school in the city, town, or school district in the county in which he resides at least 30 weeks if such person resides in the town of Charlottetown or Summerside and 20 weeks if he resides elsewhere in the Province.

The enforcement of this provision was made obligatory upon all boards of trustees.

QUEBEC.

Any adequate survey of educational progress and conditions in the Province of Quebec must be based upon a clear understanding of the unique legal character of its public school system. This includes a twofold organization which follows sharply the lines of the two dominant religious faiths, with each division entirely independent of the other. The final control and direction of the Roman Catholic schools are vested in the Catholic committee of the council of public instruction; those of the Protestant schools in the corresponding Protestant committee. Both are under a common superintendent of public instruction for the Province, who is ex-officio chairman of both, though he usually delegates the actual power in one or the other committee, and to whom each inspector general submits an annual report for transmission to the secretary of state. Each committee works primarily through its inspector general, whose powers are entirely derived from it. In matters of common import the committees combine either in whole or in part.

The great majority of the schools of all grades in the Province are Roman Catholic—in 1916–17, 6,562 out of a total of 7,289, enrolling approximately 430,000 pupils out of a total of 500,000. Among the administrative acts of the Catholic committee for the past two years was their declaration in favor of forming classes to prepare young pupils for the first-year course of study in the primary schools, and the issuance of a certificate of studies upon the completion of the elementary, intermediate, and superior courses:

> There is question at this time of a new distribution of the subjects included in the courses of the elementary and model schools, in such a way as to eliminate those which are not absolutely necessary for these schools, and to distribute the subjects over seven years of teaching.

The Catholic committee also instructed its inspector general to initiate a close investigation of the condition and needs of the Catholic schools of the Province, and early in 1917 he made the following recommendations:

1. That the course of study in elementary schools be more effectively carried out, rather than have additions of subjects or time.
2. That the importance of the training of very small children in preparation for the first grade of elementary course be recognized and more attention be paid to it.
3. That the men and women teachers of the Province be stimulated to greater professional efficiency both in preparation and in permanency in the same school.
4. That the number of schools under the direction of male teachers be increased in all possible ways.

5. That the maximum number of pupils in each class should be reduced from 50 to 40.

6. That a certificate of study should be conferred as a reward for work both to teachers and to pupils, and with the view of encouraging the latter to pursue their studies beyond the prescribed 13 years.

Among the administrative acts of the Protestant committee were: The indorsement and transmission to the Government of the provision for compulsory education for Protestant children, along the line of the petition of school commissioners of certain towns unanimously presented to the legislature of the Province and the unanimous motion of the Protestant Teachers' Convention, the Council of Public Inspectors, the Provincial Association of School Boards, and a few Catholic local school boards; the revision of laws relating to the employment in industries of children who had not passed a certain scholastic standard; and the thorough revision of school books and courses of study for the year ending June, 1920, in order to meet adequately the conditions brought about by the war.

Each committee has been fortunate in the activity and vigor of its inspector general. In 1917 the Catholic inspector general, in addition to the investigation outlined above, noted as encouraging signs the growth in interest shown by the local school commissions, due largely to the conscientious labor of the local inspectors; the decrease in the number of women teachers without diplomas by exactly half within the past five years; the increase in salaries such that those from $100 to $125 have practically disappeared and that the average salary has come to range from $200 to $300, being almost doubled in the past six years; the resolution passed by the Roman Catholic inspectors, and indorsed by the Protestant inspectors, calling upon the committees for such a raising of the minimum standards of the rural schools as would qualify all these to participate in the minimum salary grants.

Both Catholic and Protestant committees during 1917 and 1918 initiated the holding of campaign meetings throughout the Province to promote public interest in education, urging the voting of money for improved buildings and higher salaries. The Protestant inspector general noted a most encouraging awakening of popular interest in many localities in improved school facilities, but emphasized the urgent need of better salaries for rural teachers, if any with diplomas were to continue to be available; and he called for a minimum salary of $50 per month, which would not be unduly burdensome in view of the new tax assessments made in 1918 in many localities. He concluded:

> The economic reasons are not confined to the facts that trained teachers are allured to other Provinces where the reward is greater; young women of

ability are constantly afforded more attractive careers in our own Province as trained nurses and as stenographers and typewriters in banks and business offices. The war has intensified this demand, and an inadequate supply of trained teachers is not only evident now throughout the Province, but is bound to become still more inadequate in the immediate future. * * * The example of the British Parliament in adopting a great progressive educational policy involving increased expenditures in war times is one to be followed.

ONTARIO.

THE SUPERANNUATION ACT.

The most important piece of educational legislation of the Province of Ontario during the past two years was the teachers' and inspectors' superannuation act. Its main provisions are as follows: (1) The assessment of 2½ per cent upon the salaries of teachers and inspectors with an equal sum contributed by the Province, the said payments to be deducted from the legislative school grants and to be placed to the credit of the superannuation fund, and to be deducted finally from the individual salaries; (2) pensions based on length of service and amount of salary, the minimum being $365, and the maximum $1,000 per annum, with the requirement of a minimum of 30 years' experience or 15 years if retirement is caused by ill health; (3) a controlling board composed of an actuary, two other persons appointed by the minister of public instruction, and two teachers or inspectors, active members of the Ontario Educational Associaton and regularly elected by that body.

PROPOSED LEGISLATION.

Of great importance, also, is the introduction of the following bills in the legislative assembly of the Province:

1. The bill for the establishment of a system of consolidated schools, following closely the lines of corresponding legislation in the prairie Provinces, where such schools have for some years constituted the basal feature of rural school administration. It is still (April, 1919) pending, but is regarded with universal favor, and is certain to pass. It marks a long step forward in elasticity of rural school administration.

2. The adolescent school attendance bill, making compulsory part-time school attendance of boys and girls between the ages of 14 and 18. It provides that adolescents between 14 and 16 must have 400 hours of education each year, and those between 16 and 18 have 320 hours, and that they can not secure employment unless they shall have obtained certificates that they have complied with the law or are exempt for legally specified cause. Urban centers of 5,000 population or over must provide for adolescent school courses.

THE EFFECTS OF THE WAR.

As regards the practical operation of the schools of Ontario, the effects of the war have been pronounced in the following respects:

1. In diminishing the normal supply of teachers. According to the report of the chief inspector of public and separate schools, not only have—

> A considerable number of teachers enlisted for service overseas, but a much greater number have withdrawn to more lucrative positions with fewer responsibilities. The loss to the Province, not counting the cost of educating these teachers, is sufficient to cause serious alarm to the authorities of the elementary schools. The obvious and manifest remedy for this state of affairs is to insist that boards of trustees shall adjust the salaries of their teachers to the increased cost of living and to the increased wages now earned in other occupations. Unless a very considerable increase in salaries of teachers is made, a still more serious condition will arise. Not only will the service of the teachers now engaged be lost, but students will cease to be attracted to the teachers' training schools.

2. In decreasing the amounts expended for the improvement and construction of school buildings. The inspector just quoted, however, finds a compensating advantage which has made for better school buildings and better school grounds, viz, the better organization of community life and a tendency to regard the school as its center, a movement which had its beginning in the demand made by the war for a higher standard of physical efficiency and its revelation of hitherto unsuspected but widely prevalent physical defects through the reports of the Army medical examiners.

3. In increasing the difficulty of securing the punctual and regular attendance of pupils at schools. On this point the same inspector reports that the arrangements effected by regulation two years ago in view of the exigencies of the war have left something to be desired in the way of more specific regulations to compel attendance. The truant officer provision has not been found satisfactory: "With the increased cost of wages the temptation for parents to withdraw their children from school, especially where fruits and vegetables are grown, has necessarily increased."

CONTINUATION SCHOOLS.

The continuation schools have grown steadily during the past two years. In spite of difficulties of accommodation and equipment, the favoring regulations and the liberal system of provincial grants made to this type of school have advanced their usefulness, though with the confusion incidental to the war only the largest centers have as yet such schools in full operation. The inspector of the district which enrolls the largest number of such schools advocates making it obligatory that every continuation school employing two teachers

and every high school having four teachers or less shall establish departments of agriculture and household economy giving a two-year course and winter courses in each; that schools with a staff of more than six teachers shall establish departments of technical training and household economy; provision should be made for training a sufficient number of the best available teachers, the burden of expense being distributed over the muncipalities that derive benefit from such a school, and attendance of pupils for the greater part of the time between the ages of 14 and 17 being made compulsory.

For the past two years the decrease in the attendance of boys upon the continuation schools has been noticable, more particularly among the first-year pupils, attributable to the great scarcity of labor on the farms, necessitating the work of the larger children at home. In industrial centers the decrease is due to the attraction of high-school boys and girls to employments paying high wages. According to the report of the inspector of the district, which shows more distinctively rural conditions:

> The continuation schools when first established were expected to provide secondary education for the youth of the rural and village communities of the Province, and so had a strong tendency toward training for country life by means of making agriculture one of the chief subjects of study. Unfortunately, these schools have not to any great extent fulfilled such expectations. Instead, these schools are simply high schools in rural or village communities, with courses similar to those in the city high schools and fitting youths for the teaching profession and for entrance to the universities and professional colleges.

INDUSTRIAL AND TECHNICAL EDUCATION.

Though the full development of the various types of schools contemplated by the industrial education act of 1911 was interrupted by the war, representatives of every type provided for by it have been established: Day schools, including general industrial schools, technical high schools and high-school courses, part-time cooperative industrial courses for apprentices actually employed, and schools and courses for instruction in the fine and applied arts; and night schools distinctively for adult workers. The needs of the war have brought special emphasis to bear upon the instruction for apprentices. Public-spirited employers in some places have offered tangible inducements to attend classes in mechanical drawing and shop mathematics, and in one instance managers allow one month to be deducted from the year's apprenticeship for a faithful winter's work in night-school classes upon these subjects. War needs have also brought to the front the value of classes for women in domestic science.

But perhaps the greatest progress in industrial and technical education has been made in the development of the day schools,

reaching as these do boys and girls under 14 who can not be given such training in the public schools, and who have not the maturity of mind to do successful night-school work. This branch of education has also received great stimulus from the attendance of returned soldiers in trade and technical classes, this having been affected by arrangements with the Dominion agencies already mentioned, which used the already established courses for the re-education of disabled soldiers.

AGRICULTURAL EDUCATION.

Mention has been made of the disappointment felt in certain quarters over the failure of the continuation schools, as originally contemplated, to develop agricultural instruction as its chief feature in rural schools. According to the report of the inspector of elementary agricultural classes, this type of instruction has steadily overcome difficulties, and wherever it has been established as a regular subject of the public-school curriculum it has maintained itself and steadily grown in public favor. Perhaps the most conspicuous proof of the part agricultural education is coming to play in the Province is seen in the school fair exhibits held in the rural districts, and serving by means of the appeal to local productions, interests, and the awarding of prizes for excellence along agricultural lines, to arouse and maintain a social solidarity unknown until their introduction. By regulation school fairs are formally organized under the direct charge of the district representative of the department of agriculture of the county in cooperation with the public school inspector. According to the report of the supervisor of district representatives:

> The special features in many places are the live-stock judging competitions, for teams of three boys from each school, who are asked to judge two classes of live stock, generally beef or dairy cattle and heavy horses; the public-speaking contests in which from 2 to 10 boys and girls compete; the boys' and girls' driving contests, which include rapidity and skill in hitching and unhitching; the school fair parades; physical drill under the Strathcona trust; weed and apple naming contests, and the exhibition of calves and colts by boys who had spent considerable time training their pet animals.

The call made each spring for increased food production, issued by the ministers or superintendents of public instruction throughout the Dominion, resulted in Ontario as elsewhere in a tremendous stimulus to formal instruction in agriculture. A large number of the schools undertook school garden work for the first time with very gratifying results. By ministerial regulation the duties of inspectors were still further increased in the promotion of agriculture, horticulture, and manual training and domestic science especially adapted to the requirements of farm life, and it was made the duty of each public

and separate school inspector to inspect half-yearly the teaching of agriculture and horticulture in the schools of his inspectorate, and to make a special report thereon to the minister and the school boards. By the regulation of 1918, special grants were offered to school boards and teachers of lower and middle schools for satisfactory work in agriculture and horticulture, and to rural and village schools for classes maintained in manual training as applied to the work of the farm or in household science suitable to the requirement of rural districts, where a qualified teacher is employed, and accommodations, equipment, and a course of study approved by the minister are provided.

MANITOBA.

DEMOCRATIC METHODS.

The transition is abrupt from the close centralization of the public school system of Ontario to the thoroughly democratic system of Manitoba. Each is the outcome of peculiar social and political conditions. In Manitoba, as in the adjacent sister Provinces of Saskatchewan and Alberta, conditions of life are largely rural, and they have fashioned educational machinery to their own liking. The unity of the interests of these three Provinces is so generally recognized that in May, 1918, their ministers and deputy ministers met at Calgary, in Alberta, adopted uniform textbooks in most of the public and high school courses, and provided for a training course for teachers of the first and second class certificate which should be 33 weeks in length, the completion of grades 11 and 12 being prerequisite to admission to it.

Contrary to the municipal unit, which is the basis in the Provinces to the eastward, the unit of educational organization in Manitoba is the school district, ranging in area from 16 to 25 square miles, with the legal provision by which the district can be organized with 10 school children. The several district and municipal boards have absolute power in the financial support and physical upkeep of the schools and in the selection of teachers, subject only to the general supervision of the ministry of public instruction. Remarkable elasticity in administration is secured by the provision of the public-school act by which a municipal school board may be established in any municipality where the electors so desire. In addition, any rural council may, and on petition of 15 per cent of the electors shall, submit a by-law at any municipal election for the purpose of ascertaining the wishes of the people in the matter, upon the passing of which law trustees are elected who are required to take over the whole matter of administration of the schools, the original school districts being dissolved, and the new board possessing all the powers provided in the act for boards of rural school trustees.

An important feature of the latter is the appointment of an official trustee to take charge of school districts which can not be satisfactorily managed by a regular board of school trustees. This system has been attended with marked success; and in the work of organization and management the services of the official trustee have in many cases proved invaluable. The trustees in their turn have combined during the past two years in provincial and local associations, opening the way to united action along many lines and securing a broad attitude toward educational problems which would otherwise have been impossible or at least long delayed. The activities of the official trustees have been especially commended by the inspectors of the districts. The Manitoba Educational Association has recognized the great part they play and has created a special section known as the trustees section of the association.

THE ADVISORY BOARD OF EDUCATION.

On the academic and scholastic sides a unique feature in the systems of the western Provinces is the advisory board of education. In Manitoba this organization dates from 1890, and is regarded by the people of the Province as having furthered the progress in education more largely than any other agency. With its activities it has grown in membership from 7 to 31, one-third of whom in 1916 had served in various departments of practical educational work, and the remainder represented agriculture, the industries, and the professions. The board touches practical education most closely in the following respects:

1. It grants to teachers professional certificates, and has steadily raised the requirements therefor, culminating in the regulation effective July 1, 1916, which requires candidates for normal school teacher training to have completed three years of high-school work, thus making the scholastic preparation of teachers identical with that required for entrance to other professional schools; by regulation of 1917 it decreed that no permanent license should be granted any teacher who is not a British subject by birth or naturalization, all others being allowed only an ad interim certificate valid for not more than six months, renewable for no longer period and requiring a special oath; it further discontinued the authorization of school texts for bilingual teaching in the public schools.

2. The board has charge of the courses of study of the public schools of all grades, and has steadily made more rigorous the combined course of study first adopted in 1913, which constituted a great step toward unifying educational interests in the Province by satisfying the requirements of both the University Council and the Normal School.

CONSOLIDATION.

The most conspicuous feature of education in the western Provinces is the consolidation of rural schools at convenient centers, a measure practically unknown in the eastern Provinces of the Dominion, but of very rapid growth in the Provinces which are under the educational influence of the States of the American Union. The advantages incident to the consolidation of schools have from the first been thoroughly appreciated in Manitoba; more and better teachers, modern and hygienic buildings, possibilities of the beautifying of school grounds, largely increased enrollment, and in many places the attendance of practically all children of compulsory school age, instead of the deadening disadvantages of a number of inaccessible single-room schools. In 1917 eighty consolidations were in operation in Manitoba, covering a territory of one-tenth of the entire organized school area.

Progress in the improvement of the health and sanitary conditions of the rural schools continues through the—

organized campaign in which the Provincial Board of Health and the Department of Education are cooperating. In 1917 the board of health decided to employ a staff of expert nurses to operate in the rural districts. In all cases there has been harmonious and effective cooperation between teachers and nurses. * * * In 1917 sixteen rural schools undertook to provide hot lunches of some sort, and the people look upon it favorably and the trustees give assistance in equipment and materials.

ATTENDANCE.

The problem of school attendance is always one that looms large in education in rural sections. Manitoba has had for some years a legal supervisor of school attendance; and by a succession of acts respecting school attendance, culminating in the one of May, 1917, it has sought to improve the attendance on the elementary schools, though with the reluctance of a democratic people to prescribe general laws it has refrained from passing any provincial compulsory school attendance law. The last act provides for the appointment by school boards or municipal councils of a school attendance officer or officers, and sets forth their duties as well as those of school trustees, parents, guardians, teachers, and inspectors under the act, prescribing suitable penalties. The act has social as well as educational import in its purpose of protecting children from neglect and of securing for them the benefit of an education. Attendance officers to the number of nearly 150 were appointed within the year following the passage of the act.

TEACHERS.

A large part of the credit for the vigor and the growth of the schools of the western Provinces is due to the unusual personnel

of the teachers of the public schools. This is especially true of Manitoba. Here, as in the neighboring Provinces, the teachers are better paid than in the East, and they fill a larger place in the life of the people outside the schoolroom. As a consequence, there is every year a powerful draft upon the teaching force of the older Provinces. In the summer of 1918 an unprecedented demand was made upon the teachers of Manitoba by the Provinces still farther to the west, as shown by the publication of columns of advertisements, "Teachers wanted," appearing in the papers for perhaps the first time in the history of the Province. The greatest unrest ever seen in that body of course followed.

HIGH SCHOOLS.

As would be expected in a Province so progressive as Manitoba, the program of studies of the high schools has been under close scrutiny; and the Manitoba Educational Association has devoted much study to its reorganization and improvement. With the outbreak of the war the need was felt for a readjustment of studies. The time required in foreign languages necessary for admission to the university was considered disproportionate, and the high-school committee attempted an arrangement of courses to give a fair proportion of time to each important subject. The university was therefore asked to lower its language requirement from two foreign languages to one. After many conferences, the university council declined to grant the request. The issue is of course the one familiar in many countries under various names but with the same fundamental problem of dispensing with the study of Latin. Of interest, too, in its bearing upon the preparation for the high school, as well as upon the number of pupils sent into it, is the tendency to unite the two highest elementary grades into one for convenience of teaching where teacher shortage is felt. It has been tested in various localities but has not commended itself in actual practice unless, as has been suggested, Grade VIII could be stiffened and the secondary school begun with it.

THE UNIVERSITY.

An interesting experiment was initiated in 1918 by the University of Manitoba, preliminary to its establishment of a department of commercial education. Representatives were sent to the cities and towns of the Province to survey the possibilities offered for students in that branch, to analyze business conditions, local and general, and to examine methods of taxation and systems of licenses imposed by the various towns and municipalities. The report is awaited with great interest, as promising valuable information not only educationally but economically and legally.

The farthest reaching piece of legislation relative to higher education in the Dominion was enacted in 1917 by the assembly of Manitoba on the basis of the bill submitted by the minister of education, remodeling the constitution of the University of Manitoba, providing for a board of governors of nine members vested with full power over the financial affairs of the university and the final decision of all matters of academic policy; for a university council of 27 members, a few more than one-third of the number of the old council, vested with general charge of courses and academic work; and for representation of the denominational colleges of the Province upon the council alone. Upon the appointment by the Government of the chancellor and the installation of the administrative authorities, the reorganized institution began a vigorous career, with the enthusiastic support of all the educational elements of the Province.

SASKATCHEWAN.

The democratic ideas just described in the case of Manitoba are even more pronounced in the Province just to the west, Saskatchewan; but centralization more akin to that of the eastern Provinces has asserted itself in the public-school system of the latter. This centralization, however, has not lessened the deep popular interest in the schools. Perhaps the most convincing proof of this was the educational survey of the Province decreed by order in council and undertaken during the latter half of the year 1917. The public had been favorably prepared for this survey by the activities of the Public Education League, which had launched public meetings and led up to the proclamation of a public holiday by the premier, on which the needs of educational reform were emphasized at rallies held at a number of points. All this time there had been no lapse in public interest in education, as is shown by the fact that, since the organization of provincial government for Saskatchewan in 1905, school districts had been organized at the extraordinary rate of one a day.

With the tremendous increase in the amount of routine work thus devolving upon the department of education, serious discussion arose as to whether the school unit with a board of three trustees was not too small, and whether the organization of boards of seven members, as for the municipalities, would not be better able to handle a much larger territory organized as a municipality. The matter is as yet unsettled, but indications are that an organic change will be brought about by the stirring of public interest.

The progressive nature of the people and of the schools of Saskatchewan was well brought out in the findings of the survey to which reference has been made. The strongly centralized system,

it was agreed, had been of great service in the early primitive days; but the findings bore out the belief that a system more adapted to a largely increased population and especially one giving consideration to local needs was now required. In the survey, as published in 1918, Dr. H. W. Foght, Director, thus summarized what he regarded as the determining factors in the system:

(1) The people of the Province have failed to use the schools as fully as they should have done.

(2) The pevailing system of school organization and administration in rural districts particularly is no longer adequate for modern uses.

(3) Abnormal opportunities in other occupations and other causes have conspired to make it difficult to train and keep in the profession an adequate number of well-prepared teachers.

(4) The courses of study in elementary and secondary schools do not in all respects meet the demands of a democratic people occupied with the conquest of a great agricultural country.

(5) The schools, in their internal organization, are planned less for the normal child than for the exceptional child, and offer slight opportunity for individual aptness and initiative.

(6) The system of examinations in use is a questionable test of the average pupil's scholarship, ability, maturity, and fitness for advancement.

(7) Bodily health and hygienic conditions in schools, so essential to effective study, have received little attention in the daily teaching, and are largely disregarded in the physical equipment of the schools.

(8) The schools, while liberally maintained, must receive even larger support in order that commensurate returns may be obtained on the school investment.

THE SCHOOL ATTENDANCE ACT.

The School Attendance Act, which came into effect May 1, 1917, at once increased the enrollment and regularity of attendance of school children falling within the compulsory age from 7 to 14 years. By its provisions town districts appoint attendance officers who report to the department of education every month. In village and rural districts such duties are fulfilled by the teachers. As regards territories covered by the school act and length of school year, every town and village district, and every rural district with at least 12 children of compulsory age resident within 1½ miles from the schoolhouse, shall offer at least 210 teaching days; and every district with at least 10 children of compulsory age shall offer at least 190 days. A most important phase of the act is that it provides for keeping systematic records of the population of compulsory age, which has hitherto not been legally required.

School consolidation is also involved with provisions for attendance, an amendment to the act just mentioned made in 1917 giving the minister of education power at discretion to allow a larger area than 50 square miles to be included in the district served by consolidated schools. Very significantly, Saskatchewan has fallen far

below its sister Provinces of Manitoba and Alberta in the progress shown in consolidation, though considerations of climate and topography made consolidation as necessary and as feasible as in either of the other two Provinces.

Dr. Foght, in his summary, concludes that:

Consolidation has made little progress in Saskatchewan because no provincial policy has yet been adopted extending Government grants and guidance to proposed consolidation districts. A belief that Saskatchewan is not yet ready for consolidation may have caused Government officials not to push the matter. No concerted policy has yet been adopted by the Government to encourage some particular form of consolidation. The 18 consolidations now in operation are due mainly to local initiative.

SHORT-TERM SCHOOLS.

Another unfavorable phase is the existence of the so-called "short-term school," by which are meant rural schools opening in April or May and continuing from five to eight months. Such an arrangement plainly represents a compromise which, whatever may have been its original justification, has brought seriously grave disadvantages in its train. These schools engage a new teacher each year and often change teachers two or even three times in the year. In many cases they can only obtain "permit" teachers because qualified teachers prefer schools that are in operation throughout the year. On this point the minister of education concludes:

The consequence is that the children in these schools are backward in their studies, with thousands growing up who have never got beyond Grade IV, and unless action is taken at once these conditions will continue with the present generation poorly equipped for life's tasks.

INSTRUCTION IN AGRICULTURE.

As agriculture is the predominant industry of the Province, practically all interest in vocational and technical education for the past two years has centered in the furthering of agricultural education. The agricultural instruction committee in 1917 made the following recommendations to the Department of Education which, while they have not as yet become part of the official regulations, are practically certain to be adopted at an early date:

1. That agriculture and elementary science be compulsory for Third Class Part II of the teachers' course.
2. That household science be an optional subject with music or manual training for Third Class Part II of the teachers' course.
3. That agriculture and general science be compulsory subjects for examination instead of physics and chemistry for the second class teachers' diploma.
4. That an annual maximum grant of $500 be made to such high schools as give adequate instruction in the course in agriculture as defined from time

to time in the regulations of the department, the amount of such grant to be based upon the qualifications of the teachers, the nature of the equipment, and the efficiency of the teaching as reported upon by the inspector of high schools.

Aside from the formal instruction in agriculture, a large part is played by the Rural Education Associations organized in the various districts and municipalities with the cooperation of inspectors and the general public. Such interest has been aroused in this movement that more than 40 local associations were organized during the year 1917. They promote popular interest in education by means of school fairs, at which exhibits along all lines of country life are shown.

TEACHERS.

As in Manitoba, the personnel of the teachers of Saskatchewan is drawn largely from outside the Province, Ontario furnishing in 1916 more than 30 per cent and Manitoba 28 per cent of the total. The number of young teachers is unusual, one-third of the rural teachers being below 21 years and over half ranging from 20 to 25 years. In both of these facts grave disadvantages are evident. The present facilities to train teachers within the Province are entirely inadequate, and many hundred schools must be filled with provisional teachers, while very many others are below 21 years of age but hold permanent certificates. In the high schools, however, while the teachers are comparatively young, the average age being 32, the average of training and experience is unusually high. As Dr. Foght says:

> This combination of youthfulness and experience constitutes a very real asset for education in the Province, especially in view of the movement for better integration of the high schools and the grades, which will demand men and women who know intimately both elementary and secondary education.

In the field of health promotion Saskatchewan has made a forward step in the organization of a division of the Department of Education in charge of a director of school hygiene. A vigorous campaign for the conservation and promotion of health has been initiated and a survey made of hygienic conditions in the rural schools.

ALBERTA.

In Alberta educational progress for the past two years has been steady, in spite of distracting conditions due to the war. Naturally, a falling off was seen in the average attendance of pupils, though an increase was seen in the case of girls. The secondary schools suffered from enlistment of the larger boys for overseas service; and for purposes of increased production large numbers of boys, and in some cases girls, were permitted to assist in farming operations, the school-attendance act being less rigorously enforced.

The changed conditions brought about a different method of classification between graded and ungraded schools. Hitherto ungraded has meant rural, but many rural school districts now conduct graded schools, and as rural schools are more and more consolidated they pass from the list of ungraded to that of graded schools.

A further interesting effect of the change is seen in the fact that the enrollment of pupils in the secondary grades is increasing much more rapidly than the total enrollment in the lower schools of the Province, the increase being from less than 3 per cent in 1906 to nearly 6 per cent in 1916. Noteworthy also in its bearing upon the schools is the evidence of greater prosperity in the rural communities than in the town and village districts; this is shown by the fact that more than two-thirds of the money borrowed by school authorities according to the system of legal debentures was for the rural school districts. The distinctive feature of the financial support of the schools of Alberta is constituted by the legally organized school debenture branch, under a manager appointed by the Premier, a very important part of whose work is to supervise school-building plans, contracts, and initial orders for equipment, to prescribe modern requirements of lighting, heating, and ventilation, and to approve all financial engagements made by local boards. To it is largely due the credit of having made Alberta, the newest of the western Provinces, widely known for the uniform excellence of its school buildings.

THE SCHOOL ATTENDANCE ACT.

Most important of the administrative acts pertaining to the schools was the passage of the amended and much strengthened School Attendance Act in 1916, which took the place of the old "Truancy" act, whose name and some of whose provisions had become distasteful. Attendance officers under this act in the cities and larger towns are responsible for its enforcement. In the rural and village districts enforcement is by means of a school attendance branch and the school inspectors, who are ex officio provincial attendance officers. In cases of unjustifiable nonattendance the new law provides that officials, after exhausting tactful measures with recalcitrant parents or guardians, issue legal warning notices, serving them like other legal papers and allowing 10 days to elapse before the application of the law. Teachers also are required to carry out the provisions of the act especially by the inclusion of information bearing upon nonattendance in their monthly attendance reports.

A serious difficulty was found, however, in the laxity with which local authorities excused attendance on various exceptions outlined

in the act, especially that stating that "the parent, guardian, or other person shall not be liable to any penalty imposed by this act in respect to the child if the child has attained the full age of 14 years and is regularly employed during school hours in some useful occupation." Under this head, owing to the scarcity of farm labor, a great many boys missed the schooling which they should have had. Many inspectors, however, considering the harvesting and marketing of crops important as war measures, did not bring legal pressure to bear, being convinced that such nonattendance was a matter of necessity and not of neglect.

CONSOLIDATION OF SCHOOLS.

Consolidation of rural schools has proceeded steadily in Alberta, contributing also, by the wisdom of a number of inspectors, to the furthering of vocational and rural secondary education. This was initiated by a very progressive prevocational survey made by the Department of Education with a view of reaching primarily the country youth in their teens. To this end recommendations were made for distinctively rural schools in which a high-school course of two or three years, and closely adapted to local needs and conditions, should have the most prominent place.

THE BILINGUAL SITUATION.

The bilingual situation in Alberta has been discussed in connection with that topic, as it applies to the Dominion of Canada. As regards the setting of this problem in the school system and administration of the Province, attention should again be called to the fact that Alberta alone has a special supervisor of schools for foreigners. This officer has been of the utmost advantage and usefulness in instructing trustees, both lay and official, in their duties of putting and keeping the schools of foreigners in operation; in supervising the affairs of the districts; in harmonizing internal dissensions; in securing qualified teachers; in building teachers' houses in many places, and in general lending aid to the boards in remote localities, and in the management of financial affairs. A large part is also played by this official in spreading among the alien population elementary ideas of sanitation and correct methods of living, which connects vitally with the projected system of medical inspection throughout the Province, which is likely to be made compulsory within a short time.

TEACHERS' CODE OF HONOR.

An interesting proof of the progressiveness of the teaching force of Alberta is furnished by the action (1918) of the Alberta Teachers'

Alliance in promulgating the following code of honor for the guidance of the body:

It shall be considered an unprofessional act—

1. To disregard the validity of a formal contract with the school board.

2. To criticize adversely, except in an official capacity, the efficiency of a fellow member of the alliance.

3. To pass along rumors derogatory to a fellow member of the alliance, whether such rumors be based on fact or not.

4. To seek professional advancement by any other than professional means.

5. To seek employment with the school board (*a*) not in good standing with the alliance, (*b*) already having a member of the alliance under contract for the same position.

6. To make known to nonmembers, except through authorized channels, the proceedings of a committee or general meeting of the alliance.

BRITISH COLUMBIA.

Educational interest in British Columbia has centered during the past two years in the extension of the work of the high schools in such a way that the varied needs of different communities may be served; in so developing the work of the rural high schools as to adjust them to the life of agricultural communities, and especially to attract the farm boy into the high schools and there train him definitely in agricultural science; in providing nonprofessional training for teachers in elementary as well as high schools; in spreading the appreciation of the need of physical exercises and organized playground sports; in effecting important changes in the high-school examinations whereby in cities of the first and second class examinations were waived and pupils were promoted to high schools on the recommendation of their principal, and second-year high-school pupils were promoted on that of their teachers.

On the strictly administrative side, amendments were made to the public schools act of 1916 for the transition of assisted schools to the status of regularly organized school districts, for defining city school districts of various classes, for apportioning per capita grants of various amounts for cities of the various classes and for rural school districts, and for paying bonuses upon the salaries of teachers in the rural districts. Perhaps most noteworthy is the provision by which—

where it appears that in any school district there are 20 or more persons of the age of 14 years and upwards desirous of obtaining instruction in technical education, manual training, domestic science, commercial training, or in the ordinary branches of an English education, the board of school trustees may establish, under regulations issued by the council of public instruction, night schools for their benefit.

PUBLIC SCHOOL SYSTEM OF JAMAICA.

By Charles E. Asbury,

American Consul, Port Antonio, Jamaica.

ORGANIZATION.

Jamaica is an island in the West Indies, and a British colony, with a population by the last census of 831,000, of whom over 95 per cent are of African descent, either in whole or in part. Fifty-three per cent of the population can read and write. In 1916–17 the average attendance at school was 62,000, or 1 of 12 population. With a total expenditure by the Government of $6,000,000, only $420,000, or 7 per cent, was spent for public education. This amounts to $6.75 per head of average attendance and 55 cents per capita of population.

The facilities for public instruction in Jamaica consist of public elementary schools in the towns and villages throughout the island, with a few private secondary schools in the chief centers. There are training schools for teachers which give advanced elementary instruction, but there is no college in the colony.

The schools are administered under a board of education for the colony, at the head of which is the director of education. The director has on his staff 11 inspectors, who are usually men from English universities. The Department of Education allots the funds appropriated for educational purposes, and exercises advisory supervision over all the schools of the island. The governor in privy council retains final authority in all matters of educational legislation.

A large majority of the public elementary schools are owned and managed by the various Protestant churches, and receive financial aid from the Government. At the last report there were 696 public elementary schools, of which the churches owned 566, the Government 111, and other organizations 19. The Department of Education maintains its control over the schools through its power of granting or withholding financial support.

Each parish has its school board, and the schools in certain portions of the island have been grouped under district boards. These boards, however, have only such powers and duties as the department may delegate to them, the immediate control of each school resting in the hands of a manager, who represents the owners. The manager is advised by a local board, but he has authority to make final decisions, employ teachers, provide equipment, and inspect the schools, and in most ways, he actually directs the policy of the school.

GRANTS, SUBSIDIES, ETC.

The appropriations for education are distributed among the schools by the department through an elaborate system of "grants," paid to the school managers in monthly installments. An average attendance of 30 or more is necessary to secure a grant. The amount of the grant is determined by the average attendance and the "marks" or rating given the school at a formal annual inspection. A perfect rating consists of 84 marks. If the average attendance is 60 or more, a grant is made of $4.86 for each mark. If less than 60, $3.65 is granted for each mark, and 2 cents in addition for each unit of average attendance. If the average is over 50 but under 70, an additional $1.45 is paid for each unit of attendance above 50. If the average is over 70, $2.90 is paid for each surplus unit of attendance, in addition to the $1.45 for the units from 50 to 70. All these grants are to be applied to the salaries of the teachers. Additional small grants are made for teaching industrial subjects.

The department makes limited grants to assist in erecting or repairing school buildings and teachers' cottages. In no case can this grant exceed $486 for a school, or $243 for a cottage, or one-half the total cost of the project. The average annual grant for buildings is approximately $2,500. The building must be located on at least one-fourth acre, and must be occupied as a public school or teachers' dwelling for at least 12 years after the grant is made. All school sites and building plans must have the department's approval. Where a Government school is located in a building owned entirely by private persons, a nominal yearly rental of 36 cents is granted for each unit of average attendance. There are also small grants for supplies, library books, sewing materials, sanitation, garden fences, etc. These amount to only a few cents per unit of average attendance.

TEACHERS.

All teachers in the public schools are registered by the department, and are classified on the basis of training and rank in examination. They must be 18 years of age or over, and must have had at least one year in a teachers' training school or have passed the third year pupil-teacher's examination. Teachers are classified as "principal teachers" if they are judged qualified to take charge of a school; as "assistant teachers" if not so qualified. The advancement of teachers depends upon their success in school and in examination, and the length of their experience. Certificates are issued upon a successful examination in the second or third year's course at a training school. A principal teacher who has taught for 12 years, with inspection grade of "first class" for at least six years, is given a

"good service" certificate which has an important bearing upon the teacher's salary. A few teachers are registered as qualified for kindergarten work. They are required to have special training, and aspiring teachers are afforded an opportunity to secure this training, partly at Government expense.

Each school may employ, in addition to the regular teachers described above, one or more pupil teachers. They must be between the ages of 14 and 17, and are required to pass an examination. They must execute a three years' contract, and are paid a small wage. Pupil teachers are entitled to receive three hours' extra instruction per week from the principal teacher, outside of school hours. Upon passing an examination after three years' service as a pupil teacher, the candidate is entitled to registration as an assistant teacher, and is eligible for employment. A few pupils who have completed the elementary course and are unable to continue their education in a private secondary school are allowed to attend the elementary schools and act as monitors, with the privilege of attending the pupil-teachers' classes.

The training schools for teachers continue the essentially English idea of education—a matter of private initiative and Government subsidy. Any school with proper equipment which follows an approved course of study may seek recognition as a training school for teachers. Some of the requirements are the pupil-teachers's examination for entrance, his being of the minimum age of 17 years, and pursuing a three years' course, and the maintenance of an elementary practice school, which in turn may be a "Government grant" school. To each recognized training school the Government makes a grant of $120 per year for the board and instruction of each regularly admitted student, with a bonus of $50 for each one that passes the annual examination, provided that the total grant does not exceed four-fifths of the total cost of maintaining the school. Religious interest or philanthropy is expected to supply the remainder.

Before students are admitted to the training schools, they must make an agreement, supported by a bond, to teach for six years in the Jamaica schools. For each year of failure to fulfill this promise, the student becomes liable to the Government for the sixth part of the cost of his training.

The training school scheme has not been found a great success. The Government has been compelled to establish two training schools of its own, in addition to the subsidized ones, in order to keep up the supply of teachers. There are at present about 500 certified teachers in the colony, with 114 students in the training schools run by the Government, and 26 in the schools under subsidy.

In the training schools, as in all other Jamaican schools, the course of study is determined by the subjects on the final examination.

These examinations are given at the close of each year's work, and include the following subjects: Reading and recitation, writing, English, arithmetic, algebra, school management, scripture and morals, geography, history, science—general and agricultural, physiology and hygiene, geometry, vocal music, drawing, and manual training for men, or domestic science for women. A grade of 50 per cent is required for passing in the first six subjects, and 33 per cent in the others. In addition to the regular training course, a brief agricultural, technical, or kindergarten course may be given and the attendance of teachers permitted or required, with a portion of their expenses borne by the Government.

The salaries of teachers are at present determined by the system of grants and marks mentioned above, based upon the rating of their school at the annual inspection. A radical change in the system was made recently, to go into effect April 1, 1919. Hereafter the determining factor is to be the average attendance of the school, with the teacher's rank and success record taken into consideration. The present minimum of $90 per year for assistant teachers will be retained, but salaries will average about $200 per annum, with a maximum of $875 for the head masters of the larger schools. All extra grants and bonuses will be discontinued. This change has been suspended, however, owing to lack of funds to put it into operation.

Teachers are employed by the manager of the school under written contract, subject to the approval of the department. The contract may be terminated at any time by either party after three months' notice, and every vacancy must be advertised.

SUPERVISION AND ADMINISTRATION.

All superintending is in the hands of the 11 inspectors attached to the Department of Education. They receive salaries of from $730 to $1,215 per annum, with traveling expenses. Provision has recently been made for raising the pay of inspectors to $972 and $1,458, and creating two new positions of "chief inspector," with salaries of from $1,458 to $1,700. The intention is to appoint only graduates of English universities to these positions.

Every school in Jamaica which receives Government grants and offers an elementary course of instruction is a public elementary school. All pupils may attend who care to do so, provided they are eligible under the law and accommodations are adequate. No tuition may be charged. New schools are established upon application to the board of education, which in turn submits the proposition to every minister of religion within a radius of 4 miles from the

proposed location. If the department decides that the school is necessary, and that all requirements have been met, it may grant a lump sum for the first year and permit the school to be opened.

Schools must be in session four days per week, mornings and afternoons, and in certain towns one-half day in addition. Each day's session lasts five hours. A minimum of 28 half-day sessions per month and 288 per annum is required. Holiday periods must be approved by the department, and usually differ widely in the several schools.

The board of education has authority to make attendance at school compulsory, but so far the law has been made effective only in three towns of the island. The president of the Jamaica Teachers' Union states that there are from eighty to ninety thousand children in the island who do not attend school. The question of extending the compulsory attendance law over the entire island is being constantly agitated, but it is improbable that any change will be made under the present economic conditions. Objection is also made to the provision of law which compels a pupil to withdraw from school at 14. Unless he has completed the elementary course by that time, he is deprived of any further opportunity to do so.

The teacher is required to keep an elaborate set of records, including admission book, register of attendance, log book, stock book of materials, account book, pupil-teachers' record book, and garden book. The log book is very interesting. It is a sort of diary of the school, in which is recorded day by day every event of importance. It also contains the record and recommendations of the annual inspections. Before a teacher may administer corporal punishment, he must be authorized to do so by the manager, and the authority must be written out in the log book.

CURRICULUM AND COURSES.

The curriculum of the public elementary school is based entirely upon the subjects for examination at the annual inspection, and the entire time and attendance of teacher and scholars are devoted to preparation for that event. The inspection lasts only one day, and in that time the inspector examines all the pupils on the whole curriculum and determines the rank of the school and the standing of the teacher. The highest rank attainable is "84 marks," distributed as follows: Organization, 6; discipline, 6; reading and recitation, 15; writing and English composition, 15; arithmetic, mental and written, 15; elementary science, especially agricultural, 8; Scripture and morals, 5; drawing and manual occupations, 6; geography with incidental history, 4; singing and drill, 4; total, 84. A school which attains 56 marks or more, with a grade of not less than two-thirds of

the possible marks in the fundamental subjects and one-third in the others, is ranked as of the first class. Others rank second or third class according to their marks.

The elementary course is graded into seven standards, each supposed to represent one year's work of a normal child. The lowest standard is called the "junior," and the others are numbered consecutively from I to VI. The work of the sixth standard is not essential for entrance to a secondary school, and is given only in the larger schools corresponding to our "graded" schools. In the smaller schools the standards are grouped into three divisions, lower, middle, and upper, with arrangements for covering all the course by a system of two courses of study to be given in alternate years.

It would appear from the list of studies that the curriculum is much the same as that of the average American school. The instruction, however, is radically different. There is much more emphasis in the Jamaica school upon the purely mechanical exercises, such as reciting memorized poems, writing from dictation, drawing and penmanship. There is an almost total absence of quiet seat work and study. The first impression of a Jamaica school room is likely to be one of hopeless confusion. Each of the three divisions may be reciting at the same time, to the teacher, the assistant, and a pupil-teacher. It is remarkable what good results are obtained, however, in some schools.

Some difficulty has been experienced in the matter of religious instruction. Since the various churches own so many of the schools, they have insisted upon Bible teaching and the catechism in the curriculum. In order to meet the situation, the study of Scripture and morals is included, but teachers are enjoined from commenting except in the way of pointing out an obvious and universally recognized lesson. In addition, a conscience clause has been enacted by which pupils who so desire are excused from school during the Scripture hour, which must be at the beginning or close of a session.

INDUSTRIAL AND TECHNICAL TRAINING.

Some real progress has been made in industrial instruction, but the work is greatly handicapped for lack of funds and of competent instructors. A Government technical school was established in Kingston in 1896. Here pupils from the Kingston elementary schools receive instruction in manual training and household industries. The school also conducts continuation evening classes for both sexes. The work is purely elementary, and its limited scope is indicated by the fact that the head master is also the manual training instructor of the principal teachers' college and organization inspector of manual training for the whole island, having direct

supervision over all the manual training work. There are six additional teachers for day classes and six for the continuation school. Provision is made for regular work in manual training, gardening, and "housewifery" in other schools where suitable teachers and equipment can be obtained. The manual training course is for the boys of the upper division and consists entirely of mechanical drawing and simple woodwork. Small grants are made by the Government for teachers and tools.

There are about 400 school gardens in the island, but the instruction in agriculture is very rudimentary. The department requires a plat of not less than one-tenth acre, and assists in the construction of a fence and the purchase of tools. A small grant is also made to the teacher for garden instruction. All the pupils work in the garden, the boys by requirement and the girls by permission. The aim seems to be to use the plat chiefly for experimental purposes and for demonstration, rather than for practical crop results.

All schools are required to teach plain sewing to the girls, and a few which have met the requirements as to equipment receive Government aid for the teaching of cooking and laundering. There are a very few schools where practical domestic science is taught, but they are chiefly private secondary institutions. There is even in Jamaica a touch of the feeling that work is degrading and unbecoming a scholar, and industrial work has been hampered accordingly.

Nothing has been done in Jamaica in the way of supervised playgrounds. There is a little drill work occasionally, but the children play their own games in a half-hearted way. The effect is plainly seen in the poor physique of the children, and the absence of the wholesome democratic spirit which free, healthy play so much encourages.

SECONDARY INSTRUCTION.

Secondary instruction has been left largely to private initiative and facilities are consequently limited. The Department of Education exercises some jurisdiction over the private secondary schools, however, and is gradually extending its control. Scholarships are provided from public funds to the total amount of $1,360 annually for deserving pupils who desire to continue their education above the elementary course. These scholarships pay the holders from $50 to $120 annually for two years. They are distributed by competitive examination to applicants who must be under 12 years of age. Holders are expected to pass the Cambridge secondary examinations in order to retain their places. These examinations were introduced in the colony in 1882 by the Jamaica Institute, a semipublic institution. In 1916 there were 471 candidates for the several

grades of the examinations, of whom 60 per cent were successful. The scope of these examinations largely determines the curriculum of the secondary schools. They cover Latin, French, algebra and geometry, English history, geography, English composition, grammar and literature, and Scripture. The scope of each examination is announced in advance, and the year's work is arranged especially to meet the examination requirements.

The only secondary technical instruction offered by the Government is in the form of trade scholarships to winners of a competitive examination who agree to apprentice themselves to a master workman in their chosen trade for a period of years. During the first two years of the apprenticeship, the students are given instruction in the Kingston Technical School at the expense of the Government. A grant is made to cover the cost of their board and clothes during the apprenticeship, and to provide them with kits of tools when they complete it. The maximum number of students provided for at any one time is 25.

Legislative provision has been made for grants to continuation schools for working boys and girls between the ages of 14 and 17, but so far Kingston is the only community to take advantage of it, The law provides for a course of 26 weeks of 3½ hours per week, with instruction in English, arithmetic, Scripture, and home economics, manual training, or agriculture. A movement is on foot to obtain more substantial Government aid for these schools so that the crying need for elementary instruction for the boys and girls above 14 may be met.

There is a healthful dissatisfaction with the present system among the progressive element, which promises to become strong enough ultimately to secure good schools, adequately equipped, with strong emphasis on industrial and vocational education.

RECENT PROGRESS OF EDUCATION IN AUSTRALIA AND NEW ZEALAND.

By Theresa Bach,

Division of Foreign Educational Systems, Bureau of Education.

GENERAL FEATURES.

The Commonwealth of Australia comprises the States of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania. Each State has developed its own system of education, controlled and supported by the State authorities. Primary education is free in all the States and secondary education is

free in some. Compulsory school attendance in most of the States is from 6 to 14; in New South Wales the compulsory period begins at 7.

Every effort is made by the State authorities to reach the children in the sparsely settled centers. For this purpose the State establishes central schools in such localities where the children can be conveniently conveyed to school free of charge, or provisional schools, i. e., small schools in which the attendance does not exceed 8 or 10. When the number of school children does not warrant the establishment of a provisional school, half-time schools are formed, the teacher visiting these schools on alternate days. In some places the teacher goes from house to house. In 1908 New South Wales inaugurated a "traveling" school, the teacher being provided with a tent for himself and one to be used as a school. Two additional schools of the same kind have since been established. Other States have made similar arrangements. Often the State grants subsidies to a teacher engaged by two or more families; the teacher must, however, be officially recognized by the Department of Education. In localities where no facilities can be found for either schoolroom accommodation or board and lodging for a teacher, the children are reached by correspondence. This scheme seems to bring best results in homes where the parents or elder sisters or brothers can assist the young beginner. It has been successfully introduced in New South Wales, Victoria, and Tasmania. In Victoria the system was developed from the Teachers' College, and 120 isolated children were thus taught in June, 1917.

Education in the Commonwealth is on the whole homogeneous. As each State developed independently, minor differences arose in the course of years. To make the work of the various departments more uniform and for the purpose of coordinating the school systems in the different States, the first conference of Australian directors of education was held in Adelaide in July, 1916.

According to the ministerial report the following resolutions were passed:

1. AGRICULTURAL EDUCATION.

(*a*) That nature-study work be developed with a view to increasing its usefulness and making it of practical benefit to the children.

(*b*) That agricultural education be developed and carefully organized.

(*c*) That suitable schools be established in rural centers, so as to give, in addition to higher primary work, a direct practical training in subjects specially useful to rural workers; e. g., for boys—woodwork, metal work, blacksmithing, simple building construction, land measurement, and agriculture; for girls—cookery, laundry, dairying, and smaller farming industries.

(*d*) That for the largest centers of population agricultural schools be established for city boys who have completed the primary course and who desire to follow agricultural pursuits; such schools to act as feeders to the agricultural colleges.

(*c*) That it is desirable that some method be adopted to coordinate the work of the various State authorities, dealing with various phases of agricultural education.

2. CONTINUATION PERIOD OF EDUCATION.

1. That as far as practicable provision should be made for the continuous education of boys and girls beyond the primary standard of instruction, and that this education should include both a specific training for citizenship and courses of instruction preparatory for various classes of future occupations.

2. That legislation is desirable to provide for such continued education, both full time and part time, in daylight hours; and, further, to provide that it be obligatory upon all boys up to the age of 16 to receive such continued education, either whole time or part time, where facilities for the purpose are provided.

3. That while facilities for similar continued education should be made available for girls, their attendance for the present should rest on a voluntary basis.

3. INDUSTRIAL EDUCATION.

1. That instruction in craftsmanship be in two grades:

(*a*) Preparatory.—To be given in full-time day schools in continuation of the primary-school course, and that the courses of such schools include such instruction combined with hand training as will provide a preparation for more specialized trade training.

(*b*) Technical schools for instruction of persons (i) Actually engaged in a skilled trade, in order to supplement by school instruction the training gained in the practice of the trade; (ii) But it is desirable that instruction in such schools be arranged in daylight hours.

2. That the State and Commonwealth Governments be invited to give a lead to other employers by requiring the attendance of their young employees, during working hours, at suitable technical classes.

4. COMMERCIAL EDUCATION.

1. That in view of conditions likely to prevail after the war, attention be given to the provision of commercial education.

2. That provision be made in the courses of study of secondary schools of both lower and higher type for a commercial group of subjects in those States in which this provision has not already been made.

3. That for those who have left school and have entered upon commercial callings, suitable evening courses in the State educational establishments be instituted, and arrangements be made by which these courses shall lead up to the university school of commerce.

4. That arrangements be made whereby one or two universities should provide the instruction on some reciprocal plan to be determined upon by consultation among all universities of the Commonwealth.

Of interest are the resolutions with regard to arrangements for education in adjoining States of children living in border States. These read:

(*a*) That children living on the borders of a State be given every facility for attending school in the neighboring State if there is no school near them in their own State.

(*b*) That the department, when dealing with questions of establishment of new schools on the borders of States, take into consideration the total number of children in the district on each side of the border.

(*c*) That there is no need for any financial adjustment in respect to this arrangement, as the benefits to the States are fairly equally divided.

(*d*) That a review of the border schools be made as soon as practicable, with a view to improving existing conditions.

The conference also passed a resolution that the school certificate of one State be recognized by another State, and finally that "there be cooperation between the States in the matter of training of specialist teachers."

WORKERS' TUTORIAL CLASSES.

An interesting development in the education of the working circles is the inauguration of the Workers' Tutorial Classes, an organization somewhat akin to the extension lectures. The scheme was launched in 1913 in connection with the formation of the Workers' Educational Association.

The Workers' Tutorial Classes exist at present in all the States. Although controlled by the university, they receive Government grants (except in Western Australia) ranging from $1,500 in Victoria to $25,000 in New South Wales. The aim of these classes is to bring the university into closer relation with the working men. The principal subjects offered are industrial history, economics, political science, and sociology. The entire course extends over three years. The students' reading is supplemented by class discussions, and by writing an essay on subjects dealing with some phase of economics, civics, and sociology.

Tutorial classes have been formed at the universities as well as in suburban and country centers.

GERMAN SCHOOLS IN AUSTRALIA.

A number of private schools were conducted by German teachers in several States of the Commonwealth prior to the war. In South Australia 52 schools were under the control of the Lutheran Church, and the language of instruction was exclusively German. The education act of 1915 provided that teaching in these schools should be through the medium of English for at least four hours a day. The education amendment act of 1916 modified this law to the effect that the Government should take over all the Lutheran schools and that no language but English should be spoken in the schools. The use of German as the language of instruction is prohibited in all the States of the Commonwealth.

TRAINING OF RETURNED SOLDIERS.

The Department of Repatriation has been created in the Commonwealth for the purpose of replacing the returned soldiers in civil life. An officer of the department meets the transports at the port

of disembarkation and places before the men the facilities provided by the State. It has been proposed to provide workshops in leather work, basket-making, raffia work, and toy making for the convalescent men who are still in hospital. The proposed workshops are to be under the control of the military authorities.

The Department of Education in each State offers free tuition to returned men in all the technical colleges; responsibility of finding employment for those who had finished their training rests with the Government.

THE TRAINING OF TEACHERS.

The training of teachers received considerable attention on the part of educational authorities. With the institution by the States of a wider high-school system and greater facilities for the study of the subjects relating to education at the universities a marked improvement was effected in the training of teachers. In recent years definite progress in that direction was made in the States of Victoria and Tasmania.

In Tasmania the new scheme of teachers' training, put into operation in January, 1918, lengthens the minimum period of training from 15 weeks to 6 months and adds new requirements for the junior public examination. The new scheme provides four distinct courses according to the nature of the work which the applicant is to undertake.

(*a*) A short course which aims to prepare teachers for provisional schools and the less important positions in the primary schools. It extends over six months.

(*b*) Infant course designed for prospective teachers in infant and kindergarten schools. The course extends over one year.

(*c*) Primary course designed to train teachers for the primary schools. The students must have completed two years of professional training in a State high school and have qualified for matriculation before entering the training college. The course extends over one year.

(*d*) Secondary course designed to train teachers for the secondary schools. It is open to promising students who have satisfactorily completed the primary course. The length of study is one to two years, in addition to the year spent in the primary course.

Before appointment the prospective teachers enter into agreement with the school authorities to serve the department for a certain length of time, which varies from two to five years, according to the expense and length of the course they have pursued.

A similar scheme for the training of teachers was put into operation somewhat earlier in Victoria. Instead of one course, leading to the trained teachers' certificate, four courses have been provided, namely, a secondary, a primary, an infant, and a short course for

teachers of small rural schools. Under a correspondence system rural teachers may receive further instruction by corresponding with the Melbourne High School. Similar arrangements are also made at the Teachers' College for country teachers who are studying for an infant teacher's certificate.

The training of teachers has been further greatly promoted by the courses on education recently introduced in some of the Australian universities; for instance, a lectureship on education has been inaugurated at the university of Tasmania. At the university of Western Australia education may be offered as a subject for a degree in arts; arrangements have also been made for a postgraduate diploma of education.

TECHNICAL EDUCATION.

The spread of technical education continues in all the States of the Commonwealth. In recent years noteworthy measures for the purpose of reorganizing the technical schools have been taken in New South Wales, South Australia, and Tasmania.

In *New South Wales* a scheme was evolved whereby the system of the workshop was coordinated with that of the technical school and college. Two main courses of instruction have been established: (*a*) Trade courses for apprentices and (*b*) higher courses for students desiring to pursue their studies in the various trades and professions. An important feature in the new scheme is the regulation regarding admission. No student is admitted to any course unless evidence is furnished that he possesses sufficient preparatory knowledge to benefit by the training. An exception is made in the higher diploma course in science, which is open to students irrespective of occupation. The trades courses are divided into two parts; the lower courses, covering a period of three years in the trades schools, and the higher, extending over two years in the technical colleges. A trade school leaving certificate admits the student without further examination to a technical college and thence to the university. The primary technical school is thus linked with the highest institution of learning.

In 1916 there were three technical colleges in the main industrial centers, and 10 trades schools in suburban and country districts: classes in elementary technical instruction were held in various smaller localities.

The measures regarding apprenticeship inaugurated in New South Wales in 1914 were introduced a few years later in *South Australia*. The technical education of apprentices act, passed by the legislature in 1917, provides for the appointment of an apprentices advisory board, with the view of changing the whole system of apprenticeship. The chief provision of the act requires that

each indentured apprentice, during the first three years of his apprenticeship, may be compelled to attend suitable technical classes for six hours per week for 40 weeks per year. Four of these hours shall be during the working hours and two in the evening.

In *Tasmania* a commission was appointed in 1916 for the purpose of developing technical education, and bringing the existing technical schools into proper relation with the primary and secondary schools.

As a result of the commission's recommendations a technical branch in charge of the organizing inspector was created in the Department of Education. Technical schools were reorganized and classified according to their courses as junior or senior technical schools.

The junior technical schools aim to give prevocational training in industrial, commercial, and domestic subjects. The course extends over either two or three years and is free. The senior technical schools provide vocational training in industrial, commercial, art, and home-making subjects. The length of the courses varies from two to five years. Plans have been made for the opening of four junior technical schools in the immediate future.

Progress in technical education has also been made in Victoria, where seven junior technical schools were opened recently. In Queensland the first trade preparatory classes were inaugurated in 1917 and progress was so gratifying that the scheme will undoubtedly lead to the establishment of a comprehensive system of apprenticeship.

An interesting feature of the technical education is the setting up of advisory committees consisting of representatives nominated by employers' and employees' associations. These committees are formed for each subject or group of subjects offered in the technical schools. The duty of the advisory committees is to visit classes and inspect the work of the students. They may also advise on the scope and detail of the syllabus.

The following special features developed in recent years in the various States are of interest:

NEW SOUTH WALES.

Public instruction (amendment) act, 1916.—This act contains important provisions regarding compulsory school attendance, the certification of private schools, and the inspection of school premises. Compulsory school attendance is provided for children between the ages of 7 and 14, the lower age limit being raised from 6 to 7. Exemption is granted to children receiving instruction at home on at least 85 days in each half year. To comply with the new regu-

lations children must be sent to schools certified by the department as efficient. Hitherto the department exercised no supervision over private schools except those that applied for registration under the bursary endowment act. This act, passed by the Parliament in 1912, provides bursaries for students in public or private secondary schools and in the University of Sydney. Private schools desiring the benefit under the act must register and comply with the department regulations with regard to premises, the organization and equipment of the school, the method and range of instruction, and efficiency of the teaching staff. Fees in the primary schools were abolished in 1906, in high schools in 1911. Since 1916 textbooks and materials have been provided free. In recent years great progress has been made in secondary education. The number of high schools has increased from 5 in 1910 to 22 (including 3 intermediate) in 1916; the average quarterly enrollment has risen from 894 to 5,330, and the cost per scholar from about $35 to $105.

Higher education is fostered by a system of public exhibitions which include the cost of matriculation, tuition, and degree fees. To cover the increased cost of the exhibitions the statutory endowment fund was increased by £10,000 per annum under the provisions of the amending act of 1916. By the same act £2,000 were assigned for the establishment of a chair of architecture at the University of Sydney.

The Government aid received by the University of Sydney during the year 1916 amounted to £54,592. The teaching staff consisted of 23 professors, 7 assistant professors, and 122 lecturers and demonstrators. There were also on the university staff 8 honorary lecturers and demonstrators. The number of students attending lectures during 1916 was 1,660, including 500 women.

VICTORIA.

Education of women.—The Council of Public Education, appointed to advise on educational matters, submitted in its report for 1917–18 the following data on education of women. The council pointed out that in view of the fact that compulsory education ends at 14, and girls are not permitted to work in a factory until the age of 15, much valuable time is wasted. The council proposes, therefore, to extend compulsory education of girls until the age of 15. It suggests that during the impressionable years of the girl's life she should be taught in special schools by women teachers. The curriculum in these schools should embrace cultural as well as practical subjects. The subjects proposed by the committee include English, mathematics, geography, history and civics, hygiene, and music, also instruction in simple cookery, needlework, and laundry work. Practical work should not occupy more than one-third of the time during the first

year, but should be extended to one-half of the time during the final year.

As regards secondary education the council found that "at present the course of work followed is very largely determined by prescribed entrance examinations to the university." This should be changed. Instead of a prescribed course of study, alternative courses should be instituted for girls who do not contemplate a university course. Courses in art and music should be introduced in the school curriculum and given the same credit as those in literature and mathematics.

> The general practice in the secondary school—with boys as well as girls—is to look upon art as something like an excrescence; it is dubbed an "extra," and is not considered worthy of a recognized place in the curriculum. This should be corrected.
>
> The girl who leaves the primary school, and, more particularly, the older girl who leaves the secondary school, should do so with, at least, the beginnings of a cultivated taste. Mere literacy studies, however important, will not do this. The critical artistic faculty need cultivation as well, and as much as any other. Study should not stop short at the ability to express form and color, but should, by the application of form and color to decoration and design, and its expression in dress, architecture, and furniture, cultivate an appreciation of tasteful and appropriate surroundings—matters that are far too important to be left to the tender mercies of the dressmaker or the furniture warehouseman. Liking and disliking should have a basis in knowledge and culture, and not in ignorant whim and caprice.

Industrial training for women should be greatly extended. Junior technical schools for girls desiring to enter the industrial field should be preparatory to the courses in technical schools which in Victoria are open to women. Greater facilities should also be afforded to girls who wish to enter upon a commercial career.

Finally, the council lays stress on the moral and physical education which should be cultivated in girls' schools on a larger scale.

QUEENSLAND.

Vocational education came under the control of the Government in 1908 and has since been steadily growing. Among the most recent developments are the opening of a trade school for apprentices and the extension of instruction in domestic science and agriculture. In 1917 a scheme was launched to provide classes in domestic science in the sparsely populated centers. This is done by means of itinerant teachers. The traveling instructors are provided with portable structures which are used when erected as domestic science classes. The course is outlined for the period of six months.

A report on agricultural education in Queensland was issued in 1917 by a special investigating committee appointed by the undersecretary of public instruction. The committee advocated the introduction of agricultural education along the following lines:

Agriculture should be a matter for the State rather than the individual. In primary schools gardening and tree planting on a small scale should be encouraged, also nature study and observation. More rural schools with an elementary program on agriculture should be opened by the Government. In secondary schools provision should be made for the study of agricultural subjects. These schools should lead directly to agricultural colleges, which in turn should be affiliated with the university. A department of agriculture under the faculty of science was also recommended.

The first rural school was opened in Queensland in January, 1917. The curriculum is practical. It is designed to equip the boys and girls with knowledge suited to the requirements of those who live on the land.

Agricultural instruction has also been introduced by the department in the primary schools, where milk and cream testing is a part of the curriculum.

WESTERN AUSTRALIA.

In Western Australia every effort is made to reach the children in the sparsely populated areas. Until recently a full time Government school was established in any locality where a regular attendance of not less than 10 children between the ages of 6 and 14 was assured. If the attendance fell below, the school was closed. The parents were then urged to engage a private instructor, the Department of Education sharing the expenses. The new regulation, issued in 1916, increases the school facilities by providing that the average attendance for a period of six months must fall below eight before the school can be closed. The report of the Education Department for 1917 shows that 646 primary schools were in operation during that year. Of these, 35 new schools were opened in 1917, 11, which had previously been closed, were reopened, and 7 were closed during the year. Of the 646 schools, 341 had an average attendance below 20.

The practice of the department can be readily understood when it is borne in mind that the population of the State consists of 320,000 inhabitants scattered over an area of about 1,000,000 square miles. The problem of the small country schools in Western Australia is very pressing.

Endeavors are being made by the school authorities to bring the country child in closer touch with his surrounding. Courses in elementary science have been recently introduced in these schools, and experiments in the growing of vegetables, culture of flowers, and the elementary agriculture carried on in the school gardens. The teachers receive much assistance by way of departmental publica-

tions and outlines in lessons dealing with the elements of agricultural science. In this work the Department of Education is greatly assisted by the agricultural department of the university and by the commissioner of agriculture. The training college is also devoting special attention to the work of prospective teachers in small country districts.

From time to time short courses for teachers extending over a fortnight are held in centers where the neighboring teachers can easily attend these lectures. The courses are conducted by school inspectors.

District high schools have been recently established in several localities. In addition to the general subjects, the curriculum provides for a science course with direct bearing upon agriculture. The high schools are not free, but a system of scholarships enables promising country children to avail themselves of a secondary education.

SOUTH AUSTRALIA.

School committees.—A new departure in the school system in this State is the inauguration of school committees. These committees, represented by the parents of the pupils, take a personal interest in the school of their district. Extensive improvements have been thus introduced. Although the school committees have no voice in school administration, they render valuable assistance in other matters pertaining to school. Classrooms have been decorated with proper pictures, libraries stocked with suitable books, school premises kept in proper shape, and trees planted on school grounds; not infrequently parents and teachers come together and a meeting is arranged for the purpose of discussing the various needs of their school. Commenting on the work of the committees, the director of education says:

> The substitution of school committees in place of boards of advice marks a distinct educational advance. A committee, having only its own school to care for, acquires a sense of ownership, with corresponding interest.
>
> In many places money has been raised and expended on improvements. Quite a number of schools have been supplied with pianos in this way. Altogether, thousands of pounds have been saved to the State by good citizens who have determined that *their* school, at any rate, shall not be in need of the help that *they* can give.
>
> Valuable as this is, I regard as of even greater importance the development of public spirit and personal interest—*our* school, no longer *the* school.
>
> By and by, perhaps, we shall have this interest so extended that no parent will pass the school without looking in and looking on for a few minutes. The parent has as much interest in the school as has the scholar, since upon it depends much of the future of the child. He should know what is being taught, and how.

NEW ZEALAND.

INTRODUCTION.

The war had seemingly little effect on the progress of education in New Zealand. Although 650 primary-school teachers were in active service at the beginning of 1917, and there were hardly any physically fit men teachers left in the entire school system, the minister of education says in his report for 1916 that "not only have the various administrative, educational, and social agencies of the department been kept up to the regular standard of efficiency, but a substantial amount of progress has been made, which even in normal times would justly be regarded with satisfaction."

Among the notable changes the report mentions the following: The raising of the standard of requirements for the certificate of proficiency; the granting of free places in technical schools for holders of certificates of competency (the latter certificates were issued to pupils who were unable to obtain the higher certificate of proficiency, but who showed special aptitude in manual subjects); the inauguration of a grading scheme for the classification of teachers; the extension of medical inspection; and a more liberal allowance for kindergarten schools.

According to the latest report of the minister of education the number of public schools in 1917 was 2,368, with an average attendance of 168,711, as against 2,355 in 1916, with an average attendance of 163,156.

The total expenditure of the Department of Education for the year 1917–18 was £1,809,187, an increase of £119,480 over the expenditure for the previous year. Of the total expenditure, 75 per cent was on primary education, 12 per cent on secondary education (including technical high schools), 4 per cent on university education, 3 per cent on industrial and special schools, 4 per cent on technical education, and 2 per cent on teachers' superannuation and miscellaneous charges.

RETARDATION OF PUPILS.

The question of retardation of pupils received a great deal of attention. Statistics show that the average percentage of retardation in standards 1 to 6, inclusive, is 19; the highest percentage is 24 in standard 3. The causes of this retardation are delayed school entrance, mental or physical defects of pupils, and transfer of pupils from one school to another. For the purpose of reducing this wastage of time, special classes for the care of backward children are to be established in all large schools. It is hoped that a number of children receiving special training for a longer or shorter period will make greater progress and ultimately join the classes with normal classification.

Of all pupils entering standard 1, only 59 per cent finish the primary course, and 41 per cent never reach standard 6. To enable the latter to receive some kind of industrial education a more elastic scheme of admission to technical schools was devised and put into operation at the end of the year 1917. According to the new regulations, pupils over 14 years of age who have left the public schools not more than six months previously without obtaining a graduation certificate may, on the recommendation of the school inspector, enter a free technical school. The pupils thus admitted must select subjects bearing upon a trade or industry, including agriculture and domestic science. They must not take any commercial subjects. Compulsory continued education is at present provided only at the option of the local authorities in some 17 small areas, but steps are taken to have it organized in the Dominion on a more comprehensive national basis. At the third general meeting, held in June, 1917, by the council of education, an advisory body on the matter of education, it was resolved "that it should be compulsory for every child between the ages of 14 and 17 years living within 3 miles of technical classes to attend such for three hours a week and 30 weeks a year." In compliance with this regulation of 1917, three more centers were opened for continued education of the youth.

CHILD WELFARE.

The health of school children is carefully guarded by a system of medical inspection and physical instruction which the Department of Education is vigorously pursuing. Medical inspectors do not treat, but examine, the children. In case defects are found, the parents are notified and urged to attend to the matter. If necessary, the school nurse visits the homes of the pupils and sees that satisfactory results are obtained. Medical inspectors render further assistance by delivering lectures to parents on such topics as diet, clothing, and the treatment of simple ailments. Lectures and demonstrations by medical inspectors are also regularly given to the prospective teachers in the training colleges and to instructors already in the service.

The work of physical instruction is now carried on in practically all the schools. Weak and defective children requiring special exercises are treated separately in so-called corrective classes. Great progress in the children's health has also been made in recent years by providing fresh-air schools for normal pupils.

Nor is the health of infants, i. e., children below 6 years of age, neglected. For some years New Zealand has registered the lowest percentage of infantile mortality for the entire world. This result

is due to the splendid system of infant life protection conducted by the Department of Education and by private persons, the "Society for the Promotion of Health of Women and Children," founded in 1907 under the encouragement of Gov. and Lady Plunket. District agents and duly qualified nurses under the department visit the homes where children under 6 years of age are taken care of by their foster parents. In case the conditions surrounding the child in the foster home are found unsatisfactory, the license may be revoked and the child may be directed for care to some other place. More elaborate is the educational campaign conducted by the "Society for the Promotion of Health of Women and Children" and carried on by the so-called "Plunket nurses." These nurses are concentrated in some 70 points of the Dominion and visit both near-by centers and more remote districts in order to lend counsel and impart instruction in all that pertains to the hygiene of motherhood and the care of children. The services of the nurses, or, better, the specialists in child care, are at the call of any member of the community, rich or poor. Their duties are not properly covered by the term "nurses," as their fundamental aim is of an educational nature. Whenever a community expects the arrival of one of these nurses, the members of the local committee, who have been officially notified, make necessary arrangements for the visitor to speak at various gatherings of mothers and to hold public demonstrations relative to the care of children in addition to informal conferences in the local school and the instructional visits to the individual homes. An integral part of her duties also consists of correspondence with mothers who live in districts too remote to allow systematic visitation.

Thus the society concerns itself less with reducing the infantile death rate than with jealously safeguarding the health of children.

NATIVE SCHOOLS.

The Government supports a number of schools for the natives. At the end of 1917 there were in operation 118 native village schools attended by 4,622 Maori children. A large percentage of the Maori children also attend general public schools. A number of secondary schools for Maori children, under control of denominational bodies, are subsidized by the Government, which provides free places for the native children. According to reports of the minister of education the progress in education made by these children compares favorably with the school record of children of European parents.

SECONDARY EDUCATION.

With regard to secondary education, it is to be noted that of 9,517 pupils who in 1916 left the primary schools after having passed standard 6, 5,489 children, or 58 per cent, entered a secondary

institution. Unfortunately, few finish the course. The average length of stay is two years and nine months for boys, and two years and eight months for girls.

The types of school that provide secondary education are: Secondary schools, technical high schools, district high schools, private secondary schools, and Maori secondary schools.

There are no definite regulations governing the curriculum of secondary schools. These schools are mainly governed by the syllabuses of the various public examinations and by regulations issued by the Government with regard to the instruction of pupils holding free places. According to new regulations issued in 1917, all junior pupils holding free places in secondary schools must "receive instruction in history and civics preparatory to a course in the elementary principles of economics to be taken at a later stage." In the new regulations provision is also made for instruction in home science, cookery, laundry work, needlework, and home nursing for girls, and practical agriculture and dairy science or some other vocational subjects for boys.

TECHNICAL EDUCATION.

Technical education is gaining more ground in the Dominion, judging by the increased attendance of students at the technical schools. Irrespective of enrollment of older students, the total number receiving instruction at all the schools and technical classes was 20,747, an increase of 1,056 over the previous year. Increased demand is made for classes in engineering and agricultural subjects. In a number of centers classes for farmers were conducted on subjects bearing directly on agricultural and dairying industries. These were well attended. There was also an increase in the number of classes bearing on various trades and occupations. At 22 centers 167 discharged soldiers received free tuition in technical schools. In a number of cases where the technical school lacked the necessary equipment and workshops the school cooperated with the local firms which provided proper facilities for discharged soldiers.

HIGHER EDUCATION.

The New Zealand University is an examining body, with four affiliated teaching colleges: Auckland University College, Victoria University College, Canterbury College, and the Otago University. The New Zealand University is a Federal institution with limited powers. It can not interfere with the internal affairs of the colleges which are administered by the various councils. Each of the colleges specializes in certain directions; Auckland University College in mining and commerce, Victoria in law and science, Canterbury College in

engineering and science, and Otago University in medicine and dentistry.

The number of students in attendance at the four colleges in 1917 was 1,902—1,007 men and 895 women. This is a slight increase over the preceding year. As to the selection of courses, the majority, i. e., 44 per cent, took the arts course, 15 per cent studied medicine, 11 per cent engineering, 10 per cent law, and the rest took various other courses.

The total staff of the four colleges consisted in 1917 of 49 professors, 50 lecturers, and 32 assistants, demonstrators, etc.

With regard to new developments worth noting is the establishment of a school of architecture at the Auckland University and a course of instruction in anthropology at the University of Otago. In general the significance of ethnological studies is being more and more recognized by representative scientists, who urge that the New Zealand University should encourage this branch of learning by recognizing it in her examinations and by providing properly qualified teachers.

The New Zealand Journal of Science and Technology, 1918, vol. 1, No. 5, says editorially:

> Neglect of ethnological studies is greatly to be regretted for both individual and national reasons—individually because a knowledge of the main results of ethnological and anthropological research is a necessity for the understanding of civilized as well as of uncivilized man. The decay of custom is a long process, requiring many centuries. Thus the habits of thought of Yorkshire villages are still influenced by Scandinavian mythology. There is no section of the community more in need of such knowledge than ministers of religion, but, unfortunately, it does not yet form an essential part of their training.
>
> Nationally such studies are of far-reaching importance, because of the geographical position of New Zealand. We have in our midst a race backward in civilization—the Maori—and still bound by ancient custom of thought in spite of a veneer of alien culture. The proper treatment of the many problems thus involved is impossible without a knowledge of ethnology, and of the Maori people themselves, on the part of the legislators and electors. The probable absorption of the Maoris in the people of the North Island will produce a type differing from that in the South Island, and it is desirable that this problem should be properly envisaged by our thinkers.
>
> Any future expansion of New Zealand in the Pacific islands will bring further problems, for all of which ethnological knowledge will be necessary. Those who are directly concerned in the administration of these islands should above all receive such a training. New Zealand must play a part of some kind during the next five hundred years in the solution of the color problem—the relations between black, yellow, and white peoples. If it is to be a worthy part, there must be an increase of ethnological studies. This does not mean that a new subject should be introduced into the syllabus of the primary and secondary schools, for it would even now be possible for a teacher with the necessary knowledge to introduce very interesting and educative lessons on ethnology into the geography course. But a prior necessity is the training of teachers to a higher standard, and a beginning should therefore be made in the university.

Extensive revision has also been made of the courses of study at the Otago University School of Mines. The period of studies in mining, metallurgy, and geology has been lengthened from three to four years, of which the first three years of study are common to all three divisions and specialization occurs in the fourth. By this means a greater amount of general and especially geological training is given to students of all divisions, while additional advanced courses have been introduced in mining, metallurgy, and workshop practice.

In addition to the class work, all students must spend 12 months in practical work, the length of the vacation being arranged so as to permit the student to complete this work by the time the class work is finished. All students must spend at least four months in underground mining work, while an additional eight months must be spent in mining, metallurgical work, or in geological surveying, and a thesis prepared descriptive of some mining operations, a metallurgical process, or the geology of an approved area according to the division in which the student specializes.

SCIENTIFIC RESEARCH.

The importance of scientific research for the advancement of industrial efficiency has been realized in New Zealand, as in other parts of the British Empire, in the early days of the war. An attempt to coordinate science and industry was made as early as 1915, when several scientific and other bodies in New Zealand had been considering in what manner scientific and industrial research might be organized in the Dominion. The matter received, however, no official consideration until some time later, when at the request of the acting prime minister, the national efficiency board, in coordination with several other scientific bodies, evolved a scheme which was forwarded to the Government in January, 1918.

Some of the provisions of the proposed scheme are:

1. There should be established a board of science and industry, with responsible functions and substantial authority to encourage and coordinate scientific and industrial research in the Dominion.

2. There should be a minister of science and industry, who should be the chairman of the board.

3. An adequate sum, not less than £100,000, should be voted by Parliament to cover the expenditures for five years.

The board is also to have power to establish, award, and supervise fellowships and to see that the fellowship, tenable for two years, should be of sufficient value to prevent the holders from being attracted to other positions.

It was also suggested that the board of science and industry might (*a*) advise primary producers upon all questions of the application of

science to their industries; (*b*) advise persons, firms, or companies engaged in industrial pursuits as to improvements in the arts and processes employed, and as to the utilization of waste products; (*c*) make recommendations as to the adoption in an industry of the results of investigations conducted under its direction; (*d*) undertake the investigation of industrial problems which, if unsolved, would obstruct the development of the industries concerned; (*e*) advise the Government in regard to the help that should be given to any new industry that is likely to be ultimately of value to the country, though at first it may not be workable except at a loss; (*f*) advise the Government as to which contribution, if any, should be made toward the cost of any research by the firms or companies benefited thereby; (*g*) on the request of the University of New Zealand, consult with that body in matters relating to the national research scholarships in its award; (*h*) consult with the General Council of Education, the University of New Zealand, the university colleges, and other educational bodies as to the line along which there could be brought about an improvement in scientific education, and cooperate with them and all others concerned in taking such steps as may lead to the better appreciation of the aims and advantages of science on the part of producers and the general body of citizens.

RECENT PROGRESS OF EDUCATION IN THE UNION OF SOUTH AFRICA.

By Theresa Bach,

Division of Foreign Educational Systems, Bureau of Education.

GENERAL DEVELOPMENT.

The Union, constituted by an act of Parliament in 1909, comprises the former self-governing colonies, the Cape of Good Hope, Natal, the Transvaal, and the Orange River Colony, known at present as the Orange Free State. The executive power is vested in the governor general, appointed by the British sovereign, and a cabinet of ministers, the members of which are chosen by the governor. Each Province is administered by a provincial council, with power to deal with elementary and secondary education. Higher education, in accordance with the act, is placed under the control of the minister of education for the Union.

The system of education maintained in the four Provinces is concerned primarily with the children of white parents. The education of the natives, who form the bulk of the population, remains in

the hands of the missionaries, who maintain their own mission schools. The Government exercises some control over these schools and gives its financial support in the form of grants-in-aid. In all the Provinces education was made compulsory for the children of European extraction. No such provision exists for the children of other races. In some of the Provinces the tendency to increase educational facilities and to raise the compulsory age of the pupils has, in recent years, received official sanction by direct legislative measures.

So, for instance, at the Cape of Good Hope one of the most important features of the year 1917 was the amendment relating to compulsory school attendance of European children. An ordinance passed by the provincial council in 1917 makes the leaving age 15 instead of 14 and the leaving standard V instead of IV. The principle underlying compulsory education in that Province dates from the year 1905, when a school board act was passed making attendance compulsory for every child over 7 years of age and living within 3 miles of a State-aided school. Exemption from school was granted with the attainment of the age of 14 or the passing of Standard IV of the elementary school course. A further step in that direction was made in 1913 when it was generally felt that the time was ripe for an extension of the principle of compulsion. Accordingly, ordinance 16 of 1913 made it possible for the distance limit, the exemption age, and the exemption standard to be raised in selected areas. Finally, by ordinance 7 of 1917, the minimum exemption age for the whole Province was raised to 15 and the minimum school year to Standard V. The school authorities in the Cape Province are not satisfied, however, with the results attained, and point to the need of further compulsory extension for white children. Draft ordinance of 1919 contains the following paragraph:

> From and after the commencement of this ordinance regular school attendance shall be compulsory in the Cape Province for all children of European parentage or extraction who have completed their sixth but not their sixteenth year.

The important matter of free tuition is mandatory at the Cape only up to the compulsory limits. Consequently with the extension of the compulsory school age an attempt was made to extend the privilege of free tuition "up to and including the sixth standard of the primary-school course." A move in that direction can be seen in ordinance No. 15 of 1917 that empowers the department under certain conditions to pay the school fees of children whose parents are on active military service. This regulation applies not only to pupils attending schools under school boards but is applicable to any school not conducted for private profit.

Legislative measures for a larger school life have not been limited to the Cape of Good Hope. In the Province of the Transvaal a provision in ordinance No. 16 of 1916, issued by the Department of Education, authorizes the local school boards to raise the age and the standard of compulsion, if it is found desirable. This means that children over 15 years of age or those having reached the fifth standard may be compelled to continue their education at the option of the school boards. Furthermore, attendance in continuation classes can be made compulsory for children who are exempt from attendance at primary schools.

With regard to compulsory attendance in the Transvaal, various recommendations are proposed. Some school boards advocate that compulsory education should end with the attainment of the seventeenth year of age or the passing of the fifth standard; others recommend the sixteenth year as the age limit or the sixth standard as an alternative. As to compulsory continuation classes, there is a tendency to have the pupils attend school during the working hours for at least 10 hours a week.

Another regulation bearing upon increased school facilities for the children in that Province provides that a public school may be established in any country district where the attendance of not less than 20 pupils can be assured. The former regulation required a minimum attendance of 25. Although the present tendency of the department is directed toward centralization—that is, toward larger schools with a larger school attendance—the lowering of the requirements with regard to the establishment of other schools was necessitated in order to meet the needs of children who could not otherwise be brought within the reach of larger institutions.

A scheme inaugurated by the Department of Education in the Transvaal further provides Government grants for private schools recognized by the authorities as efficient. These grants will undoubtedly raise the standard of the private institutions and bring them in line with the schools controlled and administered by the various school boards of the Province.

At the end of September, 1917, the total number of white pupils enrolled was 116,491; of native and colored children, 138,397. The total number of pupils enrolled in Government-aided schools was 254,888, the average attendance being 86.4 per cent. The total number of teachers was 10,215, of whom 6,739 were holders of professional certificates.

The Government's expenditure on education during the fiscal year ended March 31, 1917, was $4,751,000, thus apportioned: Head office (administration), $51,000; inspection, including transportation, $189,000; training of teachers, $429,000; schools under school boards (grants in aid), $2,979,000; schools not under school boards,

$182,000; schools under missionary control, $556,000; industrial schools, $80,000; good-service allowance, $260,000; pension fund, $22,000; incidental expenses, $3,000.

LANGUAGE PROBLEMS.

The language question presents considerable difficulties in South Africa. At present English and Dutch are recognized as the official languages in the Union, a fact which affects the schools to a considerable degree. In the Cape Peninsula instruction in the mother tongue is provided up to and including Standard IV, when the second language is gradually introduced. The languages hitherto taught in public schools were either Dutch or English, but as the conversational medium of large circles of the population is Afrikaans, or Africander Dutch, the school authorities sanctioned the introduction of this tongue as a regular school subject in the non-English classes. The more literary Dutch has thus been superseded by Afrikaans, especially in the lower grades of the elementary course. An ordinance promulgated on May 17, 1918, and known as Education (Afrikaans) Ordinance No. 14, 1918, reads:

> Where in any public school to which the provisions of the Education (Language) Ordnance No. 11 of 1912 apply, the Dutch language is lawfully used either as a prevailing medium or as one of the media of instruction, it shall be competent for the Department of Public Education, on the resolution of the responsible school committee, or school board where there is no committee, to authorize the use of Afrikaans instead of Dutch (Nederlands) as such medium of instruction in all or in any classes of that school up to and including the fourth standard.

Thus by adopting Afrikaans the Cape of Good Hope has set itself to solve the problem of not two but practically three languages. The ordinance also permits pupil teachers to answer examination papers in Afrikaans, as well as in Dutch or English.

In the Transvaal the use of Afrikaans as a medium of instruction was sanctioned by the school authorities sometime ago. Of more recent date is the introduction of Afrikaans as a school subject. This radical change has been universally welcomed by teachers and pupils in schools where hitherto Dutch was the medium of instruction. In many instances, however, the introduction of Afrikaans had to be postponed for lack of the necessary textbooks.

One of the school inspectors in the Transvaal, referring to the new ordinance (Transvaal Educ. Dept. Rep., 1917), states:

> Great things are expected of Afrikaans, and teachers are everywhere enthusiastically studying the subject in order to "see it through." For the first time in the history of the Africander child he will find himself in a position of real equality with the other European children. In the past the study of language (which after all is little more than a medium of thought) was tak-

ing up practically all his time, while children of other countries were absorbing new ideas almost from the day they entered school.

In Natal, which is colonized almost throughout by British, the bilingual ordinance came first into operation in the year 1916, although a practical bi-lingualism has long obtained there with the approval of the department. The new ordinance reserves to the parents the right to decide as to the medium in which their children shall be instructed. In the Orange Free State, except where the parents object, both English and Dutch are taught to all children, and where possible, are used as equal media of instruction.

The provisions of the language ordinances in the various provinces are usually met by setting up parallel classes in the lower standards and then teaching each language in its own medium; general subjects, such as history and geography are taught in the higher grades in a mixed medium, unless the school is large enough to allow of a similar arrangement as prevails in the lower standards.

SECONDARY EDUCATION.

Provision for secondary education is made by public high schools or by advanced classes connected with the elementary schools. Present efforts are directed to the promotion of these classes to high-school grades wherever the scheme appears to be feasible. In the Province of the Transvaal 10 high schools have thus been created in addition to the 10 already in existence. The question of transition from primary to secondary schools has not been entirely settled in that Province. The Transvaal Teachers' Association is of opinion that separate high schools should be built only for pupils who intend to matriculate.

For the rest of the pupils the association urges the maintenance of advanced classes in the primary schools. The reason given by this body of teachers is that transfer to a secondary institution will cause many pupils to drop out. The stand taken by the higher school authorities, on the contrary, favors the separation of primary and secondary schools. Discussing the advantages accruing from the latter arrangement, the director of education for the Transvaal, in his report for 1917, says:

> It (the transfer) is an event which stirs and satisfies the impulses and ambitions characteristic of the awakening of adolescence. The spirit of adolescence is the spirit of adventure; it is a time when hunger for intellectual achievement, for the life and associations of youth, for freedom from the trammels of childhood, is imperative. Migration to a higher institution is just what satisfies it. Transfer is thus, in the first place, justified by the physical and mental demands of the pupils themselves. In the second place, it is justified by the criterion of efficiency. This will more certainly be gained in an institution where the head and his staff devote themselves entirely to secondary needs

and secondary subjects. Economy is a third argument. Science is going to bulk largely in secondary curricula in the future, and well-equipped laboratories will be essential. They can not be provided at a large number of centers. The same thing is true of libraries which must be good enough to afford a field for adventure in history and literature. Finally, there is the all-important question of playing fields and organized games. The first 11 caps or colors won in strenuous competition is the ambition of normal youth.

In the Cape of Good Hope better adjustment and the abolition of the overlapping between the elementary and the secondary school course have been effected in recent years. The seventh grade of the elementary schools was abolished and the elementary course confined to six grades, these to be superseded by the secondary school course with a four-year syllabus.

The secondary course is to be reorganized with a view of providing general and vocational training. This, at least, is the proposal of Dr. Viljoen, the superintendent general of the Cape Province, made before the Congress of the South African Educational Union, held on December 27, 1918. The scheme involves the inauguration of eight courses, each with a four-year syllabus: A preparatory course leading to higher education, and a general course for those not intending to pursue university studies; further, preparatory courses for the public service, the teaching profession, and the courses suitable for those who intend to adopt commercial, technical, agricultural, or domestic pursuits. It is proposed to introduce these courses in a limited number by way of experiment rather than to lay down hard-and-fast rules and regulations for the entire scheme.

Training of teachers.—With regard to the training of teachers in the Cape Province, several tentative proposals have been made by Dr. Viljoen.

The present third class teachers' certificate (senior) course is to be replaced by a lower primary teachers' certificate course, to commence after Standard VI of the primary school course had been completed and to extend over a period of four years. Further, the superintendent general proposed the establishment at training colleges of a higher primary teachers' course extending over a period of two years beginning after the completion of a full four years' course at a secondary school. In addition to these two courses the training schools and colleges are to offer courses for teachers in infant schools and for those intending to specialize in subjects such as domestic science, manual training, drawing, music, commercial subjects, etc.

The supply of certificated teachers, although inadequate for existing needs, shows a steady increase, if one makes reference to the records of the year ended June 30, 1918. It appears that the teaching posts in the Cape Province increased during the year by 198; the number of certificated teachers employed increased by 255; while the

number of uncertificated teachers employed decreased by 57. Compared with other Provinces of the Union the Cape employs 39 certificated teachers for every 1,000 enrolled pupils, while the Transvaal employs 25 certificated teachers, and the Orange Free State 28 on that basis.

AGRICULTURAL EDUCATION.

Scientific training in the principles of agriculture and stock raising is making rapid strides in the Union. This training is carried on at four well-equipped agricultural schools conducted by the Department of Agriculture, as well as a number of experimental farms. Two of these schools are situated in the Cape Province, one at Elsenburg and the other at Grootfontein. The third is located at Potchefstroom, Transvaal, and the fourth at Cadara, Natal. A fifth school has been built near Bloemfontein, Orange Free State, but due to the war conditions, its inauguration has been postponed. The cultivation of the soil, experimentation in plants, and the breeding of cattle are conducted on an extensive scale, not only for the benefit of the students enrolled, but also for the general farming population. Horticultural and poultry divisions are maintained in connection with each institution. Admission is based on the completion of the elementary school. The regular course of instruction covers a period of two years. Special short courses are also given during the months of June and July each year. These institutions also assist the farmer in matters relating to the various phases of farming by means of correspondence, publications, lectures, and demonstrations.

Experiments in soils, crops, and fertilizers are conducted at the school farms, at detached experimental stations, and by means of cooperative experiments with individual farmers.

The Government Wine Farm near Cape Town offers a three years' practical training with some theoretical instruction. Agricultural faculties have also been established at the University of Stellenbosch, and at the Transvaal University College, which now forms part of the University of South Africa.

COLLEGES AND UNIVERSITIES.

The university problem, closely connected with the political and social conditions of the country, have in recent years undergone far-reaching changes advocated in South Africa for the last decade. With the inauguration of the Union, higher education was placed under the control of the central authorities or the minister of education. Until a few years ago the university was a purely examining body, which dominated a number of small colleges serving only local interests. Various proposals for the creation of a strong national university, where the youth of the country could receive a common intellectual training, led to legislative measures with the

result that the entire system of university education in South Africa was placed on a higher plane.

The new scheme put in operation April 2, 1918, was reorganized on the following basis:

1. The South African College became the University of Cape Town.

2. The Victoria College at Stellenbosch was granted a separate charter and became the University of Stellenbosch.

3. The six remaining colleges—those at Grahamstown, Wellington, Bloemfontein, Pretoria, Johannesburg, and Pietermaritzburg—were federated in the University of South Africa, a successor of the University of the Cape of Good Hope, with the administrative seat at Pretoria.

The policy of the newly created institutions is reflected in the following statement from a Cape Town correspondent published in the London Times Educational Supplement for February 13, 1919:

> The University of Stellenbosch shows a strong tendency to ally itself with pronounced Dutch-Nationalist sentiment, and has already become its chief intellectual center. Its students are almost exclusively Dutch-speaking, and instruction is being increasingly given through the medium of the Dutch language. Indeed, so strong has the feeling of separate identity become that even simplified Netherlands Dutch is in danger of being cast out in favor of South African Dutch (Afrikaans). It would seem that the future of the University of Stellenbosch is largely bound up with the fate of Afrikaans. If that language succeeds in establishing itself as the recognized sister medium to English, and in developing a literature (as it shows promise of doing), and if the government of the university is alive to the dangers of an exclusive parochialism, especially in the matter of appointments to the staff, then the University of Stellenbosch will become an intellectual and moral center of influence of a peculiarly interesting and valuable type.
>
> The University of Cape Town continues the tradition of the old South African College, which always earned the kicks of extremists from either side because of the broad South African nationalism which has always characterized it. Ordinarily (though the war has made a difference) its students have been English and Dutch in about equal numbers, and the bitter political and racial struggles of the country have had but faint echoes within its walls. During the war it has been criticized with about equal vehemence by the left wing of each racial group, and the present confidence it enjoys and the phenomenal development it has recently achieved abundantly justify its maintenance of the old attitude. Language difficulties are well-nigh insuperable, but they are being handled in a reasonable spirit.

Stellenbosch specializes in agriculture, while the University of Cape Town is developing the faculties of engineering and medicine. The faculties of law and education are also likely to become stronger in the latter institution.

EDUCATION OF NONEUROPEAN CHILDREN.

The non-European population comprises the natives, the mixed races or the Eurafricans, and a small contingent of East Indians.

The education of the natives is entirely the work of missionary organizations. The Government supports the mission schools by means of grants, but the maintenance of schools devolves upon the missionary bodies. Government control over native education is exercised through the following agencies: Financial grants-in-aid, certification of teachers, issuing of syllabuses, inspection of schools, and examination of pupils. The course of study is based on the European system, with slight modifications to suit the native children. Instruction in all the Provinces is imparted through the medium of the vernacular, especially in the lower grades.

The introduction of handicrafts in native schools on a larger scale than has hitherto been practiced is being urged by school authorities familiar with the problem of native education. One inspector of schools points out that "pupils accustomed to the free unfettered life of the veld and kraal must find some outlet." And nothing, he maintains, would so alleviate the sudden transition from the unrestrained liberty of the herdboy to the ordered discipline of a school than lessons in grass weaving, clay modeling, woodwork, and needlework. These subjects should be encouraged and introduced in all the schools for native children. Consideration of industrial training to include instruction in agriculture and the native arts and crafts is also urged by Dr. Loram, an inspector in Natal. In his book "The Education of the South African Native" the author recommends the taking over by the Government of all the native schools with a view of establishing a well articulated system which shall consist of elementary, intermediate, high, and industrial schools and training institutions with courses of study complying with the social and industrial needs of the natives. The retention of the vernacular is also strongly recommended.

Missionary organizations provide schools not only for the native but also for other colored children in all the Provinces except the Transvaal. In that Province the schools for Eurafricans are under direct administration of the department and are supervised by the school boards on the same basis as the schools for Europeans. At the close of the year 1917 there were in that Province, in addition to schools for European children, 19 Government schools for colored children, with an enrollment of 2,681, and 330 subsidized mission schools with an enrollment of 21,421.

In addition to the mission schools, the Government subsidized a number of Indian schools, notably in Natal, where 39 such schools receive grants-in-aid, while 5 schools for Indian children are directly maintained by the department of that Province.

THE PROGRESS OF EDUCATION IN INDIA.

By WALTER A. MONTGOMERY,

Specialist in Foreign Educational Systems.

INTRODUCTION.

In no other country of the world is the subject of education more complicated than in India. The system maintained or sanctioned in the 15 Provinces which are directly or indirectly under British control is further complicated by considerations indissolubly intertwined with the historical, climatic, racial, religious, and strictly agricultural characteristics of the people. Historically, the system still shows in many fundamental features of the vernacular schools the native system which prevailed in the larger and more powerful Provinces—such as Bengal, Bombay, and Madras—before the official consolidation of British power about 60 years ago; and the successive modifications made by the several education commissions, provincial and imperial, have left indelible traces upon it.

India's racial complexity is a commonplace, more than 40 distinct races going to make up her total population of over 250,000,000 (estimated, 1919). As a consequence the several Provinces representing the original nuclei of diverse tribes have developed widely varying systems of administration and instruction. This tendency has been fostered by the definite policy of the British Government, which has been loath to attempt to impose upon India, as a whole, one rigid and uniform system, but has wisely sought to confine itself to maintaining educational activities in their broadest and most useful aspect. The difficulties inherent in religious differences and jealousies, and in their inevitable consequence, the caste system, were unlimited; and even a partially successful harmonizing of these, so far as to effect some system of popular instruction, is in itself a triumph for British colonial ability. Yet in face of all these abstacles, multiplied in many phases in almost every Province, more than fair success has been achieved since the original lines of educational polity for India were laid down. Marked progress is to be recorded, especially during the last reported quinquennium (1912–1917), the period adopted by the Indian authorities for a systematic and comprehensive report upon the educational conditions of the Provinces.

A consideration of the effects of the war, direct and indirect, on Indian education must necessarily precede a more detailed investigation of conditions in that country. The former have varied according to the location of the Province under consideration, whether situated upon the sea coast, and possessing a large port of embarka-

tion of men and supplies, or remote from visible connection with the war. To select from those most closely concerned with the war: In the Madras Presidency, perhaps the most marked effects were the cutting off of the recruiting of teachers from England and Europe and the vacancies due to the withdrawal of the teachers for service; financial difficulties of growing seriousness making it necessary to postpone many educational projects; and, perhaps most marked for this Province, the difficulties encountered in the matter of the missionary societies maintaining a system of schools. Most of these were German and Lutheran educational missions; and their taking over by the Government and continuation with changed committees were fraught with many perplexing questions.

In the Bombay Presidency the effects just noticed were also evident; but in this Province a greater gain has been pronounced in the interest aroused among people of all classes, not merely among the children in the schools, in the great world issues, in the broadening of knowledge and mental horizon, and in the quickened appreciation of the unity of the British Empire. In Bombay the very useful step was taken of applying the machinery of the schools to explain to the people at large the real causes and progress of the war. This was done by daily talks by the teachers, by the periodical visits of the inspectors, by the dissemination of Indian newspapers and pamphlets translated into the different vernaculars of the Presidency, by lectures and lessons on the war loans, and by the offer of prizes for the best essays on the war written by students of secondary and higher education. It is doubtful if all other activities of the schools were as valuable for the mental awakening of the people as this, which might be regarded as merely a by-product of the war.

In Burma fewer adverse effects of the war are to be noted than in any other Province. Though for economic reasons attendance declined in the lower primary vernacular schools, many important changes in administration and instruction were carried out especially during the last two years of the quinquennium under consideration. The long-discussed and very important transfer of municipal schools to the provincial government was finally effected early in 1917; grants of half the salaries of teachers were restored in the European schools and in most of the aided Anglo-vernacular schools; and the maintenance of these schools was transferred to the Province. Other special administrative changes will be indicated under their proper headings.

In the larger field of education throughout the Indian Empire financial considerations for the first two years of the war stopped the allotment of the imperial grants decreed in 1904. In certain Provinces a marked decrease was shown in the attendance in the primary schools. But as an offset to these material disadvantages

there were compensating advantages throughout India at large as indicated in the reports of representative Provinces.

The most vigorous stimulation of educational interests has come, within the past two years, from a far-reaching project of political independence for India, culminating in the presentation to the House of Commons of the Montagu-Chelmsford Report in July, 1918. The officials whose names are thus linked are the secretary of state for India and the viceroy. Both were thoroughly conversant with the needs of India; both had for years studied the part that education must play in the political welfare of the peninsula; and the report, in its largeness of view, its exalted vision, its kindly sanity, and its deep sympathy with the unrepresented millions and even with the classes depressed by the oriental caste system, is an honor to British provincial administration. It is difficult to believe that barely a century marks the difference in time between the spirit of this report and that of rulers of the type of Warren Hastings. The broad outlines of the report are as follows:

1. The report prefaces its review of political and social conditions with a survey of the evolution and present state of education in India, basing all recommendations upon the prinicple that "educational extension and reform must inevitably play an important part in all political progress of the country."

2. The report concludes that the original decision of 1835, with which the name of Lord Macaulay has always been connected, to impart western education to the natives by the medium of English was at that time the right and indeed the only road. The varied demand for enlarged opportunities, now rising with increasing force and including always more people, is itself only the logical result and the vindication of the work laid down by that decision; but—

3. It has brought an illiteracy of the masses and an uneven distribution of education which must be ended. No state of affairs which includes 6 per cent of the total population literate and less than 4 per cent under instruction can be longer tolerated.

4. The steadily growing cleavage between the educated minority and the illiterate majority is the necessary result of the educational system adopted, and the fruitful cause of political and social unrest. From every point of view this cleavage must be stopped; reforms in education must precede all attempts at governmental and political reform.

5. Results which have been economically disastrous have been manifest in the fact that the exclusively literary system of higher education has produced a growing native *intelligentsia*, which can

not find employment and becomes humiliated and soured, affording the best possible soil for discontented and anarchistic teachings. Education is directly responsible for this political and governmental ulcer on the body of the country. Only of late years has any complaint arisen against the real element which is wrong in the situation, namely, the inadequacy of facilities for training in manufactures, commerce, and the application of science to active industrial life.

6. Examining the charge that the traditional educational system of India has failed in character development, the report finds that the question trenches upon the very complicated domain of religious belief, which in India, as in all primitive countries, is crystallized along racial lines. The Governmental schools have either utterly ignored the problem and attempted no moral instruction, or, if a few here and there have attempted it, the disadvantages under which the teachers labor, the indifference of children, and the hostility of parents have been so great as to nullify all attempts. The mission schools alone have dared to inculcate ideas of duty, discipline, and civic responsibilities and obligations, and in this field they have had results which are worthy of admiration.

7. The report, replying to the criticisms of the very limited diffusion of education in India, recalls the conservative prejudices of the country which rigidly maintaned themselves until the world events of the last few years suddenly began to break them up. That they are breaking and yielding is seen in India's undeniable change of attitude toward female education. But nothing has yet been done to put an end to the profound educational disparity between the sexes which must always hopelessly retard any real social or political progress. Again, peculiar difficulties arise from the predominantly agricultural nature of the population. Such a population, traditionally suspicious of change, can be reached only by making agricultural education increasingly practical. At bottom must always rest the need of differentiating primary education according to the needs of the people to whom it is applied.

8. The report concludes by emphasizing the urgent necessity of an enormous development of educational opportunities side by side with any extension of political activities, basing all upon the contention that "political thought in India is coming to recognize that advance in all lines must be influenced by the general educational level of the country."

Another report, akin in spirit to the Montagu-Chelmsford Report and upon which were based many of its conclusions, was the Industrial Commission Report, presented early in 1918 and embodying the results of many months of investigation in the leading Provinces of India. Though primarily economic in subject and aim, it, like the Montagu-Chelmsford Report, was of distinct value educationally.

It brought clearly to the front the extreme "topheaviness" of a system of education in which less than 3 per cent of the total population are enrolled in the elementary schools; in which the average duration of school life is less than four years and nearly half the children are in the infant sections of the primary; and in which a relapse into illiteracy in adult life is the rule; whereas in the field of higher education the percentage of total population enrolled, one-twentieth of 1 per cent, is nearly equal to that of England, one-sixteenth of 1 per cent, and considerably larger than that of Japan, one-thirtieth of 1 per cent. In the field of university education alone, India shows one-fortieth of 1 per cent to Japan's one-seventieth of 1 per cent of total population. In the estimation of the report, this "topheaviness" could only be cured by an efficient, free, and compulsory system of education, and by the building up of a modern progressive and economic society. Furthermore, India is the only country in the world where the educational ladder, fragmentary at best, has its higher end in another country. This evil, too, must be cured by the further establishment in India of centers of professional and cultural learning for native Indians, themselves graduates of the continuous system of schools below.

ADMINISTRATION OF SCHOOLS.

In the domain of administration as such the student of Indian education is confronted at the outset by the lack of any compulsory power vested in the central imperial educational authority. No parent is compelled by imperial regulation to send his child to school; nor is any person prohibited from opening a school or positively required to take out a license in order to do so. The system is decentralized throughout.

As regards the relation of the Imperial Indian Government to education, in general it may be said that it is advisory and promotive:

> The Government of India * * * considers questions of general policy, correlates when necessary the lines of advance made in the various Provinces, examines, approves, or submits to the secretary of state for India schemes which are beyond the sanctioning power of the local governments, and allots imperial grants.

In order to administer the increasingly larger field covered by these activities, the post of director general of education was abolished in 1910, and a member for education was added to the imperial executive council. In April, 1915, the post of Educational Commissioner was created, whose duties are somewhat akin to those of the Commissioner of Education of the United States:

> He tours extensively, discusses questions of educational polity with local governments, and advises the department on educational cases. At the same time a small bureau of education was reestablished for the collection and dissemination of information.

Each provincial government has a department of public instruction, presided over by an official usually designated as the director of public instruction, appointed by the provincial government. On the side of public education the educational powers of the Province are shared with local bodies such as rural boards, municipalities, and even private associations and individuals. All these latter are themselves required by law to provide facilities for primary education, and some are permitted to provide other forms of education in addition. The first piece of educational legislation of a compulsory nature ever enacted in India was that passed by the legislature of Bengal early in 1918. The act is noteworthy in that it is constructed entirely along the decentralizing and autonomous lines which form the distinctive feature of the Montagu-Chelmsford Report; and so representative is it of the dominant thought of the most advanced Provinces that the councils of Madras, the Punjab, and Behar have signified favorable action if it should be submitted to them. It strikes at the very root of the mass illiteracy of the Province, applying its provisions equally to both sexes (a signal advance over eight years ago, when a similar provision was defeated), making the period of compulsion to include the whole of the child's eleventh year and thus giving a minimum of five years of school attendance. The compulsory feature is not, as yet, applied to rural areas, but schools are provided in each of the more than 1,100 villages of the Province containing more than 1,000 inhabitants and at present without a primary school. No fees are allowed to be charged in any grade of school work.

Any class or community may be exempted from the operation of the act by the local provincial government only in such case as the municipality can not arrange satisfactorily the education of such children, and they are properly instructed by other means. In the vital matter of imposing penalties upon those persons employing for profit children who ought to be in school, it is to be regretted that economic interests caused a departure from similar provisions laid down in the Fisher Act; and so fully recognized was the national necessity of child labor both in organized industries, on farms, and in the home, as to call for compromise by which only those are subject to penalty who employ children of school age in such ways and at such hours as to interfere with their efficient instruction.

The weak point of the act is, confessedly, the vagueness of the responsibilities of the State in the event that local bodies, through poverty or neglect, fail to provide proper instruction. But the continuance of the Government quota to local bodies is in no way affected by the act; and the lively interest uninterruptedly manifested by the provincial governments in the past furnishes

every guarantee that the danger of the Government not making subsidies to deserving local boards is imaginary. Indeed, much is expected in the way of the development of local independence from the very knowledge that local delinquency can not as now rely upon the provincial government to supplement inadequate appropriations. The act has been commended by the school and secular press. The Times of India well summarizes the situation in saying that the act must and will be applied "along the sound principle that whether State finances are flourishing or the reverse, primary education is a necessity for which money must be found."

As regards the machinery by which provincial governments administer public instruction, the director controls a staff of inspectors and the teaching staff of the schools in so far as the teachers are employed by the Government, and performs such other duties and wield such other powers as usually belong to him in his capacity of agent of the provincial government. The organization of the inspectional machinery is generally based upon the unit of the revenue division of the Government. In the Punjab, however, and in Bengal, as secondary schools are numerous, second and assistant inspectors are added, generally in charge of all local education, and are expected to advise the divisional school officials on policies and related matters. The detailed inspection of primary schools, however, is incumbent upon deputy inspectors, one for each district. There are also special inspectors for European schools, for Mohammedan education, and in localities where they are needed, for the teaching of Sanskrit, Arabic, and Persian. In the larger cities expert inspectors have recently been appointed in the subjects of manual training, drawing, and science. In addition inspectresses for girls' schools are employed so far as the climatic and social conditions make it possible. Medical inspection has made encouraging progress, especially in the Punjab and in Bihar and Orissa, in spite of the serious interruptions caused by the war.

Unfortunately, all the Provinces report grave limitations in the inadequate number of inspectors, in the narrowed scope of the work possible, and in a popular indifference which cripples the efficiency of the service. The reports show also that the inspectional system, if it is to give adequate supervision to primary schools, especially those in villages and remote districts, urgently needs clearer definition and better coordination of its several agencies and a large increase (especially in Bengal, Bombay, and Madras) of the inspecting staff, burdened as this is by many new duties of increasing complexity.

The most important agency, however, both of control and direct management is constituted by the local educational bodies, which include rural boards and municipalities. Indeed, they may be regarded as the foundation upon which the primary educational system

of India rests. Varying widely in areas covered in the several Provinces, the rural boards are supreme in matters of education and in those pertaining to means of communication. Municipal boards in cities and towns have corresponding responsibilities of providing instruction. The supreme importance of the functions performed by the local bodies of both types, and the wide diversity of their responsibilities and scope, well illustrate the decentralized nature of educational polity in India. A summary of the salient legal powers and duties in the several Provinces is given:

1. In Madras the municipal act requires the municipality to provide for the school instruction of all children of school age, but the responsibility is limited by the phrase "so far as the funds at their disposal may admit."

2. In Bombay and the United Provinces the law requires reasonable provision for primary schools. In the latter the act requires the municipalities to expend on primary education at least 5 per cent of their normal income after the deduction of income from special modes of taxation. In the city of Bombay the law requires the corporation to make adequate provision for maintaining, aiding, and accommodating private schools, but provides that in the event of education becoming free or free and compulsory, one-third of the additional cost shall be paid by the Government.

3. In Bengal the former rule requiring the municipality to spend 3.2 per cent of its ordinary income on education has been repealed, but this is taken as a suitable standard; and also in the Punjab, Burma, and the central Provinces the acts are permissive only, requiring only the application of certain funds to the object of education, with varying requirements as to the funds from which such funds are to be drawn. In Burma it is provided that the maximum expenditure for education shall not exceed 5 per cent of the gross annual income.

4. In Assam it is provided that the percentage spent on primary education must not fall short of that represented by the average of the expenditure of the previous year and that of the year 1904–5, which is taken as a representative basis. The establishment of a board charged with oversight of all primary and middle vernacular schools is left optional with the Government.

5. The procedure throughout India varies greatly in the grades of schools under the charge of local bodies. In the majority of the Provinces the functions of local bodies are not limited to primary education, but their chief concern is with the primary schools. Most of them give aid to privately managed schools, and therefore wield a legal power over the latter. The extent and method by which the provincial government shares in the maintenance and control of primary schools are of great complexity. In most instances the provincial government is largely guided by the advice and wish of the local board, provided always that the latter evinces reasonable generosity and feeling of responsibility for primary education.

During the five years under consideration the most marked tendency both in Government and education was that to grant wider and larger powers of government to the local authorities. This culminated in June, 1918, in the plan issued by the Imperial Government of India, definitely disclaiming any policy of general compulsion as being unwise under present conditions, but urging all local bodies to assume the burden of "a solid advance toward mass education." The additional expenditure for teachers and inspection is to be

borne by imperial and local governments, that for the establishment and maintenance of physical facilities, buildings, etc., necessary to double the enrollment of boys in the primary schools—the goal set within 10 years—to be borne by the local boards.

As matters stood up to that time, local bodies managed the comparatively few local "provided" schools and had control of aided schools. Up to 10 years ago, three-fourths of the primary schools were under private management, but since that time the tendency has been for "provided" schools to gain much faster than aided (missionary) or unaided (native) schools; so that in 1917 more than half the pupils throughout India in attendance on primary instruction were in these schools. An interesting exception must be made in the case of Burma, the Province which shows the highest percentage of literates. Here primary education is in the hands of the Buddhist monks. Elsewhere unaided schools diminished and provided schools increased so rapidly that the authorities see in this a proof that "there was left no large outer circle of indigenous institutions suitable for inclusion in the public-school system." The reasons for the rapid growth of board schools during the past five years are that better education can be secured and at less than half the cost of the unaided school, and that pupils remain much longer in school. The policy of expanding primary schools, of including aided (missionary) schools, and of encouraging unaided schools also to come under Government management has been steadily pursued by the school authorities. Under the new action of the Imperial Government of India, wider scope for initiative has been allowed the local boards; but the duty still rests upon provincial governments to encourage primary education and, where needed, to assist in maintaining it by special educational grants.

It has been shown that the Imperial Government has little control over education, yet it plays a great part in aiding schools, chiefly out of funds realized by nation-wide taxation. According to local needs, it is free to make, and does make, a considerable assignment of revenues for definite educational purposes. Similarly, local and municipal funds realized by taxes (usually from "land-cesses") levied by local bodies may be supplemented by provincial funds. In general, the elasticity with which taxes of either of the three categories may be applied to educational purposes is absolute, being limited only by the provision that funds of, and for, a given Province may not be diverted to another.

As an offset to the wider power and greater responsibility assigned to the local boards as indicated above, a contrary tendency is to be noted in the way of administrative centralization. This is not general, but as it concerns the two great Provinces of Bengal and Bom-

bay it should not be passed over without mention. In them decrees in council have transferred certain duties formally wielded by the boards to the inspectors and to the college authorities, and have delegated executive functions to the directors of secondary schools. It is claimed that efficiency has been secured without a sacrifice of the good of the schools. In Bengal especially the result has been to vest in the director of public education powers hitherto unpossessed by him of appointment, transfer, dismissal, and general control of officials of low grades in the provincial educational service.

CLASSIFICATION OF THE EDUCATIONAL SYSTEM.

The traditional and most convenient classification of the educational system of India is that into public and private institutions. Public institutions are those offering a course of study prescribed or recognized by the provincial department of public instruction or the provincial university and certified by competent authority to have attained the required standard. In point of management, public institutions are divided into those managed directly by the provincial government, or by local rural or municipal boards, and those managed by societies or individuals, aided by provincial or local subsidies, or supported by fees, endowments, or subscriptions. Private institutions are those financially independent of all aid, and excluded from the above categories. They are exclusively conducted by missionary activities of religious bodies. Following yet another line of cleavage from the above, the racial and lingual-racial, the classification is adopted of the vernacular, Anglo-vernacular, the English, and the Mohammedan.

Under the vernacular falls, of course, the great majority of the schools of India, the predominant feature being the vernacular primary school, which educates the native child from about 5 years of age, using the local vernacular dialect alone as the medium of instruction up to 10 or 11. The usual division is into two stages, the lower primary, of four years, and the upper primary, of one, two, or three years. The greater number of the pupils never advance beyond the lower primary, a fact which constitutes perhaps the most serious phase of the problem confronting the educational system of India; and the actual length of the average pupil's schooling is less than four years.

The next higher division is the middle school, which includes (*a*) the middle vernacular, really a continuation school giving instruction chiefly in practical subjects, without English, and leading to no higher standard, and (*b*) the middle English school, the beginning of the Anglo-vernacular division. This is the first school which

offers opportunity to a native child to pursue his education, and contains standards preparatory to the high school and articulating with it. The high school admits both natives and Europeans, and in most Provinces includes more than the American use of the term conveys, not only the essential high-school subjects, but also the middle standards just indicated, and even occasionally the last year or two of the upper primary.

Above the high schools are the colleges, which are (*a*) those of second or intermediate grade, corresponding in general to the American junior college of two years; and (*b*) those of the first grade conferring the B. A. or the B. Sc. within four years from the completion of the high school and the M. A. or M. Sc. within five or six years therefrom.

PRIMARY VERNACULAR SCHOOLS.

The primary vernacular school is the pivot of popular education in India. Except in a few districts, it is attended almost exclusively by boys. Instruction is sometimes continued through the middle vernacular classes, but the overwhelming majority of children never advance beyond the lower primary. In 1917 the primary schools and the primary departments annexed to other schools numbered somewhat over 140,000, with 6,748,101 pupils enrolled. This was an increase of 16 per cent over 1912, but registered an increase of only 2.8 per cent of the total population. Only 29,313,545 rupees are expended on them, a per capita of $4\frac{1}{3}$ rupees ($1.30). The low proportion of expenditure on elementary as compared with higher forms of education is the startling and significant feature of the entire situation, along with other facts reenforcing the well-known indictment of "topheaviness" against the entire system.

The evil naturally varies in intensity from Province to Province. Bombay and Bengal pay better teachers' salaries, and the expenditure upon primary schools in these two Provinces is less disproportionate than the average; but the evil of overcrowded and unequipped primary education is substantially as stated. Attempts have been been made, notably that in 1916–17 by the government of Bihar and Orissa, for the expansion of primary education by the district boards with the object of doubling the percentage of children enrolled in schools by opening additional schools and by a species of consolidation of schools. Another problem pressing for solution but for which none has been found is that presented by the fact that the school child of India abandons school within less than four years and between 10 and 12 years of age, and often relapses into complete illiteracy.

In the face of these problems changes, such as those in the curricula and methods of instruction, seem of minor consequence. Only in the western division of Bengal can a new curriculum be said to have been prepared. It was to be brought into force in 1918. The differences between the curricula for rural and for city schools are generally unrecognized. In some Provinces, in the attempt to keep boys in school longer, the directors have striven to give an agricultural tinge at least to education in rural schools by requiring the teachers to call attention to plant and animal life, to make reading and arithmetic questions concern themselves with agricultural methods and production, and to impart instruction in land records to advanced pupils.

The question of the medium of instruction has never been a troublesome one, primary education being almost always synonymous with vernacular education even in the primary standards attached to the secondary schools. The point at which instruction in English is begun varies from Province to Province, according as the lower primary has or has not infant standards and four or six standards besides; but practical uniformity exists in that the use of English as a medium of instruction (except in the case of east Bengal) always begins after the completion of the middle standards.

In Burma the largest educational increase recorded in India was shown, primary schools for boys increasing by 42 per cent and pupils in attendance upon them by 38 per cent for the five years up to June, 1917. A large part of this was due to the satisfactory settlement of the peculiar problem presented by primary education in this Province, namely, the assimilation of Buddhist monastic schools in the educational system, and the marked improvement of their teaching staff. These monastic schools are the most vigorous feature still left of the original educational system which prevailed before British occupation; and, forming as they do the principal means for the moral instruction of the youth, they can not be ignored. Indeed so influential were they locally that only by their maintenance and strengthening could the moral and political welfare of Burma be subserved. A satisfactory arrangement was made, the Government taking over the responsibility of financial support, appointing deputy inspectors, and in general bringing increasing numbers of these schools under the educational control of the Department of Public Instruction. The schools of Burma also must be credited with the only far-reaching change made in India during the five years under consideration. This was the introduction of a special course for boys who did not proceed beyond the fourth grade. No reports of the success of this experiment are available, but they are awaited with great interest by all students of Indian education

as dealing with a problem whose solution will be of inestimable value. During the year 1917–18 officials of Burmese education, with the consent of the Government, effected important changes in the curricula for Anglo-vernacular schools.

The chief effect of these changes was to prescribe a modified and uniform course in geography for these schools; to simplify the course in arithmetic for girls so as to leave more time for domestic economy and needlework, now compulsory; to separate hygiene from elementary science, making it compulsory for boys and girls in the primary and middle schools but optional in high schools, to amplify the courses in elementary science and object lessons, and to add morals and civics as a new subject in primary and middle schools. Arrangements were made for the preparation of a new series of textbooks in the above subjects as well as in geography.

To Burma also must be given the credit of effecting the most important administrative change of the five years, namely, the creation of a system of divisional boards to undertake, under the general control of the Educational Department, the administration of certain branches of vernacular education. The methods of handling of educational finances were also so simplified when these boards were created as to call to popular attention their increased responsibility for vernacular education. A conference held in 1916, participated in by representatives of native as well as British education, cordially accepted the arrangement, and divisional boards now have charge of all matters affecting vernacular education, subject only to the veto of the Department of Education.

With the stirring of ideas looking toward larger popular powers both in government and in education, and with the demands for compulsory education, intangible in most places and yet culminating in the Bengal act, there has been realized more thoroughly the inefficiency of the system of education as regards reaching the vast unlettered population of India. The demand for mass education, scarcely heard 10 years ago, has now so grown in volume as to fill the journals and public press, and to occupy a large part of the attention of provincial legislative assemblies. It has also significantly written itself on the mind of the governing Englishman, as is shown most conclusively by the Montagu-Chelmsford Report to Parliament, and on Indian soil proper by the circular letter addressed in 1917 to the local governments by the Imperial Government.

Grasping this demand in all its causes and implications, the educational officials of India do not hesitate to accept it as largely justified, and to use it as a powerful lever in their efforts toward thoroughgoing reform. In summarizing the general lines of progress made during the five years from 1912 to 1917, undeniable on the spiritual as well as the material sides, Dr. Sharp, educational commissioner of the Indian Empire, well sets forth what must continue to be the

weakness in primary education in India so long as the masses are unreached:

> But it is impossible to rest content with an expansion of mass education on present lines or with a system under which a large proportion of the pupils are infants stagnating in a crêche, and the remainder glean only an acquaintance with the three R's, and only a small residue continue to the stage where some of the fruits of this initial labor can be reaped. Given sufficient funds and sufficient schools, education could probably be made universal on a compulsory or on a voluntary basis within a comparatively short time; but it would be an education which in many cases ended almost with the cradle and left 39 per cent of its recipients totally illiterate a few years after its cessation. This is the real crux of the problem. At the moment that a boy reaches a stage of reasonable intelligence he also becomes a useful economic asset, and even if he has not at once to begin labor in the field or factory, the utility of further study ceases to be apparent. To overcome this attitude we must look partly to better teaching, possibly to the addition of vocational classes, but mainly to the economic changes which are slowly permeating the country—agricultural progress, cooperative movements, and the growth of industries * * * . It is on economic progress that the future rests. We can not expect to see in India a literate and intelligent proletariat until that progress has permitted the provision of the necessary funds for more schools and more efficient schools and brought about the necessary change in the attitude of the people.

An interesting phase of primary education for native children is seen in that provided since 1916 by the Government for the children, and more especially the orphans of Indians serving the Empire in the Great War. Liberal grants have been made to the provincial school officials for aid to such children studying in the primary schools and also for the purpose of establishing new schools along modern lines in localities where needed. A striking feature is that all such provisions are applicable to girls as well as boys. Any child whose father is certified to have been slain or incapacitated in the service is entitled to free primary education with graduated allowance or to free scholarship in any middle school or to compete for scholarships in higher education. The Madras presidency led the way early in the war in exempting the children of actual combatants in the service from payment of all fees in the elementary schools. The amount presented by the women of India as a silver wedding gift to the Queen-Empress has at her request been devoted to the education of the children of fallen Indian soldiers. The Bombay presidency was the first to establish a technical school not only for adolescent children but also for disabled Indian soldiers for instruction in the trades.

A problem unique to India is the education of backward and depressed classes, such as the aboriginal, and hill and forest tribes, the classes subject to caste discrimination and neglect, the criminal tribes, and the communities, religious and racial, which present special problems. Naturally these classes vary so vastly from Province to

Province, and even within the same Province, in the causes underlying their condition and their needs, and in the methods to be used in their instruction, that no general rule can be laid down. The directors of public instruction are uniformly alive to the appeal made by these classes, educationally and socially, and a growing determination to minister adequately to them is manifest in the last reports of education in India. In this work the aid of the mission agencies has been invaluable. By years of patient toil they win the confidence of these classes, learn their tongue, found schools, and reduce to writing languages which have never been written.

Even more pathetic is the condition of the depressed classes, for they suffer more acutely from the immemorial tyranny of the caste system. As is evident, this question is complicated by many of the most subtly difficult phases of Indian social life. Here again Government schools must be supplemented by missionaries, both Christian and native; but throughout there must be taken into account the difficulty of securing as teachers natives of the better caste. Work among the criminal tribes, which only a generation ago were a terror in most of the Provinces of India, has been steadily pursued. An interesting fact is that the most successful agency for dealing with such tribes is the Salvation Army, which has established settlements remote from civilization and is imparting systematic industrial and moral training. Unequally applied, but of general use in the education of these classes, are such measures as special inspection under the auspices of the Government, scholarships and fee exemptions, a special system of hostels under moral control, instruction in industries and in weaving, carpentry, and silk culture.

The subject of the teachers upon whom primary vernacular education devolves is necessarily a most important one. The salaries, as all the directors freely admit, are inadequate, though what is deemed some improvement has taken place during the five years under consideration. In the representative Provinces of Madras, Bombay, Bengal, and the Punjab, the average salary is, respectively, 10,[1] 28, 7.5, and 12 rupees. In Burma it is the highest in the Empire, being 40 rupees per month. The dire necessity of supplementing salaries in various ways is a significant commentary upon the real situation. Teachers in many places are granted very precarious fees; again, they serve as branch postmasters, an arrangement long criticized, but still continued by the authorities; and in the more remote settlements they eke out their salaries by having charge of the cattle pounds, sanitation, and registration of cattle in the district. As the directors recognize in their reports, the raising of the standard of teachers and their place in the public estimation can only come from increase of salaries.

[1] The rupee is estimated to be worth about 32 cents.

SECONDARY EDUCATION.

The division of secondary education into the vernacular and the Anglo-vernacular shows the extent of the departure from the uniform character of primary education. As regards the grading in this division, it includes the middle standard, whose exclusive purpose is to prepare boys for the high stage; and the high standard, leading directly to the colleges or technical school.

The middle standard is, except in the Central Provinces, entirely vernacular, though in most of the Provinces the study of English on the literary side is begun with the middle courses. A complicating element is also found in the fact that the middle standard usually has attached to it the upper primary classes. Indeed, this is the case everywhere except in Bombay and the Central Provinces. The middle vernacular schools constitute the type usually found in the rural districts; but there is increasing complaint that boys of talent and even high caste, whose only opportunity such a school is, upon its completion can not easily, if at all, be transferred to an English school.

In the few cases where such a transfer can be effected such a boy finds himself without the necessary training in English.

This problem has been clearly seen by most of the directors of public instruction. To take a representative Province, in Madras the attempt was made to draw a sharp distinction between secondary and elementary education. It was hoped that this would compel promising native boys to begin the study of English earlier in the vernacular school; but the attempt was found impractical, and the director reports that further means will have to be sought for properly grounding native boys who may be destined for a professional or public career, and for protecting the secondary schools from a large influx of ill-prepared boys from the elementary schools.

The high standard, which offers instruction ranging from one to three years, is conducted solely through the medium of English, and prepares directly for college and technical school. Its curriculum is modeled closely upon that of the classical public schools of England, such as Eton and Rugby. It naturally appeals almost exclusively to the boys of Europeans, and the few native Indian boys, destined to governmental employment, who have enjoyed unusual advantages of early training from tutors in English and classics.

The "top-heaviness" characteristic of the system of education in India is clearly illustrated in the secondary field. As this division is practically restricted to boys, the comparison must be instituted with the number of boys in the primary. This, in 1917, was 5,614,633, being 4.5 per cent of the total male population. In secondary education, the total enrollment for the same year was approximately

1,250,000, being 1 per cent of the total male population, and an even more striking increase of 28.3 per cent for the quinquennium under consideration. Here is met the most significant feature in Indian education, the numerical increase in secondary education. This varies from Province to Province, Bengal marking the highest percentage, having 35.8 of all the secondary schools, and 35 per cent of all the secondary pupils in India. But the phenomenon is marked in them all. If Bengal may be taken as representative, the director finds the following reasons for so extraordinary a popularity:

1. The partition of Bengal into two governmental districts with more effective administrative and financial handling.

2. The fostering of education by the Government, especially among the Mohammedans, a people traditionally inclined to education.

3. The prevailing high mark of prosperity, with the consequent ambition of the middle class to advance their children by means of secondary education into professional careers and governmental civil service.

With this phenomenal increase in secondary education, however, it was not to be expected that there should be a corresponding improvement in the extent to which it answers the needs of the native population, though in every Province earnest attempts have been made to make it do so. The provincial governments have everywhere recognized their responsibility to provide facilities at the larger centers, and have striven to relieve local bodies of the increased expenses of secondary education, to leave local funds free for use in elementary instruction, and above all to improve the salaries and living conditions of teachers. But after all has been done, it is still recognized that the crowding of ill-prepared native students into secondary schools, the inevitable corollary of the inertia of the primary schools remains an evil which disastrously affects the whole system.

In 1916, the Government of India submitted an exhaustive scheme for the approval of the several Provinces, whose main features were the reorganization of the service to which the graduates of high schools might aspire, the opening of additional high schools, the systematic financing of middle English schools by the Government, and a thorough overhauling of schedules and programs of studies. Another suggestion has been that the provincial government prescribe a maximum limit of, say, 40 pupils for high-school classes or sections; Madras and Bombay have already adopted such a limit, but the problem still remains unaffected by such palliative measures. It has been thought that the trouble lies with the impractical and too literary nature of the curricula; and therefore in the advanced

Provinces, such as Bombay and Madras, science, drawing, and manual arts have been made compulsory in many high schools, and others such as history and geography have been articulated with the life of the students.

In short, while the officials think that solid improvement has taken place in the spirit of secondary education and in the sincere desire for reform, yet the standard of secondary education is still discouragingly low because of inadequate staff and poor pay of teachers, overcrowding and defective discipline. As the educational commissioner reports:

> The apparently inexhaustible demand for secondary education, combined with the difficulty of meeting it in an adequate manner, tends to swamp the effects of reform. Existing schools are improved, but new ones spring up, lowering the average of attainment, and undermining discipline.

According to official reports of the year 1918, the general condition of secondary education throughout India at large had shown little improvement for several years preceding; but that year marked the introduction, in several Provinces, of important changes in the system of examinations in secondary schools. Details differ from Province to Province; but the common tendency has been to abolish the old blanket permit of college or university matriculation, and to stiffen up the examination or leaving certificate required by the individual secondary school. Examination upon a minimum of certain specified subjects is required. This move is interesting as running counter to the trend of modern secondary educational thought, which, certainly in the west, is setting ever more steadily toward easier articulation between the secondary school and the higher institution, and toward less emphasis upon examinations pure and simple. In India, however, it is only fair to point out the abuses which developed under the old system of easy matriculation, which was perhaps chiefly responsible for the swollen enrollment of the higher institutions with their masses of ill-prepared students.

A material feature of secondary education in India must not be passed over without notice. This is the institution of the so-called "hostel," by which is meant the boarding hall under the direct supervision of the school, with varying arrangements as to mess halls, and presided over by either the school head or one of the older assistants. As a large number of native boys do not live in close proximity to schools of secondary grade, and must attend such schools more or less distant, the importance of the hostel in their school life can not be overrated. The hostels naturally vary extremely in their character and in the habits of regularity, method, orderliness, and cleanliness which they inculcate. The negligent and even criminal conditions, with insanitary lodgings and exposure

to temptations, which have been discovered in many instances, have aroused directors and students of education to the duty of the State to see that so large a proportion of the school population shall live in a wholesome environment. Under compelling circumstances as they exist at present, it is recognized that the hostel system can not be done away with, but must be accepted, improved, and even extended. The Province of Madras in particular (where one boy in every five in secondary schools lives away from home) has grappled with the situation by a systematic study of the character and conditions of the hostels within its borders.

COLLEGES AND UNIVERSITIES.

The Indian colleges are divided into those which offer a general education and do not especially prepare candidates for any profession, and those which do prepare students for the professions. The former class fall usually under the head of colleges of arts and general science, themselves being subdivided into English and oriental colleges, with the latter of which we are not here concerned. The arts colleges, which train students by the medium of the English language in the usual subjects, are divided into first and second grade colleges. The latter, approaching in character and purposes the American junior college, do not confer a degree. The first-grade college graduates the students in all academic degrees and even offers a full graduate course.

While the colleges do not vary essentially in organization from Province to Province, they do vary decidedly in historical development, in number, in location, and in efficiency. Madras represents one extreme in the considerable number of scattered colleges, and of the second-grade and mission colleges; while Bombay and the Punjab represent the other extreme, that of the so-called "intensive development," grouping all eight of her colleges in three great centers. Following the English model, the colleges of all Provinces are closely affiliated to the universities, their courses and examinations, and even internal regulation and inspection, being prescribed directly by the universities. In certain Provinces, as in the case of Bengal, the university has power to annul the action of the college authorities in the matter of students' appeals from decisions and in the arrangement and conduct of hostels and mess rooms.

Among the pressing problems connected with the methods and the success of college instruction, the chief perhaps arises from the fact that the staff is usually ineffective in number for the great size of the classes under its charge. This complaint is voiced in most of the reports of the provincial directors. The situation is but another symptom of the "top-heaviness" already dwelt upon. In 1917 the colleges numbered 134, and showed an enrollment of 47,000

students, both native and European; registering a percentage of four-hundredths of one per cent of the total male population, and an increase of 60 per cent since 1912.

Within the past five years the question of the exclusive use of English as the medium of instruction in the colleges has come to the front, after having lain dormant since the early thirties, when Lord Macaulay's famous minute convinced the Government of India of the necessity of English as the only means of instruction. The Province of Bengal has led the way in declaring for bilingual instruction in the courses of its colleges, the other language being Bengali. This decision was arrived at after mature consideration of the claims of all languages spoken in the Province and the establishment of the fact that a considerably larger proportion of students use Bengali as their native tongue than any other. This decision, furthermore, does not affect the subject or content of courses offered nor relieve the student from satisfying the requirements in English literature and composition both at entrance and in course.

The tutorial system of studies, favored by most directors, under the direct influence of the English system, is profoundly and adversely affected by conditions varying with financial inability, with individual numbers of students, and with attainments of the tutors themselves. The tutorial system is most firmly established in the colleges of the Punjab; elsewhere it has at best a precarious footing.

As regards the conditions under which the students live, the hostel system which has been considered in secondary education plays also a large part in the colleges. Because of the maturity of college students as compared with those in the middle and high schools, the system is regarded as most successful in the colleges. The director of public instruction in Bengal thus summarizes the place of the hostel:

> Some parents whose sons could attend from home are said to prefer their residence in hostels because of the good influence which it exercises. Other means are used to promote corporate life and common interest. In Calcutta (where residential arrangements are defective) the colleges of the university acquired a fine building for social gatherings of students and their elders. In the well-managed colleges throughout India there is now an esprit de corps and a vigor of life which contrasts refreshingly with the languidly laborious existence which less favorably situated students still endure. Athletics, literary, debating, and scientific societies, and the production of magazines are usual features of college life, taking to some extent the place of general reading, which has not the same attraction for Indian as for English youths.

The five universities of India—those of Calcutta, Bombay, Madras, the Punjab, and Allahabad—were founded within the first 30 years of British rule, and until five years ago were considered as meeting all demands for the country. Their constitutions are modeled largely upon those of the English universities: They are governed by a

chancellor (the Viceroy or the governor of the Province), a vice chancellor, a senate diversely made up but along the lines laid down at Oxford and Cambridge, faculties and boards of studies, and finally a syndicate in whom are vested extraordinary powers of appeal and review. With the enormous increase in secondary education, the five years under review saw the awakening of a need for additional universities of various kinds. The Hindu university at Benares and the university at Patna opened their doors in October, 1917; the university of Mysore, under legislative incorporation of the Province, in July, 1917. The Indian university for women, a private institution, with scattered branches whose administrative center is at Poona, was founded in 1917.

The constitution and aims of the first mentioned are significant. It is frankly denominational, admitting persons of all classes, castes, and creeds, but imparting religious instruction in the Hindu tenets. It is sustained by large private and popular contributions, and begins on a more independent plane than any other hitherto known. The posts of chancellor and vice chancellor will be filled by the governing body. It is not—as are most of the other universities—an affiliating body controlling colleges scattered over a vast area, but its jurisdiction is limited to Benares and such colleges as may be established there. Important innovations are made in the constitution and functions of the several bodies which govern it, of which the main features are that administration is vested in a court composed of donors and persons chosen by various bodies, and that all academic control is vested in a senate consisting not necessarily of teachers in the university but of outsiders elected by the senate itself.

Of the schemes pending for the establishment of additional universities, most important is that for a university in Burma. This has grown steadily in popular interest during the five years under consideration, and plans are ripe for fruition within the next two years.

That a new conception of the purposes of higher educational training is permeating those in charge of Indian affairs is evident from the summary of college and university education in India given by Dr. Sharp, educational commissioner, in his seventh quinquennial review (1912–17):

> Thus two lines of development are running side by side. The old universities continue mainly, as they were in the past affiliating institutions. * * * Meantime, new universities are springing into life—some, replicas of the old, but with smaller areas and with an endeavor at partial concentration around the university sight; others completely centralized and primarily teaching institutions. It is recognized that university problems in India are of a far-reaching nature, and that the best professional advice is requisite at the present juncture. * * * His excellency Lord Chelmsford, in addressing the recipients of degrees at Calcutta said: "Only the other day I asked a

law student why he was taking up law, with all its risks and disappointments. He answered, What else is there for me to take up? I am not going to discuss his answer, but this I will say, it is my sincere hope, and it is the policy of my Government, to endeavor by all means in our power to open up other avenues of employment. So long as students think that the only avenues of employment are in the legal and clerical professions, so long shall we get congestion and overcrowding in those professions, with consequent discouragement, disappointment, and discontent. Our policy then is first to secure that there shall be as many opportunities of a livelihood opened to the educated classes and next to endeavor to divert the students into channels other than those of law and Government clerical employ."

TECHNICAL, INDUSTRIAL, AND AGRICULTURAL EDUCATION.

The recognition of the vast economic and social value of practical lines of education in India has been seen in the Montagu-Chelmsford Report. It is also everywhere emphasized in the reports of the directors of public instruction for the several Provinces. A significant trend is also showing itself in the action of the local governments in depending more and more upon advisory committees whose duty it is to study the needs of the individual Province, peculiarly with reference to technical and industrial education, and to give expert advice both in management and in general policy. The adaptation of modern education to a country like India, for ages immovable in her social and educational ideas, is necessarily most complicated.

Perhaps the outstanding feature to be recorded of the five years under consideration is the work of a committee representing the Provinces at large upon the education of civil engineers. This committee considered carefully such questions as a low age limit for students entering engineering schools, requirements for admission to such, minimum knowledge of English necessary, articulation with Government colleges, in short all the problems confronting the development of an increasing body of native students of engineering.

It is agreed that only in the development of such a native body, both in engineering and allied lines of practical training, can means be found to stem the flow of young Hindus into the law and Government service.

The urgent need of industrial education began to make itself felt about 15 years ago, when a committee appointed by Lord Curzon suggested an apprentice system maintained by the State. In addition, the Imperial Government encouraged the establishment by the local governments of trade schools of various grades. The next 10 years saw many schemes, some fanciful, most too costly, and others still impracticable, put into operation. In Madras and Bengal especially the schemes for industrial education in weaving, dyeing,

mechanical engineering, and plumbing were most practical and fruitful. It is interesting to note that the scheme for the State training of apprentices was dropped, but led to the establishment of Government trade schools, where continuation classes are provided for youths still in the employ of various firms, an interesting anticipation of provisions in the Fisher Act. On the whole, however, industrial education in India has hitherto attained only a limited measure of success. The causes, racial and governmental, lie deep below the surface; but that the situation is capable of improvement and that it is improving is emphasized by the directors of the advanced Provinces.

The sign of greatest promise is the existence of the Indian Industrial Commission, with its encouragement of practical instruction in manual arts and domestic science in the common primary and elementary schools. The report of this commission, presented early in 1919, makes the radical recommendation that the general control of noncollegiate industrial and technical education should be transferred to the Department of Industries, though the cooperation of the Education Department can not be dispensed with. The commission feels that an education purporting to train for industrial life must have direct organic connection with industries and industrial employers; that teachers and inspectors should be trained by the Industries Department not merely for independent schools but also for industrial and technical apprentice classes annexed to commercial plants.

The Government of India has never lost sight of the supreme importance of agricultural education in India. This is one subject that is free from complications, inasmuch as its two fundamental objects—the improvement of agricultural methods and the betterment of the material and economic conditions of the vast mass of the people of India—confront all students of the subject on the threshold.

To devise ways to reach influential classes, such as the landed and more prosperous cultivating class, a number of conferences participated in by students of general education as well as of agriculture have been held. Chief of these was that held in Simla in June, 1917, at which were represented all the Provinces of the Empire. It recommended the foundation of agricultural middle schools, the specific training of teachers for such schools, the adaptation of primary education to rural needs, the establishment of an agricultural college in each of the principal Provinces of India, and the more general diffusion of agricultural knowledge among the mass of the people by the demonstration of improved methods and by instruction brought to the illiterate tiller of the soil.

Most of the agricultural colleges in existence report a grave lack of interest among the people, as evinced by the small number of

students generally attending and by the even more serious lack of demand for specially trained men on the part of the landholders and agents of large tracts. Attempts have been made to increase interest in individual colleges by reducing the length of course and by offering practical courses rather than those upon scientific subjects. Most of the so-called agricultural colleges, according to reports, are very little more than secondary schools.

THE EDUCATION OF GIRLS.

With the stirring of reform movements in Government, and the proposal to extend suffrage to women, the education of women in India has become within the five years under consideration a burning question, such as was never anticipated it would be. Speaking generally, little provision is made in the governmental schools of India, vernacular or Anglo-vernacular, for the education of girls. They are educated mainly in special schools, which are generally private except in districts where, as in the Central Provinces, the Government has taken over control. Only in Burma, where extremely early marriage does not prevail, are the schools mixed.

The subject is, like so many others, complicated by innumerable traditions and social limitations. According to the inspectresses of various districts, difficulty is experienced in securing Indian ladies of position to work upon local committees, in attracting women of proper character, attainments, and caste to work as teachers, in securing regular attendance, in inducing girls to remain in school for a reasonable length of time, and back of all in combating and overcoming the age-old hostility to educating women at all. Despite these social as well as educational difficulties, however, the great increase of 29.2 per cent is to be recorded for the past five years in the total number of native girls under instruction in India. This for 1916–17 reached the surprising total of nearly 1,300,000 girls. More important than the increase in numbers is the change which is being wrought in the attitude of the public, a change which applies not only to the essentials of primary education, but also to secondary schools. Authorities agree that:

> Indian public opinion has slowly changed from its former attitude of positive dislike to the education of women and is now much more favorable as regards every community. * * * Professional men now wish to marry their sons to educated girls who can be in a real sense companions and helpmates; therefore education is beginning to be valued by parents as improving the marriage prospects of their daughters.

A large part of the credit for the advance of female education is due to the fact that the quality of teaching in schools for girls is better than in those for boys. This is especially pronounced in sec-

ondary schools, both those under mission management and those, as in the Central Provinces, maintained by the Government. Again, modern courses in industrial and vocational subjects have been introduced in many girls' schools, and increased attention has been paid to physical training. Here immediate results of modern diet and training have been most pronounced.

Another interesting phase of women's education well shows how closely related are social and educational considerations in India. The institution of extremely early marriage, and its concomitant of a large number of child widows in the great Brahman States of Madras, Bombay, and Bengal, have led school authorities to take measures for the education of that element of the population which has hitherto been neglected and led a sad and useless life. For the most part such Brahman child widows are distinctly intelligent and their training as teachers, especially for secondary schools, has been attended with marked success. The school authorities see in this a powerful incentive toward the popularizing of secondary education amongst the Hindu people.

A word should be said as to the encroachment of English education for girls upon the vernacular education. From all reports, the appreciation of English education is growing, largely because in the public mind English influences are held responsible for the existence of any education for women at all. Some authorities see the future of girls' education as lying in a judicious extension of the middle English schools, whose graduates should furnish a nucleus of educated opinion as well as a trained corps of teachers. The director of public instruction for Bengal vigorously summarizes the situation :

> We may at least hope that in dealing with the education of girls, we shall not repeat the mistakes which have been made in the education of boys. There will be no excuse if we do, for the girls of Bengal with comparatively few exceptions do not have to be trained to scramble in the open market for a living * * * For many years yet secondary and higher education will be confined to the few. Is it too much to hope that we shall be able so to order things that the education given will be a reality? There is only one way of accomplishing this, and that is by securing cultured and sympathetic women to work as inspectresses and in colleges and schools and by giving these women as free a hand a possible. If we determine to do this and do not shrink from the bill—it will not be an unlimited liability—we shall be giving Indian women a chance.

EDUCATION OF MOHAMMEDANS.

The discussion of Indian education, as has been seen, centers, predominantly around that of the native population. Up to this point general lines have been laid down which include all races and creeds without discrimination. But there is an element of the native population so distinct and so tenacious of creed and customs that special

mention must be made of it. This is the Mohammedan population of British India, which comprises (1917) 58,000,000 souls, or slightly less than one-fourth of the total. It is the only racial group whose adjustment to the uniform educational system of the country once seemed fraught with grave difficulties. But time has brought tact and understanding to the authorities in their dealings with the Mohamedans. Racial and religious barriers have been so broken down that in the Provinces showing the highest Mohamedan population—Bengal, the Punjab, the Northwest Frontier Province, and in some of the native administrations under British protection—the Mohammedans had proportionately a larger number of children in the lowest vernacular schools recognized by the Government than any other race.

But there are certain difficulties still inherent in the situation. The Mohammedan religious authorities require the child to attend the Mosque before he does any other. This results in the Mohammedan boy's commencing his regular schooling at a later age than the average. The alien languages to be learned, and the poverty of large sections of Mohammedan communities (where many converts are from the depressed classes) have worked to reduce the numbers in the higher standards of the primary vernacular schools materially, to say nothing of those in the institutions of higher education.

A further important element in the situation is the small number of Mohammedans engaged as teachers in the Government system. This is, among others, a result of the strict religious obligations laid by purely Mohammedan education upon its graduates to remain faithful to Islamic teachings. Thus conditions for both teachers and pupils of Mohammedan faith are not favorable to the development of confidence in the Government schools. In Bengal the authorities have steadily endeavored to develop such confidence by special concessions to Mohammedans and the assignment of a large proportion of official posts to be filled by them.

None of the measures indicated, however, has been recognized as adequately meeting the situation, and the authorities have repeatedly authorized the Mohammedans to start their own schools under their own committees, with full facilities for religious instruction and observance. Such schools are: (1)Those which teach the ordinary course of elementary subjects; (2) those which started as native schools but have modified the prescribed curriculum; and (3) those which are indifferent to government recognition and have their own scheme of studies. The number of Mohammedan schools necessarily varies widely from Province to Province, secondary schools being specially well developed among them. In Bengal especially there is the unique combination of what are really middle

English schools with separate departments using Arabic as a medium of instruction and teaching Arabic literature.

Three colleges are maintained by the Mohammedans, which mark a distinct advance in the reconciliation of the turbulent quarrels of the frontier tribes, many students being drawn from the non-Mohammedan population. There is an increasing demand for college education among the Mohammedans in Bengal, and the next few years bid fair to see additional colleges initiated to meet this demand.

To sum up the situation: The English educational officials are much encouraged by the marked increase in the number of Mohammedans resorting to the schools giving instruction along modern lines. Indeed, the number of Mohammedan pupils has steadily grown to be larger in proportion to the number of this group than those of all races and creeds together. The increase of Mohammedan pupils in the Government schools is a convincing proof that even among this stubborn group—

> the old prejudice against modern forms of thought and exclusive adherence to the orthodox subjects are dying away. Views are broadening. It is seen that instruction in special schools is often inferior—if only because the staff is inferior. * * * The special school that teaches unnecessary or useless subjects is waning in popularity. The cry is still for special institutions, but of the type that will fit the Musselman for the developments of modern life while yet keeping him a Musselman.

EDUCATION OF EUROPEANS IN INDIA.

While the study of Indian education primarily concerns itself with instruction imparted to native children, who comprise the overwhelming majority of all school children throughout the Indian Empire, yet the education of the children and youth of European descent should not be overlooked. In the nature of things a different background of tradition and inheritance is possessed by the European, and his children, no matter how humble or to what employment destined, have essentially another outlook on life from that of the native, and in most instances children of European descent, whether pure or mixed, retain European habits and modes of life. As late as the close of the past century social distinction brought about the result that children of English officials were sent to England in early infancy, there to be educated, or in the more healthful hill Provinces special schools were privately organized and maintained for them. At the same time the children of the poorer Europeans and those of mixed blood were left to be educated largely by charity and in schools especially founded by private and religious benefactions.

Of recent years not only has the European population of the leading Provinces of India increased exceedingly with the development of commerce and industries, but it has come to be recognized as the moral duty of an enlightened State to assume the instruction of all children whose domestic circumstances can not afford them adequate schooling. The original character of the schools for European children has, however, remained, and even where governmental grants are assigned it is usually to schools founded and managed on religious and denominational lines. In return for the grant of aid the Government does not always require a share in the management. The case of Bengal may be taken as representative. Out of 79 institutions for the training of European children only 5 are managed by the Government; 15 are undenominational, most of them being schools maintained by the industrial corporations for the children of their employees; the remainder, 59, belong to various religious bodies. This denominational character, although the powerful factor in the existence of such schools, has come to be regarded as leading to some waste of effort, and the Government has begun to encourage the consolidation of such schools wherever local conditions make it possible. Such schools are visited by a special inspector in each of the larger Provinces, but beyond good sanitary and health conditions no very rigid requirements are exacted.

In Provinces and districts where denominational and private schools have not been founded the Government has addressed itself seriously to the long-neglected question of the education of Europeans. Since the historic conference on this branch of education held at Simla in 1912, presided over by the governor of the Punjab, and including representatives of the various interests of European life in India, interest has steadily grown. The system of compulsory education, of which the conference declared itself in favor, met surprising opposition from the local governments, the claim being made that the voluntary system of attendance was found to be working effectively. This, however, has been questioned by social workers in the large cities. Especially in the city of Madras the imperial grant of 30,000 rupees for the extension of education among the poorer classes was gratefully welcomed in consideration of the undeniably large number of European children not reached.

Separate European education naturally enrolls the overwhelming majority of its pupils in the primary stages. Embracing the middle school, 9, 10, and, in a few instances, 11 grades are offered, the subjects being practically the same as those taught in corresponding European schools. An interesting feature is that the second language required may be either Latin or a modern European language or an Indian vernacular. In regard to high-school work, the conference above referred to recommended for the high schools for boys a more

modern and practical curriculum with a few schools which should prepare boys for the universities and the professions and be called collegiate schools. The latter clause, however, owing to the disagreement of local governments and the Imperial Government of India, which thought the need amply met by practical training, was not put into execution.[1] As a matter of fact the peculiar defect of European governmental education in India is that it makes scant provision for continuing the education of promising boys. A few endeavor to go to England, and those unable to do this are admitted to the colleges for Indians, where they enjoy all advantages. Most of the directors report satisfactory progress in the European schools in their Provinces, and interest in this field is shown by the proposal for a training college for teachers in southern India. Methods and instruction are reported as still improving, in spite of the losses of many teachers to military service.

TRAINING OF TEACHERS.

The broad distinction between the English and the vernacular schools is also carried out in the classification of teachers. Teachers trained in the English schools serve in secondary schools exclusively; teachers trained in the vernacular institutions serve almost exclusively in primary schools but to some extent also in secondary schools. The former class are trained according to English methods in the 15 special colleges and call for no further notice. The latter are of great importance in the system of Indian education, but their training lacks much of being what it should be. The Government of India has always been alive to the necessity of having a supply of teachers for primary schools adequate both in number and in attainments; but progress has been hampered in the many ways already shown in the treatment of primary education.

In August, 1916, the Government of India issued a circular letter to local governments pointing out the inadequacy of the arrangements in many Provinces for the training of teachers for secondary and primary schools, and suggesting as a minimum standard that the number of teachers to be trained in each year should not be less than the number of new teachers who must be provided to take the place of those who have died or resigned or to meet the demands created by the extension of education. Since then considerable improvements have been effected, but no improvement can be funda-

[1] It is interesting to record that this problem was attempted in Madras, where a very progressive schedule of studies, allowing three alternative courses, has been introduced in the middle schools. The first was for pupils who did not intend to pursue their education; the second prepared for the high school with studies leading to college and university; and the third prepared for business. Madras also has the credit of being the first to provide especial vocational and domestic economy training, an example which has since been followed by some of the schools in Bombay.

mental unless the teacher's profession is so elevated socially and financially as to attract an adequate number of candidates of the proper stamp. This has been attempted by increasing salaries, the effect of which has been to increase the numbers of the applicants in many Provinces, if not to elevate the quality. Of the approximately 190,000 teachers of the vernacular, barely 60,000 are trained.

The magnitude of the problem is serious. If the wastage of teachers of the vernacular be estimated at 6 per cent each year, the training institutions should turn out 12,000 teachers a year. But in 1917 the number turned out was only a little below 9,000. Thus the normal supply is not maintained, to say nothing of the increase necessary for extension.

Students enrolled in the higher vernacular training institutions are required to have completed the middle course in the vernacular or Anglo-vernacular schools, and upon graduation they are certificated to be teachers in secondary vernacular schools or to be headmasters of primary schools. These are the distinctive normal schools, their training extending over periods of from one to three years according to the Province concerned. Schools of a lower type are attended by students who have completed only the upper primary grades, and they offer shorter courses for the training of ordinary teachers in primary schools.

It is the improvement in the students frequenting this latter class of schools that is the task of supreme importance in the training of teachers. The several Provinces differ in the attention bestowed upon the one or the other of the two lines of teacher training, and in the content and thoroughness of the courses offered. The problem of improvement has been most seriously attacked in the Province of Madras, where, as the report shows, modern methods are much needed:

> As regards the methods followed in the training schools, criticism and model lessons are generally suitably conducted. A weaker point in the training is the work in the practicing section. With the existing numbers it is difficult to give the students sufficient practical work, nor does it appear to be sufficiently recognized that the practical work done must be thoroughly supervised, scrutinized, and discussed with the students. The teaching of the subjects of general education is variously reported upon. With their better staffs, the Government schools are better than the aided. Nature study seems to be the weakest subject and garden work poor. * * * Criticisms are also heard of the teaching of geography and the vernacular. On the whole, however, real progress appears to have been made.

GENERAL CONCLUSION.

In conclusion, the note of encouragement and optimism voiced in the reports of the several directors of public instruction seems justified, and a net result of progress during the quinquennium is to be

recorded despite the retrogression in certain districts and in certain branches of education which are inseparable from the economic and other effects of the war. As Dr. Sharp summarizes the situation in his concluding paragraph upon the general progress of education in India:

> There is no denying the fact that while public interest in education has increased, public opinion so far as it is expressed often remains crude and unformed. Press utterances are frequently actuated by vested interests or political motives. The criticism of measures of reform is attractive and the student community is a valuable political asset. * * * There is a tendency to lower standards and to oppose their improvement. Publicists support pupils in acts of indiscipline, openly blaming the teachers and deprecating punishment. * * * Below these manifestations there is a great body of sound public opinion. Nor is it always inarticulate. An important section of the press has, during the quinquennium, approached educational questions in the spirit of the educator. This is a hopeful sign. But before a thoroughly sound advance can be made it is essential that educational questions should be regarded on their own merits, that the teacher should come into his own and that due values should be set upon the respective merits of knowledge and of understanding.

EDUCATION IN EGYPT.[1]

Egypt was declared a British protectorate on December 18, 1914. The ruler under the title of sultan, formerly khedive, and the Council of Ministers form the government. The authority of Great Britain is vested in the British Resident, the British advisers of each ministry, and inspectors of the various departments in the 14 Provinces. Education is controlled by the Ministry of Education or the central authority and the councils, or the local authority for education. No close cooperation exists between these two kinds of bodies. The majority of the population is illiterate. According to the 1907 census, 96 per cent were unable to read and write. At present only 3 per cent of the population are attending elementary schools. A scheme is, however, under way which aims to establish efficient schools for at least 10 per cent of the population within the next 30 years. The net expenditure of the Egyptian Government on education represents less than 2 per cent of the annual budget. This sum is intended primarily to cover the expenses of the Europeanized course of education designed to fit Egyptians for various branches of the public service and for professional careers. The education of the masses is intrusted to provincial councils or the local authorities, who make provision for elementary schools in their areas.

BUDGET.

The expenditure of the Ministry of Education for 1918–19 amounts to $2,858,941, which is an increase of $548,216 over the esti-

[1] Based upon the note of the Ministry of Education on educational organization and policy.

mates of the preceding year, when the credits granted were lower by $186,727 than the prewar level of 1914–15.

Education of Egypt is now clearly crystalizing into two systems: The Europeanized, which aims at providing education chiefly for the wealthier circles of society, and the vernacular, which aims at providing a practical education for the rest of the population. The Europeanized system is modern. The vernacular is old and indigenous. The primary schools form the basis of the Europeanized system.

INFANT CLASSES AND SCHOOLS.

Infant classes are at present provided in girls' primary schools only. As some knowledge of reading is required for entrance to primary schools, the ministry is making provision for the establishment of two infant schools for boys, one in Cairo and one in Alexandria.

PRIMARY SCHOOLS.

The Ministry of Education at present maintains 30 boys' primary schools, attended by 6,716 pupils. The provincial councils maintain 27 boys' primary schools, attended by 2,892 pupils, and give grants in aid to 14 private primary schools attended by 1,985 pupils. There are also 42 other private boys' primary schools, attended by 7,999 boy pupils, under the inspection of the Ministry of Education.

The girls' primary education is provided at present in three Government primary girls' schools, attended by 491 pupils. The provincial councils maintain 10 primary schools attended by 993, and give grants in aid to two other schools with an attendance of 227. There are also under the inspection of the ministry 15 private girls' schools, attended by 1,726 pupils. The Ministry of Education has thus under its control or under inspection 113 boys' primary schools attended by 19, 592 pupils and 30 girls' primary schools, attended by 3,437 pupils.

The staff in the primary schools is exclusively Egyptian, and all the instruction is given in Arabic. The curriculum comprises the ordinary elementary subjects. English is also taught. In girls' schools stress is laid on training in domestic subjects (cooking, laundry, housewifery, and home hygiene). The course in boys' schools lasts four years; in girls' schools six, the first two years constituting infant classes.

The instruction in the Government primary schools is not free, but some provision is made for necessitous children in the primary schools belonging to the provincial councils and private benevolent societies.

The primary education certificate, formerly awarded upon the completion of the primary school, qualified the pupils for appointment in the Government service. This attracted a large number of

pupils who did not intend to pursue higher studies and were thus diverted from taking up a more practical course of studies. This defect was remedied in 1915 when the primary education certificate was abolished. In its stead was instituted an entrance examination for admission to secondary schools. By this reform the primary course lost its mark of self-completeness and came to be regarded as an initial stage of the Europeanized system.

THE VERNACULAR ELEMENTARY SCHOOLS.

The vernacular elementary schools, called maktabs, aim to meet the needs of the population at large. The course lasts four years, and, in addition to the ordinary elementary subjects, includes the study of the Koran and the tenets of Islam. In girls' schools stress is laid on domestic science. The standard in maktab schools is far below that maintained in the primary schools. Improvements are being introduced gradually. In the Government and in a number of other maktabs, teachers are paid fixed salaries instead of being dependent on school fees. In some places, as for instance in Alexandria, private maktabs are being bought out by a special commission and turned into municipal schools under the inspection of the ministry. At present the ministry maintains from its own budget two maktabs with 209 pupils and manages or inspects 4,263 maktabs attended by 282,063 pupils.

HIGHER ELEMENTARY SCHOOLS.

These schools aim to supplement the meager education received in the maktab schools. There are at present 16 higher elementary schools attended by 742 boys and 226 girls. These schools are supported by the Ministry of Education and the provincial council. The boys' higher elementary schools are of two types, urban and rural, with a four years' course each. The rural schools offer, in addition to the usual literary subjects, lessons in rural science and native study, mensuration and surveying, and practical work in the school garden, as well as a certain amount of manual training. The urban schools have an industrial bias. The school schedule provides among other subjects for lessons on materials, machines, and manufactures, as well as for a large amount of manual training. These schools represent a new development in Egypt. The manual training is intended to be a means of mental training. The pupils, it is claimed, show great delight in manual work, and this reacts favorably on their book work. In order to facilitate the development of this new type of schools the fees have been considerably reduced. In the girls' higher elementary schools the course is limited to three years. The instruction is practical, more than one-third of the time being devoted to domestic training (needlework, cookery, laundry work, housewifery, household accounts, and home hygiene).

SECONDARY SCHOOLS.

Secondary schools are the product of the Europeanized system. The ministry maintains at present six secondary schools and arrangements are being made to open a seventh. The schools are attended by 2,442 pupils. There are also 28 private secondary schools, attended by 4,643 pupils. In 1913 the ministry inaugurated a system of grants in aid to private secondary schools. This had a marked effect in improving the equipment and efficiency of these schools. The ministry has thus under its control or under inspection 34 secondary schools, attended by 7,085 pupils. There are at present no departmental secondary schools for girls, although the ministry is planning to create a girls' high school for the children of the well-to-do classes. The secondary course for boys extends over four years, branching out at the end of the second year into two divisions, literary and scientific. The syllabus for the first two years comprises Arabic, English, history and geography, mathmematics, elementary physics and drawing, as well as physical training. In the third and fourth years, while the teaching of Arabic and English is continued, pupils in the literary course begin the study of French and follow an extended course in history and geography, while pupils in the scientific course do not take up the study of a second foreign language but devote their time to extra work in mathematics, science, and drawing. The secondary examination is taken in two stages, Part I after the second year and Part II on the completion of the course.

INTERMEDIATE TECHNICAL SCHOOLS.

Admission to the intermediate technical schools is based on the primary course of study. The technical schools comprise the Bulak Technical School, the Intermediate School of Commerce, both in Cairo, and the Intermediate School of Agriculture at Mushtohor. The Bulak school has a four years' course of study, the school of commerce and that of agriculture only three years. The Bulak Technical School is organized in three sections—building construction, mechanical and electrical, and arts and crafts. The first two schools are under the department of technical education (a branch of the Ministry of Education); the last is under the Ministry of Agriculture.

The Ministry of Education also maintains model workshops at Bulak, Mansura, and Assiut, which are attended by 743 pupils. In addition, the provincial councils maintain 12 trades schools, attended by 1,643 boys. There are also five trades schools, attended by 531 boys and 156 girls, in the governorates. These nondepartmental trades schools receive grants in aid from the department of technical education. The Ministry of Education also maintains one

domestic school and inspects two private schools. Agricultural education is provided at nine agricultural schools, attended by 473 boys. These schools receive grants in aid from the Ministry of Agriculture, which is responsible for the inspection of the schools.

ELEMENTARY TRAINING COLLEGES FOR MEN AND WOMEN.

Great progress has been made in recent years in the training of teachers, both men and women, for service in the maktabs. It was only in 1903 that the first elementary training college was established. At present, in addition to the two men's training colleges and two women's training colleges maintained by the Ministry of Education, there are in existence 13 training colleges for men and 10 for women teachers, supported by the provincial councils. The four Government colleges are attended by 196 men and 396 women. No fees are charged, and in two women's colleges the students are lodged and boarded free. The 23 provincial council colleges are attended by 1,059 men and 353 women. The Ministry of Education has thus under its control or inspection 27 elementary training colleges, attended by 1,255 men and 749 women.

The elementary training college course extends over three years. The men's colleges are at present recruited mainly direct from the maktabs, but also largely from the mosque schools; the women's colleges are recruited direct from the maktabs. At present evening classes are held in the Bulak Elementary Training College for teachers in maktabs in order to improve their competence in kindergarten methods and physical training. As the existing higher women's college does not furnish a sufficient supply of teachers for the women's elementary training colleges and for the girls' higher elementary schools, the ministry has found it necessary to provide some other source of supply. In 1917 it created a supplementary course in the Bulak Elementary Training College, 11 students remaining to be trained as teachers of general subjects and 6 as domestic science teachers. The experiment having proved satisfactory, the ministry has now developed the scheme by extending the course to a second year. A third section was added for the training of kindergarten teachers for the new infant schools and the infant classes in the girls' primary schools.

NASRIA TRAINING COLLEGE AND SCHOOL FOR CADIS.

Apart from the University of Al Azhar and the other mosque schools, the Nasria Training College and the school for Cadis form the culmination of the vernacular system.

The standard of admission to the Nasria Training College is very low. The college has now 318 students, all of whom receive their training free. The course extends over five years. Its special

purpose is to train sheiks as teachers of Arabic, the Koran, and tenets of Islam for service in the primary and secondary schools.

The school for Cadis, which is under the Ministry of Justice, comprises two sections, a lower section for training clerks and a higher section for training judges, both for service in the Moslem courts. The lower course occupies four years and the higher course five years. In addition to free education, the students receive a bursary.

HIGHER COLLEGES.

The higher colleges, based on the Europeanized system, include the School of Medicine, the School of Pharmacy, the School of Engineering, and the Sultania Training College under the Ministry of Education; the School of Law, under the Ministry of Justice; and the School of Agriculture and the Veterinary School, under the Ministry of Agriculture.

The principal facts with reference to the various higher colleges are shown in the following table:

Courses and students in the higher colleges.

Higher colleges.	Length of course.	Number of students.	Higher colleges	Length of course	Number of students
School of Law	4	288	School of Agriculture (Giza)	4	120
Sultania Training College	3	273	School of Commerce	3	75
School of Engineering	4	239	Veterinary School	4	31
School of Medicine	5	237	School of Pharmacy	3	20

Admission to the higher colleges is based upon the secondary education certificate examination. For the School of Medicine and the School of Engineering the scientific secondary certificate is required, for the School of Law the literary certificate; the other colleges admit students irrespective of whether the certificate is obtained on the scientific or literary side, though in the School of Agriculture and the Veterinary School preference is given to applicants possessing the scientific certificate. English is, in the main, the medium of instruction in the higher colleges.

In the Sultania Training College there are two sections, a literary, recruited from students with the literary certificate, for the training of teachers of history, geography, translation, etc.; and a scientific, admitting students with the scientific certificate, for the training of teachers of mathematics and science. These colleges admit boys only.

THE SANIA TRAINING COLLEGE FOR GIRLS.

This college forms an important phase in the development of female education in Egypt. It is this college that is to supply women teachers not only for the girls' primary schools but also for the

women's elementary training colleges and the girls' higher elementary schools. The regulations provide for a four years' course. The Sania Training College at present contains 91 students, as compared with 77 in 1917 and 4 in 1900, when the college was founded. All the students are boarders, and no fees are charged. The standard of admission is low, but this will be remedied when a girls' high school, which the ministry intends to open, comes into existence.

A number of graduates of the higher colleges are sent to Europe for further studies. At present the Ministry of Education maintains 33 such students, all of whom study in England.

EDUCATION OF JEWS IN PALESTINE.

By Theresa Bach,

Division of Foreign Educational Systems, Bureau of Education.

GENERAL DEVELOPMENT.

The recent revival of Hebrew education in Palestine culminated in the laying of the corner stone of the future Hebrew University in Jerusalem. It was the outgrowth of the Jewish national movement known under the name of Zionism. During the past few decades, and particularly during the years immediately preceding the war, a great revival of the Jewish spirit took place among the Jews in all the countries of the world. This is true particularly of Palestine, where the Jewish life began to shape itself along national lines. The Hebrew language was revived and became a living tongue. Hebrew literature sprang up, aspiring to take a place among the great literatures of the world. Hebrew writings were translated into modern languages. The masterpieces of English literature were rendered into Hebrew. Hebrew songs, newspapers, and textbooks were current. School children were instructed in Hebrew, despite the endeavors of the Young Turks to make Turkish the principal language of the country, and in active opposition to the propaganda carried on by the German, French, and English schools established in the Holy Land. Notable among the foreign institutions were the schools of the Alliance Israélite and the Hilfsverein der Deutschen Juden, a French and a German organization, respectively. The former employed French as a language of instruction; the latter, German. Neither of these bodies had, however, sufficient comprehension of the new life that was budding in Palestine. The policy pursued by the men in charge of foreign schools made it easy for the truly nationalistic schools to gain ground and supersede the older institutions. No foreign rivalry could crush the efforts of those who regarded Hebrew as the language of their own and strove to develop it in the land of its origin.

December 10, 1913, marks a new era in Hebrew education. That was the day when not only the language question but the whole policy of Jewish education in Palestine was definitely settled. The immediate cause of this turn of affaris was the decision of the German Hilfsverein with regard to the language of instruction in schools supported by that body. Contrary to its previous policy, the Hilfsverein began to neglect the study of Hebrew and pushed it more and more to the background. This caused much discontent among teachers and pupils nationalistically inclined. The climax was reached in December, 1913, when the Verein passed a resolution to the effect that the language of instruction in the new Technicum at Haifa, then under construction, should be German. A general walkout in all the schools of the Verein followed, with the result that the best forces in the teaching staff went over to the Hebrew schools and helped in spreading the ancient culture of their own. The attitude of the pupils was no less remarkable. Over 50 per cent of the total number joined the national schools, where instruction was given in their own tongue. An immediate consequence of the Hilfsverein's action was the creation of the educational committee, which sprang up in time of struggle. The aim of this committee was to establish order and cope with the situation created by the split. Its efforts were directed toward building up a school system truly representative of the best wishes of the people. New elementary schools were opened and conducted along modern lines in all the towns of Palestine. In Jerusalem, Jaffa, and Haifa, national schools replaced the old institutions maintained by private philanthropy, which were forced to close their doors. These new schools grew rapidly and attracted large sections of the population who had held aloof from the semi-Hebrew schools of the Hilfsverein.

In agricultural colonies conditions differed. The colony schools, though subsidized from abroad, were not maintained by foreign organizations. They came into existence with the colonies themselves and reflected the spirit that animated the settlers. At the outset of the war elementary schools existed in each of the 30 colonies of Palestine. The language of instruction in all these schools is Hebrew. The program of the colony schools comprises the usual elementary school subjects, in addition to lessons in religion, Bible, and Jewish history. Arabic is also taught, as knowledge of this language is indispensable in Palestine. In some of the colonies instruction in French is given. This is due to the fact that many of the colonies were for some time under the control of the Jewish Colonization Association, a French institution which subsidized the schools. Fortunately, the subsidy carried with it no interference in the internal management of the schools. This was left entirely

to the colonists. The colony schools sprang up independently of one another and differed widely in method and character. Some had only elementary classes, others with a larger school population had a well-equipped elementary school, with eight classes and a kindergarten attached to it. Of recent years the teachers' association, which performs the function of a board of education, set a certain standard for these schools. This body appoints teachers for the colony schools and furthers educational development by publishing Hebrew textbooks and a Hebrew educational periodical, Ha-Chinnuch. It is noteworthy that all national Hebrew schools have been organized and conducted by a local committee of parents and teachers. This committee drafts the program of the school, subject to the approval of the Hebrew Teachers' Association. Schools of the elementary type are the only schools in agricultural colonies. The colonies, though growing rapidly, were not large enough to provide for secondary instruction. This was introduced in the two large cities, Jaffa and Jerusalem. Though not directly founded by the Zionist organization, the secondary schools are the product of the Zionist spirit.

SECONDARY EDUCATION.

The gymnasium in Jaffa, as the secondary school is called, has four preparatory and eight regular classes. After the fifth year the curriculum branches off into the classical and the so-called "real" course. The program of the gymnasium includes, in addition to the ordinary high-school program, the study of the Bible, the Talmud, Turkish, and Arabic. Emphasis is laid on gymnastics and the excursions which form an important item in all the national schools. The rapid development of the Hebrew high school in Jaffa is graphically described by Dr. Mossinsohn, one of its leaders and inspirers, in the Menorah Journal, December, 1918. Opened in 1906 with 17 pupils and 4 teachers, it grew so rapidly that in the latter part of 1914 it enrolled 900 pupils and 30 teachers. The curriculum is given in Hebrew exclusively, and the diplomas of the school are recognized by most of the American and foreign universities. In the last few years the popularity of the school was so great that it was almost entirely sustained by the income derived from tuition. The gymnasium in Jerusalem, organized in 1908 and patterned after that in Jaffa, had a somewhat slower development. Both high schools are coeducational. Important from the point of view of a national system of education was the establishment of a school for kindergartners with a three-year course in Jerusalem and a technical high school at Haifa. Both were opened in 1914 by the educational committee, as a result of the controversy with the Hilfsverein. The Haifa school was opened in place of

the proposed Technicum. It is coeducational and aims to give students a technical training. The original idea of building a higher technical institution in Palestine has not been abandoned. Those interested in the project hope to realize it as soon as an opportune moment presents itself. There are, of course, in Palestine a number of Jewish schools with a decidedly religious bias. These schools are orthodox in spirit and hostile to modern innovations. Their chief aim is to foster the Jewish religion and to keep it intact from foreign influences.

Of special schools the musical conservatories, called Shulammith schools, in Jaffa and Jerusalem deserve mention. These schools have contributed greatly to the revival of Jewish music by arranging concerts and issuing collections of old and new songs. An important national school for the promotion of Jewish art is the Bezalel School of Arts and Crafts, founded by the artist Boris Schatz. The subjects taught in the school are carpet weaving, filagree silver work, carving, lithography, lace making, etc.

AGRICULTURAL TRAINING.

The provision for agricultural training, so important for the colonies, is wholly inadequate. The Mikveh Israel Agricultural School, established in 1870 by the Alliance Israélite Universelle, near Jaffa, has an annual budget of about $10,000. The language of instruction is French, the course of study lasts four years, and the curriculum is intended to turn out professional agronomists, who seek positions as inspectors, supervisors, landscape gardeners, and teachers at other schools. As there is no field for these agronomists in Palestine, many graduates go into other callings or leave the country. The Petach-Tikvah Agricultural School, established in 1912, has a very ambitious four years' program which includes Hebrew, French, Arabic, mathematics, history, geography, chemistry, botany, physics, surveying, meteorology, zoology, geology, and mineralogy; soil chemistry, the installing of plantations, cattle raising, medicine, dairying, plant pathology, administration of farms, agrarian law, commercial law, etc. To practical work only two hours a week are assigned. Thus neither the old Mikveh Israel School nor the more recent Petach-Tikvah Agricultural School has succeeded in working out a program suited for the colonies. A unique undertaking is the farm school for girls at Kinneret, near the sea of Tiberias, supported by a Jewish women's organization. Candidates must be at least 17 years old. The pupils enjoy free tuition, board and lodging, as well as a monthly stipend. The work is predominantly practical, the pupils being occupied from seven to nine hours daily. The subjects taught in the first year are botany, elementary chemistry and physics, cooking and preserving, and in the second the elements of

scientific agriculture, fertilizing methods, plant diseases, the principles underlying various crops, poultry raising, cattle breeding, and the care of dairy products. The school has for its use 16 acres of land for ornamental gardening, forestry, and a barnyard. All the work of the farm is done by the pupils, also the sewing and cooking required for the institution.

This was in brief the state of Hebrew education in Palestine before the war broke out. The effects of the war were in many instances disastrous for the newly established school system. Schools were turned into hospitals, teachers were banished, funds failed to arrive, and pupils were driven from place to place. Yet there was a dogged determination to keep the schools open at any cost. This often necessitated the feeding and care of children. When the population was banished from their own homes, schools were opened in the refugee camps. At present a Zionist board of education administers the national schools in Palestine and subsidizes all Jewish schools on two conditions: That Hebrew be the language of instruction and that there be a certain standard of hygiene and sanitation. Funds are supplied from abroad.

ESTABLISHMENT OF A UNIVERSITY.

Every effort is made to organize a unified national Hebrew school system headed by a Hebrew university, where Jewish culture may thrive freely. A higher educational institution is thus far lacking, though Zionists and other Jewish circles have dreamed of such an institution for a number of years. When Russian universities closed their doors to thousands of Jewish students, these were compelled to seek higher education in foreign countries. Many went to Swiss, others to German and French universities. It was then proposed to build a university for Jewish young men and women. But opinions differed. Some chose Switzerland as the land where such a university could flourish. Others who had a definite aim in view and looked forward to the revival of the Jewish culture pointed to Palestine as an appropriate center. Things were unsettled when in July, 1913, negotiations were begun for the purchase of a site in Palestine, but these were necessarily suspended when the war broke out. The declaration of the British Government of November 2, 1917, on behalf of the Jewish home in Palestine gave new impetus to the movement and spurred the Zionists to renewed educational activities. Their efforts have been crowned with success. Palestine is to have a Hebrew university. In March, 1918, a Zionist commission headed by Dr. Weizmann was sent to the Holy Land under the auspices of the British Government. The object of this commission was, among other things, "To inquire into the feasibility of the scheme of establishing a Jewish university." The inquiry

proved so satisfactory that a few months later, i. e., on July 24, 1918, the commission found it advisable to take the initial steps in laying the corner stones of the future university. Representatives of the Christian, Moslem, and Jewish creeds were present at the ceremony, and thus emphasized the cultural value of a higher institution in Palestine. In his speech delivered at the laying of the foundation stones, Dr. Weizmann has defined the new institution as a "Hebrew university," for he continues, "I do not suppose that there is anyone here who can conceive of a university in Jerusalem being other than Hebrew." Speaking further of the program, he thus defines it:

> I have spoken of a Hebrew university where the language will be Hebrew, just as French is used at the Sorbonne or English at Oxford. Naturally other languages, ancient and modern, will be taught in their respective faculties. Amongst these we may expect that prominent attention will be given to Arabic and other Semitic languages. A Hebrew university, though intended primarily for Jews, will, of course, give affectionate welcome to the members of every race and every creed. "My house is a house of prayer for all nations."
>
> Besides the usual schools and institutions which go to form a modern university, it will be peculiarly appropriate to associate with our Hebrew university archæological research, which has revealed so much of the mysterious past of Egypt and of Greece and has a harvest still to be reaped in Palestine. Our university is destined to play an important part in this field of knowledge. Side by side with scientific research the humanities will occupy a distinguished place.

In conclusion Dr. Weizmann pointed out that the Hebrew university, while devoting its activities to the higher scientific achievements, will—

> at the same time be rendered accessible to all classes of the people. The Jewish workman and farm laborer must be enabled to find there a possibility of continuing his education in his free hours; the doors of our libraries, lecture rooms, and laboratories must be opened wide to all. Thus the university will exercise its beneficial influence on the nations as a whole.

Before the political structure of a new nation that is yet old had time to grow, before the foundation of such a structure could be laid or even conceived under existing conditions, there looms thus from the distant Orient a spiritual creation of the Jews, a creation that promises to take a prominent place alongside the great institutions of learning in our own and in other countries.

CHAPTER III.

EDUCATION IN FRANCE IN 1916–1918

By I. L. Kandel.

Contents.—Administration—Physical welfare—Elementary education—Secondary education of girls—Secondary education of boys.

The war has affected the conduct of education in France perhaps more than in either England or Germany. For the first two years the demands at the front tended to subordinate all other thought and activities to the one great purpose. More recently the educational literature of France indicates that the war has had the effect of provoking considerable questioning and dissatisfaction with the existing systems of education. Radical changes have not yet taken place in educational administration or organization, but the ground is being prepared by discussions and conferences, by public and private commissions of inquiry, by articles in the daily press for the reforms that it is now generally felt must come after the war. The schools will be called upon to play an important part in the restoration of the country and must, in the opinion of many, be improved to meet the new demands.

While the war has strengthened the universal conviction that the principles of French democracy and the basic French institutions are sound, it has none the less directed increased attention to the need of widening educational opportunities and the general scope of the school. The proposals for the better administration of school attendance, and for compulsory attendance at continuation schools, the reform of the examination for the certificat d'études primaires, the consideration of the reform of the higher elementary school, and the urgent demand for greater opportunities for higher education as well as its reform are all comprised in the present tendency. Within the school there is a demand that instruction be less academic and bookish and more adapted to local circumstances and modern needs in general.

As in other countries there are those who would convert every school into a technical or vocational school. This problem is well summarized in the following statement:

> The present problem is that of reconciling two cultures—the humanistic and practical. What shall be the relations in the elementary schools between in-

struction and local conditions? What in the higher elementary schools or in the technical schools shall be the relations between general education and vocational training? In secondary education what shall be the relations between classical culture and preparation for modern life, and in higher education between pure and applied science? Is not the problem the same everywhere? [1]

The answer to this statement is that the principle of balance, the principle upon which the Republic is founded, will offer a solution here too.

A balance between science and letters, between authority and liberty, between discipline and initiative; a balance attained with wisdom and moderation, with tolerance and humanity, with finesse and good sense; a balance so conforming to the liberal ideas maintained by the defenders of civilization that it will suffice for us to establish it in instruction so that it may become adapted to the demands of modern society and definitely serve the interests of the country.[2]

While one tendency is represented by those who desire to retain the present organization provided it is reformed to a considerable degree, there is a still more marked tendency, as is indicated below, to demand a thorough reorganization of the educational system. According to this view, represented by a number of teachers grouped together as Les Compagnons and attracting considerable attention in the country, the problem is no longer merely one of pedagogy or of internal reform. "This is a moment when the whole country feels too strongly the need of a general reconstruction, of reform in administration, politics, economics, industry, etc., for one to confine oneself strictly to the field of pedagogy." [3]

The authors accordingly advocate not a reform of the disparate parts of the system, but a reorganization of the whole system based on one point of view. They advocate a common school (école unique), upon which can be built up on one side the humanistic, on the other vocational courses. This should be the national type, whether in public or private schools. The elementary school should be the portal for all, but opportunity should be offered to all to advance as far as their ability warrants.

ADMINISTRATION.[4]

There appears to be a marked feeling that the need for the reform of administration, organization, curricula, and methods of instruction is one of the most pressing problems of the present time. The

[1] Crouzet, P. Pour la revision d'ensemble de l'éducation nationale. *La Grande Revue,* vol. 94, p. 395.

[2] Bezard, J. Les lecons de la guerre dans l'enseignement secondaire. *La Grande Revue,* vol. 94, p. 472.

[3] Les Compagnons. Le lycée et l'école primaire. *Revue Universitaire,* vol. 272, Oct., 1918, pp. 172ff. See also *Les Cahiers de Probus. Premier Cahier,* by the same authors (Paris, 1918).

[4] For a detailed consideration of this subject see *Les Cahiers de Probus. Premier Cahier.* Par "Les Compagnons." (Paris, 1918.)

charge is made that the administrative machinery of French education no longer meets the requirements and demands of modern education.[1] The present situation has developed partly out of the existence, side by side and without coordination, of different branches of education, some under the control of the ministry of public instruction and fine arts, others distributed among other ministries, partly out of the practice of piecemeal reforms and reorganizations. Reform at this hour, it is urged, must be based on a consideration of the needs of the country as a whole and of the functions of education in general. Peace will bring a well-defined task, for which half measures will be inadequate.[2] The whole national structure of education must be reorganized from the elementary school up.[3] The demand for reorganization and reconstruction in industry, commerce, agriculture, politics, and social life can not be met without the one reform on which these all depend—the reform of national education. Only through such a reform—the conservation and training of its human capital—can France reap the benefit of her great material and spiritual resources.

The chief administrative change that is considered desirable is one that will abolish the extreme form of centralization that characterizes the system. If the needs of the nation and the different localities are to be met, some flexibility must be introduced in educational administration,[4] and provision must be made for the cooperation of various economic and industrial interests, as already proposed in 1911 by M. Steeg. The present system inevitably leads to administration through official documents and correspondence rather than by direct personal supervision. The future requires the grant of larger liberty to local authorities. At present the powers of the local authorities in education are almost negligible, and many of the local school committees (commissions scolaires) contemplated by the law have ceased to function.[5] Any increase in local freedom must be extended to the teachers, who should feel at liberty to adapt their work to local needs within certain well-defined minimum requirements and standards.

One writer sums up these suggestions as follows: "There will not be the same uniformity among the schools of different departments or among diverse communes of the same department; but what does such uniformity, created artificially and externally by the State laws, matter, if there is an internal harmony, if each school obeys the rhythm of the life about it?" [5]

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[1] Crouzet, P. Pour la revision d'ensemble de l'éducation nationale. *La Grande Revue*, vol. 94, pp. 392ff.

[2] Crouzet, P., *loc. cit.*

[3] See *L'École et la Vie*, a magazine established to propagate the closer relationship between education and life. See also the work by "Les Compagnons" cited above.

[4] Collet, E. Tous les enfants en classes. *L'École et la Vie*, Oct. 13, 1917, p. 70.

[5] Bugnon, E. L'École primaire et les leçons de la guerre. *La Grande Revue*, vol. 94, p. 511. Also *Les Cahiers de Probus*.

Concrete proposals for the development of a system of administration to give effect to these tendencies have not yet been put forward to any extent. It is suggested that the conseil superieur de l'instruction publique can be brought more closely into touch with the currents of national thought by the inclusion of women and of representatives of employers and employees from the fields of industry, commerce, and agriculture.

PHYSICAL WELFARE.

It was perhaps to be expected that France would be influenced as a consequence of the close contact with the British and American forces, just as it may be expected the French intellectual influences will affect British and American thought in time. A widespread movement has begun for the improvement and extension of physical education and games throughout the country, not merely to develop agility and endurance in the individual, but to strengthen the Nation as a whole. The recently reformed examination for the certificate of primary studies includes a gymnastic exercise. Associated with this movement is the recognition that more attention must be given to medical inspection and treatment of children of school age and preschool age. The American Red Cross has aroused considerable interest, as, for example, in Lyon, by distribution of leaflets and exhibits on the physical care and welfare of children. Early in 1917 a commission was appointed to study the reorganization of physical training in the schools.

In April, 1918, the ministry of public instruction issued a circular[1] to the rectors of the academies urging the development of physical education, games and athletic sports in secondary, normal, and higher elementary schools. It is pointed out that such training could be organized without encroaching on class work. School principals and teachers are asked to encourage the establishment of clubs under their general supervision and with the assistance of advisory committees representing the public and alumni associations. From another point of view, school athletics are advocated as a center for cooperation between parents, teachers, physicians, and pupils.[2]

La Ligue française pour l'hygiène scolaire is actively promoting the introduction of open-air exercise, in which teachers should also participate, and is advocating the introduction of school medical inspection and the keeping of records of physical development. A Union des sociétés françaises de sports athlétiques has been established to promote the development of school athletic clubs and to secure playing fields. It is suggested in the circular that participation should not

[1] *Bulletin Adminitratif.* Apr. 15 and May 18, 1918: *Revue Universitaire,* vol. 27, 2. p. 141f.

[2] See Etevenon, L. Les sports, terrain d' entente entre les parents, les maîtres, les médecins, et les élèves. *L'École et la Vie,* Dec. 1, 1917, pp. 180f.

be made compulsory and that no boy be allowed to take part without the written consent of his parents, so that the State might be relieved of responsibility for accident. The union has made advantageous terms with insurance companies to furnish compensation in cases of accident.[1]

The further development of the movement is indicated in the following account of some propaganda that has already been undertaken:[2]

In the course of a recent manifestation in favor of physical education, organized at Bordeaux, M. Henry Pate, deputy, delivered a very interesting address, in which he stated that he and some of his colleagues in the house of deputies had decided to participate actively in the physical education and athletics of the young, in accordance with the following program: (1) To adopt a general method of rational physical instruction, based on a knowledge of the physical needs of the subject, the specialization of the work, and the attraction of the exercise. (2) To create regional schools and a superior school destined to create and to maintain a unity of methods. (3) To open these schools to the physical instructors of the army, to the monitors of the preparation for military service, and to the instructors of both sexes. (4) To direct the young toward outdoor exercises, giving them freely. (6) To obtain (*a*) the simplification of school programs, which are frightfully overloaded and tend to destroy energy; (*b*) the introduction of a physical test in all examinations; (*c*) the institution of outdoor schools and open-air or outdoor colonies for the physically abnormal children; and (*d*) the complete reorganization of school medical inspection. (7) To assure the employment of special professors of gymnastics. (8) To demand legislation providing for obligatory post-graduate instruction and the introduction of the eight-hour day (la semaine anglaise), so as not to injure the vocational work of the adults, or their apprenticeship, or reduce the wages to which they may aspire. (9) To give a larger place in the training for military service to physical education and athletics, as a base for the future reorganization of the army, and of the recruiting laws.

In order to solve these multiple problems, there has been appointed a comité national de propagande pour le développement de l'éducation physique et sportive, de hygiène sociale et de la rénovation de la race. This committee will cooperate closely with the public authorities, the universities, the faculties, the commercial centers, industrial centers, financial powers, and the press.

ELEMENTARY EDUCATION.

The most pressing problems in the field of elementary education are the improvement of school attendance, adaptation of the work of the school to local environment, and better articulation with higher schools. The withdrawal of adult workers affected French agriculture and industry seriously, and until better adjustments

[1] *Revue Universitaire,* vol. 25, 1, p. 330, Les exercises physiques; vol. 26, 1, p. 378, Voeux relatifs à l'éducation physique; vol. 26, 2, pp. 95ff., La question de la culture physique dans l'enseignement secondaire; vol. 27, 2, pp. 141f., Les sports athlétiques dans les établissements secondaires.

[2] Reprinted in School Life, vol. 1, No. 3, p. 13, from the Journal of the American Medical Association, July 20, 1918.

between the needs of the army and the needs of industries were made, the immediate result was a marked increase of child labor with a consequent effect on school attendance. This condition was already marked and subjected to criticism before the war;[1] the law of 1882 permits the exemption of children from school attendance for three months of the year if they are assisting parents in harvesting, potato gathering, fruit picking, and other agricultural pursuits, and for one school session out of two if they are working for another employer. A ministerial circular[2] issued on October 1, 1917, urges that better efforts be made to improve school attendance and indicates that restrictions would be introduced officially. The preparation of the next generation and the great task awaiting it require that children should enjoy a longer education. To this end it is pointed out that the teachers, who have gained considerable prestige during the war, can contribute much by cooperating with the home. The suggestion is also made that municipal authorities might make the grant of clothing, food, and other assistance to school children dependent on their regular attendance.

The curriculum of the elementary school suffers too much from uniformity and continues, as in many other educational systems, to be too bookish. Says P. Crouzet, Inspecteur de l'Académie de Paris:

> We are too confident that knowledge is power. We study to know instead of studying to live better. . . . The educational problem of to-morrow is not to extend or change the knowledge or to extend or modify the programs so much as to direct knowledge of life, to teach everything, not in terms of the past but of the present and future.[3]

Although the regulations permit adaptation to local industrial and agricultural needs, very little appears to have been done to make this permission effectual. It is urged that instruction in the elementary school should be made more real and practical, not merely by the effective introduction of manual work for boys and household arts for girls, and school gardens for both, but by vitalizing the curriculum by reference to the environment with which the pupils are familiar. Such a reform, it is admitted, will demand more teachers of good training who can make the best use of the responsibility that should be theirs. In country areas it is recommended that principals be appointed to supervise a number of teachers and schools. It is felt that the new education for responsibility and liberty, that are fundamental to modern democracy, can not be developed under the existing pressure of uniformity.[4]

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[1] Bugnon, E. L'école primaire et les leçons de la guerre. *La Grande Revue,* p. 506; Cottet, E. Tous les enfants. *L'École et la Vie,* Oct. 13, 1917, p. 70.

[2] *Bulletin Administratif,* Oct. 13, 1917.

[3] Crouzet, P. *L'École et la Vie,* vol. 1, Sept. 15, 1917, p. 3.

[4] Bugnon, E. L'École primaire et les leçons de la guerre. *La Grande Revue,* pp. 480–496; Une programme d'éducation nationale, proposed by La Ligue française. *Revue Universitaire,* vol. 26, 1, pp. 306f.

In 1917 the Conseil supérieur de l'instruction publique voted to reform the examination for the certificate of elementary studies (certificat d'études primaires). This vote was followed by a ministerial decree on July 19, 1917, giving the details of the reform and by another on March 9, 1918, giving instructions to the rectors of academies on the conduct of the examinations. The purpose of the reform is to meet some of the criticisms that the work of the elementary school is too bookish, emphasises memory work, and neglects subjects not required in the examinations. The reform aims to secure a place for every subject in the curriculum commensurate with its importance, to develop uniformity of standards, and to encourage the development of judgment, intelligence, and will. The examination is to be conducted by commissions appointed by the academy rectors and is to be based on the work of the cours moyen, usually completed at the age of 11 or 12. The examination is in two parts. The first includes an essay on a simple topic, dictation, and questions on the text, problems in practical arithmetic and the metric system; a composition or some questions in history and geography or everyday science, and for boys an exercise in linear drawing or handwork, and for girls a test in sewing or design. The second part consists of questions in history and geography or science, a test in reading and simple questions on the text, recitation of a piece of poetry or singing at the pupil's option, a test in mental arithmetic, and a simple gymnastic exercise.

A similar reform of the examinations at the close of the higher elementary schools is also contemplated, but for the present is postponed until these schools undergo a contemplated revision On August 3, 1918, a circular was issued by the minister of public instruction[1] directing the attention of teachers and inspectors to the need of promoting continued full-time education by improving instruction of pupils from the ages of 12 to 15. The circular proposes that conferences be conducted to consider the revision of the cours supérieur and the cours complémentaires. The following questions are proposed for discussion, with the suggestion that the replies be sent to the ministry in December, 1918:

The number of advanced courses in each canton and their adequacy? How to create new courses?

What should be their programs? What place should be given to vocational education?

Should there be a special examination leading to a sanction?

What can the elementary schools do to improve the work offered to older pupils of 13 and 14? Can not these schools combine general education and preapprenticeship instruction?

[1] *Bulletin Administratif*, Aug. 3, 1918, p. 189f. (Circulaire relative aux conférences de 1918 et à l'organization d'un enseignement destinées aux enfants de 12 à 15 ans).

The importance of the problem, which is, of course, closely associated with the proposals for compulsory continuation school attendance, is emphasized:

> The more the ruin and losses increase, the greater must be the service of national education. The end to be attained is two-fold—to stimulate, by means of the cours supérieurs and complémentaires and other schools offering the opportunity, the development of the pupils; and by the cours de perfectionnement to furnish the whole people with the means of increasing their moral strength, intellectual vigor, and economic productivity.

To repair the ruins of France in men and material caused by the war, the urgent need will be to discover ability wherever it can be found. The burden will, therefore, be placed on those intrusted with the administration not only to select pupils in the elementary schools who show ability to proceed further, but to articulate the different types of schools in such a way that each boy or girl will secure the training most suitable. This task will not only involve selection of pupils for advancement, but the creation of new types of schools adequately differentiated to meet the different abilities of the pupils and the diverse needs of the country. At present the only opportunity of which the elementary school pupils are able to avail themselves is to pass on to the higher elementary school. The doors of the secondary schools were thrown open to them in 1902, but very few take advantage of this opportunity in spite of the existence of scholarships.[1] That an elementary education is not sufficient equipment for life has been recognized universally,[2] and with the end in view of increasing educational opportunities compulsory attendance at continuation schools has been proposed. For the more able, however, the development of trade and technical schools and a reorganization of secondary education along modern lines are advocated.

To enable the poor pupil of parts to continue his education as far as possible it is urged not only that scholarships should be offered, but that maintenance grants be given and allowances to parents to compensate them for loss of wages. The proposals for the reorganization of secondary education are made largely with importance of articulation in mind,[3] while the better adjustment of the elementary schools to vocational preparation is also receiving considerable attention. These points of view merely indicate that the elementary school can not be organized without reference to the broader needs of the nation.[4]

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[1] Crémieux, A. De l'école primaire au lycée. *Revue Universitaire,* 27, 1, April, 1918, pp. 280ff.

[2] Clavière, J. L'enseignement national après la guerre. *Revue Universitaire,* vol. 25, 2, p. 64.

[3] Bounhiol, J. P. Les leçons de la guerre pour l'enseignement secondaire. *La Grande Revue,* vol. 94, p. 485.

[4] Une programme d'éducation nationale. *Revue Universitaire,* vol. 26, 1, pp. 306f.

The project for a continuation school law to which reference was made in the last report of the Commissioner of Education has not yet been passed, but seems to be exercising some influence already. At Corbie the local manufacturers have posted notices to the effect that they would employ young persons leaving the elementary schools with the certificate of studies, and allow them to attend the local higher primary school for three years, providing tuition, books, apparatus, and even maintenance grants. On leaving these schools the pupils would enter the factories as apprentices for two or three years, during which they would continue to attend school three times a week for general and technical instruction during working hours and without loss of pay. The abler among them would be sent on to schools of arts and crafts, receiving maintenance allowances and tuition during their period of study. The parents would be under no obligation to the employers except to permit them to control the educational progress of the young employees, so that "they may become active, hardy, enterprising, and proud of their country."[1]

SECONDARY EDUCATION OF GIRLS.[2]

The changes brought about by the war in the position of women have made the reorganization of secondary education of girls a question of vital importance. As in other countries women have taken the place of men in every walk of life, and have proved themselves equal to most tasks, but the change in the social tradition has been more revolutionary in France than elsewhere. It is recognized that not only the professions but positions of leadership in commerce and industry must in the future be opened to women on an equal footing with men. Women have been admitted for some time to the practice of law and medicine, and new careers are constantly being made accessible to them. In the field of commerce where women are expected to find considerable scope in the future the Chamber of Commerce of Paris has opened the École commerciale des jeunes filles which will give a three-year course, including preparation not merely for subordinate clerical positions but for the more important work of management. The École pratique de haute enseignement commercial pour les jeunes filles at the Conservatoire des arts et métiers in Paris

[1] *Revue Pédagogique*, vol. 72, pp. 74f.

[2] See especially:

Bernes, H. La réforme de l'enseignement secondaire des jeunes filles. *L'Enseignement Secondaire*, July-October, 1916, pp. 61ff; La question de l'enseignement secondaire des jeunes filles. *Ibid.*, November-December, 1916, pp. 77ff.

La réforme de l'enseignement secondaire des jeunes filles. *Revue Internationale*, 203ff.

Projets relatifs à l'enseignement secondaire des jeunes filles. *Revue Internationale de l'Enseignement*, vol. 71, pp. 47ff.

offers similar opportunities. Schools and institutions hitherto restricted to men have now opened their doors to women. These include the École centrale des arts et manufactures, the Institut agronomique, the École de l' horlogerie, and the École de physique.[1]

These developments have led to a demand for reform of the system of secondary education, which as organized under the law of 1882 is adapted chiefly for girls of the wealthy middle classes who do not expect to enter a profession or career of any kind, but desire a general education, leading to a diplôme de fin d' études, which, however, has no official value.

Private schools, however, offered facilities for the preparation of girls for the baccalaureate, while in a few cases some schools for boys admitted girls for advanced work. The proposals take the form of a demand either for secondary education of the same type as that for boys or a new and extended organization of the existing system. The objection to the first suggestion is that the basis of the lyceés and the colleges for boys is not sufficiently broad and that the majority of girls at present do not desire a preparation that leads only to the universities and professions. It is also felt that while the secondary schools for boys are being subjected to criticism and discussion, it would not be advisable to copy them.[2] The difficulty in the way of the second proposal is the national tradition of privileges, certificates, and examinations which mark the end of a school course. A third suggestion, that a new section of the examination for the baccalaureate be created, is rejected as introducing too much differentiation and leading as a consequence to much confusion, while its establishment would probably have the effect of ousting or lowering the standard of the present diploma. The problem involves, therefore, not so much the reorganization of girls' schools as the nature of the educational and other privileges (*sanctions*) to which it will lead.

In December, 1916, a Project relatif à l'enseignement secondaire des jeunes filles was presented to the Conseil supérieur de l'instruction publique, in which it was pointed out that any radical change in the system of secondary education of girls would require parliamentary action. The plan presented in the projet was based on the existing organization in the expectation that the reform could be effected by administrative machinery. The problem was to bring the diplôme de fin d'études into harmony with modern needs and to give it a value equal to that of the baccalaureat. The projet recommends the beginning of secondary education at the age of 11 instead of 12, as under the present system, thus extending the existing course to six instead of five years. The course is still to be divided into two

[1] *Revue Universitaire*, vol. 26, 1, pp. 66f; vol. 26, 2, pp. 59ff; *L'Enseignement Secondaire*, 1917, p. 73.

[2] *Revue Internationale de l'Enseignement*, loc. cit., vol. 71, p. 51.

parts—one of four years closing with the certificat d'études secondaires, and the other two years culminating in an examination for the diplôme de fin d'études. Except for those students who desire to take the baccalauréat with Latin the work is to be the same for all and is to include morals and psychology, French langauge and literature, modern languages, history, geography, mathematics and science, drawing, and gymnastics. It is suggested that a seventh year be added for those who desire to study for the second part of the baccalauréat or to continue a special general and cultural course or to prepare for any of the new careers open for women in administration, commerce, finance, industry, and the civil services.

It was thought by the framers of the projet, who claimed to have canvassed teachers and associations of parents, that by this plan the diploma could be given the same sanction as the baccalauréat and that with some modifications those who desired could specialize for the Latin or science sections. The introduction of the projet was opposed, however, as illegal unless passed by parliament. It was urged that the conseil supérieur could not introduce it as an administrative measure. Accordingly, the minister of public instruction, M. Viviani, at the close of 1916, established a commission to inquire into the modifications needed in the organization of studies and privileges for the secondary education of girls.[1]

M. Camille See,[2] the author of the law of December 21, 1880, in his evidence before this commission on January 19, 1918, pointed out that the original intention of the law was a secondary school for girls giving a seven-year course, divided into two cycles of four and three years, respectively, and leading to the diploma of secondary studies. The fundamental course was to be so organized that by the addition of elective subjects pupils would have been able to enjoy the same curricula as those offered since 1902 in the boys' schools. He mentioned that he had also advocated in 1878 the establishment of technical courses leading to scientific institutions. The present proposals, in his opinion, only represented a return to the spirit of the law of 1880, which had been overridden by an administrative regulation of January 14, 1882.

The commission issued a questionnaire, covering the following topics, to educational authorities and parents' associations:

Should the education of girls bear a distinctive character in organization and curriculum?

What amount of time should be given, consistent with the requirements of health, to intellectual studies?

[1] Commission extraparlementaire chargée d'examiner les modifications à apporter à l'organization des études et à la sanction de l'enseignement secondaire publique des jeunes filles.

[2] See *L'Enseignement Secondaire des Jeunes Filles*, May 15, 1918, pp. 193ff., and June 15, 1918, pp. 241ff.

What modifications are needed in the curriculum? Should room be found for domestic science, hygiene, and physical and practical technical training?

Should the diplôme de fin d'études be retained or changed, and what should be its relation to the baccalaureate?

When, if at all, should Latin be begun?

A subcommittee of the commission drew up a number of recommendations which are now being considered by all the members. The chief recommendations are as follows:[1]

1. The education of girls needs a new organization and appropriate program of studies.

2. The schools shall be organized in two cycles, the first of four years, the second of two. The course shall begin at the age of 12.

3. In the first cycle the school day shall be of four hours; in the second cycle of five hours.

4. Fourteen hours a week shall be given to compulsory subjects in the first cycle; 17 hours in the second.

5. An important and compulsory place shall be given to studies appropriate for girls (household arts and hygiene), practical work, and physical training.

6. The six years' course shall be brought to a conclusion in an examination on the work of the last year, leading to a diplôme de fin d'études, equivalent to the first part of the baccalaureate.

7. As many careers as possible shall be open to girls holding this diploma.

One of the burning questions in the secondary education of girls is whether Latin shall be included in the reorganization. The commission will probably favor its inclusion for those who desire it. It is also proposed that a seventh year be provided in the organization for girls who wish to complete the baccalaureate to enter the universities or to prepare for a professional career.

SECONDARY EDUCATION OF BOYS.

The war has directed considerable attention to the system of secondary education for boys, and more discussion has probably centered around this problem than around any other. The education of adolescents gives rise to a large number of questions. If the schools are to play an important part in the restoration of the country, and if a new generation is to be built up to repair the ruins of the past four years, it is urged that the whole structure of adolescent education must be revised with a view to differentiation. The suggestions for the improvement of elementary education have already been discussed; the proposals for the extension of a part-time compulsory attendance were referred to in the report of the Commissioner of Education for 1916; the vital questions of the moment concern not merely the administrative reorganization of the secondary schools but the fundamental reconsideration of the principles on which their curricula are based. These questions resolve themselves, when

[1] *Revue Universitaire*, loc. cit., vol. 25, 2, p. 215.

examined, into the problem of better articulation with other institutions, elementary and higher, the problem of creating increased opportunities for able pupils, and into the problem of revising the curricula and methods of the secondary schools to meet modern needs and demands.[1]

The problem of articulation has already been referred to and the suggestions for selecting the abler pupils from the elementary schools for advancement to higher education have been mentioned. It is pointed out by the critics of the existing system that the reorganization of 1902 was based in part on a desire to meet social needs, and to this end the beginning of secondary education proper was postponed to 11 in order to encourage more boys to enter from the elementary schools. The division into cycles was based on the desire of opening the way for the transfer of pupils from the higher primary schools. It is proved statistically by M. Brelet[2] that neither of these purposes has been attained. In spite of the offer of scholarships pupils of the elementary schools do not present themselves as candidates in any large number mainly because the curriculum of the higher primary schools is better adapted to their needs. Nor do the pupils from the higher primary schools flock to the secondary schools to avail themselves of the opportunity of completing the second cycle and the requirements for the baccalauréat. The few who are transferred find themselves handicapped, for three of the four available courses of the second cycle are closed to them because of their inadequate preparation in languages. From another point of view it is also proved statistically that the division into cycles is not warranted either by social or educational needs. The justifications for the division were, first, to encourage pupils to transfer from the higher primary schools, and, secondly, to enable pupils to leave at the close of the first cycle after completing a definite round of knowledge. Statistically it is shown that very few pupils leave at the end of the fourth year (in 1910 only 965 out of 9,236), fewer in fact than at the close of any other year of the whole course. On these grounds, therefore, new principles must be sought for the reorganization of the secondary school, taking into account not merely its educational purpose and function, but its relation to other institutions.[3]

The criticism of the present organization of the curriculum of the secondary schools is more widespread and more radical than is that of its administrative aspect. Education in France, it is argued, sets up false standards and is founded on false principles. France was

[1] Besch, E. Le lycée et l'école primaire. *Revue Universitaire,* vol. 27, 1, pp. 324ff. Brelet, H. L'enseignement secondaire et la réforme de 1902. *Revue de l'Enseignement,* vol. 70, pp. 254ff; L'enseignement secondaire, ce qu'il doit être. *Ibid.,* vol. 71, pp. 361ff.

[2] Brelet, H. *Revue Internationale de l'Enseignement,* vol. 70, p. 266; *Revue Universitaire,* vol. 27, 1, p. 145f; pp. 224ff.

[3] See Brelet. *Loc. cit.*

before the Great War a huge diploma factory and the eduactional horizon for every student is bounded by the diploma or the sanction that it carries. The universal test of individual worth is the possession of a certificate. M. Lavisse, in a letter published on January 1, 1918, writes:

> We suffered before this war from these bad habits in all branches of education. All of us were more or less the slaves of the examination. The examination was the director general of public instruction. But the examination is a detestable director.[1]

The result of this worship of paper qualifications is seen in the character of the syllabi and in the methods of instruction. The curriculum of the secondary schools is overcrowded; the energies and attention of the pupils are dispersed. The emphasis is placed on the acquisition rather than the assimilation of knowledge, on making the brain a storehouse rather than an instrument or tool.[2] That is the necessary result of the preparation for recurring examinations instead of directing effort to the development of activity, judgment, and personality. Erudition, borrowed from the Germans, and bookishness have taken the place of intelligent observation, intellectual curiosity, and contact with the needs of modern life. The product of the secondary schools of to-day, it is charged, is a sort of lay priest, living a life of his own, removed from social activity, and ignorant of the needs of society.[3]

Fundamentally the problem is one of reconciling the old and the new cultures. The prevailing curriculum is merely a collection of subjects devised by specialists from their own point of view instead of a coordinated whole organized with a view to modern requirements.[4] Even the so-called practical courses, for example, in the sciences, that were introduced by the reform of 1902 are bookish and academic and but little related to present demands.

While there is considerable unanimity in these criticisms, there is a parting of the ways when the proposals for reorganization are put forward. Two points of view can readily be distinguished. The one would turn the schools of France into trade and technical institutions and put the traditional elements on one side;[5] the other, recognizing the defects of the present secondary school, would aim at introducing a new spirit responsive to modern requirements, while

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[1] Quoted in *L'Enseignement Secondaire*, July-December, 1918, p. 45. See also Faury, A. La guerre et l'esprit française. *La Grande Revue*, vol. 94, pp. 400ff.

[2] Bounhiol, J. P. Les leçons de la guerre pour l'enseignement secondaire. *La Grande Revue*, vol. 94, p. 487.

Brelet, H. *Revue Internationale de l'Enseignement, loc. cit.;* vol. 71, p. 487.

[3] Parthault. Pour une orientation pratique. *La Grand Revue*, vol. 94, pp. 534ff.

Perrotin, L. *L'enseignement Secondaire*, July–December, 1918, p. 45f.

[4] Bounhiol. *Loc. cit.*, p. 485.

[5] Hersent, G. *Le réforme de l'éducation nationale.* Paris, 1917. Une programme de l'éducation nationale. *Revue Universitaire*, vol. 27, pp. 306f.

retaining and emphasizing general education.[1] Both sides agree with the late M. Liard that the university of France needs at present "a deep bath of realism."[2]

While it is generally conceded that France must give greater attention than hitherto to technical and vocational training in all its branches, partly to repair the losses of war, partly as a preparation for the economic competition after the war, those who take the extreme radical view of the function of education are few in number. It is recognized that the danger is great of being dazzled by Germany's rapid industrial and commercial expansion in the past 30 or 40 years and her early success in the war, both of which are attributed to her systematic technical training. But it is also admitted that the fruits of victory will have been lost if the world goes to school to Germany, and if the materialism that characterised so much of her education is allowed to predominate, in spite of her defeat. The moral and humane functions of education are in danger of being relegated into the background if the schools are turned into miniature factories in which the youth of the land will specialize narrowly for the particular vocation that they have selected. There are many of those who see the urgency of technical and industrial education who agree with the advocates of general education that the primary purpose of education must be to raise the general level of intelligence, to train men and women who understand their duties as citizens and workers, to develop individuals with breadth of mind, devotion to the ideals of the nation, and interest in social questions instead of turning out human machines functioning solely for material ends.

The problem of education is not solely one of economic production or the training of engineers, technicians, and workers, but of developing men and women. Even if it is true that the basis of modern social organization is division of labor, it becomes more essential than ever to provide and prolong that education that gives all citizens a common background of general ideas and of a culture that stresses human values. The best preparation for specialized technical training is a good and extended general education. Those who argue that a general education can be obtained from specialized training run the risk of incurring failure in both. It is pointed out that in the most difficult and most technical branch of the army, the artillery, the graduates of the secondary schools were able to master the intricacies after a very brief training. To concede the situation entirely to those who demand technical and vocational preparation

[1] Brelet, *loc. cit.; La Grande Revue,* vol. 94, pp. 396ff; pp. 471ff; pp. 512ff; pp. 534ff. Clavière, J. L'enseignement national après la guerre. *Revue Universitaire,* vol. 25, 2, pp. 64f.

[2] Bezard, J. Les leçons de la guerre dans l'enseignement secondaire. *La Grande Revue,* vol. 94, p. 465.

would involve a betrayal of the ideals for which the world has been fighting to the dangers of barbarism and materialism.[1]

The real issue is, therefore, how to modernize the general education that is considered almost universally to be essential, how to redefine culture in modern terms, how to organize a liberal education adapted to the needs of modern society. As in Great Britain and Germany this problem resolves itself into a consideration of the value of the classics. Those who argue that the French and French culture are Celtic in origin would at once abandon the classics. The majority of those who discuss this question, however, are agreed that French culture is continuous with Latin, and that Latin must, therefore, be the basis of an education that aims to impart French culture, to strengthen the French points of view, and to fortify national ideals.[2] A classical education, it is felt by many, is all the more necessary to-day as the source of an ideal of humanity which is essential for the development of moral ideas and the evolution of society. The failure of classical education has not been inherent in the subjects taught, but in the methods employed, in the emphasis on erudition rather than on their spirit. It is even suggested that the Latinless course be eliminated from the secondary schools and relegated to the higher primary schools.

There is, on the other hand, a very pronounced opinion that in a scientific age, the sciences must form an important part of a liberal education. It is urged, however, that since science has no conscience and may serve a bad as well as a good cause, the emphasis in education should be placed on the relation of science to human welfare.[3] The greater extent to which an individual acquires a knowledge of the world of nature and of its manifestations, the nearer he approaches to a conception of his own place as a member of human society. It is conceded that the secondary schools may have neglected the sciences. but that does not establish its claim to absorb the whole of the curriculum. On this basis it is probable that, as in England, there will be no difficulty in reconciling the demands of the classicists and scientists. The reorganization of secondary education will demand the harmonious development side by side of the humanities and the sciences. A general secondary education will include, therefore, French, the classics, with exemptions for those unable to profit by them, modern languages, history and geography, mathematics and science, and philosophy. Specialization should be delayed as long as possible and be based on a general education of this character.[4] Such an education, it is argued, will reconcile the old and the new,

[1] Pécaut, F. La guerre et les pédagogues. *Revue Pédagogique*, pp. 512ff.

[2] See references in note 1, p. 15.

[3] Bezard, J. Les leçons de la guerre dans l'enseignement secondaire. *Le Grande Revue*, vol. 94, pp. 465ff.

[4] Bounhiol. *Loc. cit.*, pp. 480ff.

the cultural and the utilitarian, the humanities and the sciences. On the basis of an education of this type those who are to become the nation's leaders can be trained, well prepared intellectually to meet the demands of modern society. Such an education should aim to develop not encyclopedists or academic scholars, but men of physical, moral, and intellectual strength. The function of secondary education would, therefore, be selective, to train the élite from all social classes to the position of leadership,[1] for as M. Steeg stated in presenting the budget of the Ministry of Education in 1911: "That an élite is necessary, it is not for democracy to deny; that an élite is necessary not only to maintain the prestige of society, but for the direction of the nation—on this point, I believe, that we can come to an agreement. The object of secondary education is the intellectual training of an élite which is destined to become directive and which must be prepared for its social rôle."[2]

[1] Besch. Le lycée et l'école primaire. *Revue Universitaire,* vol. 27, 1, p. 325.
[2] Brelet. *Loc. cit.,* vol. 71, p. 374.

CHAPTER IV.

EDUCATION IN ITALY.

By WALTER A. MONTGOMERY,

Specialist in Foreign Educational Systems, Bureau of Education.

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I. INTRODUCTION.

The economic and social exigencies brought about for Italy by her entrance into the war in May, 1915, inevitably led her educational thinkers to submit her traditional system of education to more careful scrutiny than ever before, and to recognize how inadequate it was along certain lines to meet the demands thrust upon it by the new conditions. The first results of the consequent attempt at readjustment were seen in the enlarged scope given the schools—the teachers, the pupils, and the buildings—and in their vigorous cooperation with the nation-wide organizations founded to minister to the immediate needs of the refugees from the invaded Provinces, to relieve the families of men called to the service, and to supply school facilities to an overwhelming influx of pupils. The local and provincial teachers became, very logically, the executive heads of much of this activity; and pronounced benefits accrued to the schools in increased respect for them and popular dependence upon them. Administrative officials, teachers, and laymen interested in education were not slow in taking advantage of the new strategic position of the schools to initiate a propaganda of reform, which, taken up by the educational and secular press, began to direct itself definitely toward legislative action. This awakening of the nation, with the impetus given to educational interest, and the consequent testing of principles and methods hitherto held sacred from all criticism, constitutes the most valuable line for the review of educational matters in Italy for the past two years. Of the projects and plans broached, some naturally failed of enactment into school law; but all show,

in their natural sequence from the lower to the higher, a uniform national desire to throw off the dead hand of traditionalism and to make education subserve the actual needs of the nation.

ILLITERACY.

Preliminary to the discussion of the elementary schools proper should come that of illiteracy, a national problem inextricably bound up with them and dependent for its solution upon their progress and betterment. The percentage of illiteracy in Italy has decreased from 68.8 in 1871, the year of the first census after the unification, to 46.7 in 1911, when, of a total population of nearly 35,000,000, approximately 16,000,000 were illiterate. Of prime ethnological and climatological significance in the study of Italian illiteracy are the facts that the Italians are spread over many varieties of climate and altitude; that of the 8,323 communes (June, 1911) only 6 were without illiterates, and only 13 had less than 1 per cent, all these being situated in northern Italy; and that 456 situated in south central and southern Italy had an illiteracy of 75 per cent and over.

Sicily and Sardinia showed the highest percentage of illiteracy; the plateau and mountain Provinces the lowest. Of 30 communes 1,500 meters and more above sea level, 16 showed an illiteracy of less than 5 per cent; 9 of less than 10 per cent: 5 of less than 20 per cent; only 1 of as much as 37 per cent. The highest commune in Italy—appropriately *il commune di Chamois*—showed a percentage of 0.9 for women and 2 for men; the lowest commune in the Kingdom, one-third of a meter above sea level, had a percentage of 57 for women and 42 for men. Of 69 chief provincial cities and towns, 5 showed 10 per cent of illiteracy and 10 more than 50 per cent. Turin had the lowest percentage, 5; Girgenti and Messina, in the extreme southern tip, had 57. The city of Rome showed 15 per cent. The minister of public instruction is seriously doing his best to overcome this chief menace to national life. For the year 1916, 4,246 night schools and 1,923 holiday schools for illiterate adults—an increase of nearly 500 in two years—accommodating approximately 100,000 men and women,[1] were authorized; and of continuation schools for semi-illiterate adults (*scuole di complemento*) nearly 1,400 were authorized for the same year, an increase of nearly 200 over those of the two years preceding. Encouraging as these figures are, however, such adult schools can never be more than palliative measures.

Italian social workers think the cure is to be found not in measures hitherto employed but in systematic increases of appropriations for elementary schools and salaries to elementary teachers. Valuable aid is anticipated from the plan adopted several years ago by the military

[1] Figures of actual enrollment are not available.

authorities, whereby illiterate soldiers, veterans as well as recruits, are to be given elementary instruction in the camps and military posts. It is feared, however, that the recently enacted law admitting illiterates of mature age to the electoral franchise will remove a great incentive to self-instruction, and prove a deplorable mistake from the point of view of combating illiteracy.

II. POPULAR EDUCATION.

(a) ELEMENTARY SCHOOLS.

The elementary schools of Italy, in 1915, enrolled 3,692,024 children between the ages of 6 and 11 years, employed 75,993 teachers, 17,243 men and 58,750 women, and cost the nation, combining central and local expenses, approximately $18,000,000.[1] They are, of course, the pivot of the entire educational system. In the judgment of Italy's progressive social workers a fair if disillusionizing estimate of their influence upon Italian life was furnished by the very unexpectedly high rate of illiteracy, or practical illiteracy, shown in the youth registered for the armies since May, 1916. Many such had had one or more years' schooling in the elementary schools. Acting on this stimulus, a definite move began for the complete reconstruction of the entire lower public school system. Among the most fruitful suggestions made by such bodies as the National Union of Italian Teachers, approved by the minister, and commended by the committee on education in the Chamber of Deputies were the following:

1. The term of years for the courses of the elementary school should be shortened to four years at most; the subjects taught modified in content and scope, and adapted to the comprehension and advancement of the pupils. Fewer subjects should be taught, and these should be taught well. The traditional repetition of programs and schedules should at once be eliminated; and subjects divided into definitely briefer assignments, adapted to the capacity of the pupil.

2. The number of pupils in each class under one teacher should be restricted to 25.

3. School attendance should be absolutely obligatory between definitely prescribed school age limits. This should be rigorously enforced by the civil authorities, with a graduated scale of fines for delinquent parents and guardians.

4. With the improvement in teaching thus demanded, teachers' salaries should be raised from the prevailing average of 200 lire ($40.00) per month to at least twice that amount, and this increase

[1] Expenses of public elementary instruction are for 1916–17.

should be accompanied by an emphasis upon the quality and standing of the teacher in popular estimation. The elementary teacher should be required to have a teacher's diploma.

5. On the administrative side, more efficient operation of the system of inspectors should be secured by a diminution in the number of vice-inspectors from the present 1,000 to 600, and the increase of the full inspectors from 400 to 600, promotion being restricted to members of the lower grade and made solely on the basis of merit and service. The jurisdiction of either grade should be limited to 30 communes at most. Vice-inspectors should be relieved of all teaching functions, and should be required to devote their attention exclusively to the supervising duties in the zones assigned.

6. Fundamental to all these, greater local power should be granted the communes in the management of the elementary schools, and in the adjustment of courses to local needs and conditions. The subjects taught in remote rural schools should be sharply differentiated from those taught in cities and populous towns.

In furtherance of this movement the Minister of Public Instruction, early in 1918, appointed a committee of inspectors and vice-inspectors, with powers to formulate a report of conditions and of recommendations. This report is awaited with very favorable interest by all the educational forces of the State.

Under the vigorous administration of Sig. Berenini, while no strictly legal reforms in elementary education were made during the past two years, the systematic attempt was made, in so far as this was possible by departmental ordinances, to bring elementary education into vital relation with the needs of every-day life, especially in the rural districts. In this connection, the peasant schools of the *Agro Romano*,[1] in a peculiar sense the ward of the State, have constituted a valuable object lesson as to the possibilities of rural schools. The report of the committee, issued in July, 1917, and covering the 10 years of the schools' existence, shows the harmonious cooperation of the State with the commune, the former working out hygienic and technical problems, the latter those of a moral and ethical nature. The population and teaching material in the *Agro Romano* was, at the inception, regarded as perhaps the most backward to be found in Italy. Beginning in 1907 with 8 schools, enrolling 340 pupils, they have grown to 73 regular schools, and 3 pre-schools (*infantili asili*), enrolling and partly feeding 3,220 pupils. Furthermore, 14 State and communal upper elementary schools combined exist in communities where the original elementary lower schools began operation. These schools are of four types, regular day, vacation, night (for adults), and *infantili asili*. They have rendered through their teach-

[1] The strip of the Campagna lying north and west of Rome, covering an area of about 75 square miles.

ing staff increasingly effective assistance to destitute families and those of men called to the service, and their buildings have served as gathering places in the civic life of the community. These schools have the definite aim of preparing the pupils for their environment, to improve it, and to train them in agricultural pursuits, in building better homes, and in improving means of communication. Especial attention is called in the report to the efficiency of the system of inspection of these schools.

The direct attention focused by the minister of public instruction upon elementary education has been accompanied by marked success in keeping before the Italian people the vital importance of the schools during the period of national stress. The enrollment in elementary education, by the figures of January 1, 1916, exceeded by more than 500,000 that of the preceding year, and on an estimated gain in population of approximately a million. The branches of education related to the elementary, such as the *asili*, the kindergartens, the auxiliary schools, communal and private, and the parents' associations, have all shared in the benefits of this awakening, and all have been reenforced by private initiative.

A culmination to the active efforts of the Italian Federation of Popular Libraries was seen in the royal decree of May, 1918, making compulsory a library of at least 50 volumes in each elementary school, to be purchased and maintained by the State and commune jointly. It is hoped that this compulsory popular library may become the nucleus for a system of popular education for the older members of the community; that, by means of large increase in the existing grant devoted to popular and school libraries, and a place set apart for the library in each new school, popular extrascholastic classes may be held; that for teachers of such schools recourse may be had, in small rural communities, to such educated persons as there may be in the vicinity, while help may be given by teachers from neighboring towns; and that ultimately attendance at such classes may be made obligatory up to the age of 18.

(b) SCUOLE POPOLARE; RURAL SCHOOLS.

The putting of the *scuole popolare* into operation is the most striking advance made in the field of Italian education during the past two years. The legal enactment constituting them was the result of an organic growth, combining features of the plans submitted by the Minister of Industry, Commerce, and Labor, in December, 1916, and by Sig. Ruffini, then Minister of Public Instruction, in February, 1917. Their compositely social and educational character is well illustrated by the history of the origin and passage of the

law establishing them. The salient points of the *scuole popolare*, both in organization and aims, are as follows:

1. The Government, with the consent of the local school council and the communes, was instructed to found a new type of school based upon the completion of the fifth and sixth elementary classes, and offering instruction of special and vocational character, as well as a development of the courses in the basic subjects, especially arithmetic and practical geometry, drawing, and the elements of physical and applied natural sciences. Such schools were to cover three years additional to the elementary schools, and in the case of communes reserving to themselves the management of the elementary schools, the power of further amplifying the *scuole popolare* was granted.

2. The entire three years' course was to take the name of *scuole popolare*, be recognized as an institution of public instruction in legal standing, and governed by special statute approved by royal decree on the recommendation of the minister. The teaching staff and the program of special and general courses were to be determined by the statute embodying the school. Courses in agriculture, horticulture, agricultural economics, and whatsoever other scientific pursuits were adapted to the climate and needs of the individual locality were to be fostered and taught intensively. Only those teachers that should have pursued special training courses in the subjects they were assigned to teach should be elected to the *scuole popolare*, and only upon the passing of examinations thereon. To be nominated as teacher of Italian, history, and civil ethics, geometry and arithmetic, the teacher must hold the diploma of the normal school or have served at least five years satisfactorily in the elementary public schools. The minimum salary of teachers in the *scuole popolare* was fixed at 2,000 lire ($400) for communes having over 20,000 inhabitants and at 1,500 lire ($300) for communes having less. The weekly schedule of instruction required of each teacher was to be 24 hours. For hours exceeding this he was to receive additional compensation of 80 lire ($16) per annum for each hour, and for hours falling below he was to be required to render such assistance as the giunta of the commune should direct.

3. For admission to the *scuole popolare* the usual *maturitá* examinations required for admission to the first class of the middle and complementary schools should not be valid. Only students completing in actual residence the work of the lower elementary school and passing the promotion examination of the fifth elementary grade were to be admitted to them. Students completing the work of the *scuole popolare* were to be admitted to the first classes of the technical and complementary schools upon the examinations and conditions fixed by the ministerial regulation. The leaving certificate of the *scuole popolare* should be recognized as equivalent to the

leaving certificate of technical schools for admission to posts in various branches of the public service.

Rules governing the passage of certificated students from the *scoule popolare* to the agricultural and vocational middle schools were to be fixed by royal decree on the recommendation of the Ministers of Public Instruction and of Agriculture, Industry, and Commerce.

To sum up: The *scuole popolare* are essentially rural and scientific, of considerable freedom in courses and schedules, supported by the commune and the State jointly, largely autonomous, and in the nature of continuation schools, being, in the words of Minister Berenini, "a bridge between the elementary and the vocational and technical schools." They are designed primarily for children hitherto unable through economic stress to continue in school. Scientific and vocational advantages, hitherto offered only in schools of higher grade and at a distance, are now brought within local reach.

An interesting phase of the *scuole popolare* is afforded in the tentative plans for the establishment of a marine popular school at Venice. As outlined, this school is designed to impart instruction in elementary navigation, making and managing boats, pisciculture in the various phases shown in particular localities, and devices for catching, conserving, and transporting of fish. Promising pupils will be afforded aid in proceeding on to higher technical marine schools already established.

(c) RURAL SCHOOLS.

A distinct move for the establishment of rural schools of elementary grade, below the *scuole popolare*, but offering advantages akin to them, was launched at a meeting of the National Teachers' Union for Popular Education, held in Rome in May, 1918. The discussion was participated in by representatives of the Association for the Interests of Southern Italy, by the director and the Commission for the Peasant Schools of the *Agro Romano*, the school press, and many students of the needs of the rural population. Resolutions were passed calling for the recognition by the Government of the difference of the rural schools from the urban, the need of reducing studies and hours, of limiting the number of pupils under one teacher to 40, and of diminishing the number of holidays, the obligatory establishment of four grades with enforced compulsory attendance, assistance to needy children, increased salaries for teachers, attention to their physical health and comfort, and the naming of a special commission to study the conditions of the schools and children of the rural districts. Such a move marks a distinct advance in educational thought and administration, by which atten-

tion was first called on Italian soil to the essential difference between the problems of the city and country schools.

Closely related is the subject of agricultural instruction in the elementary schools, about which much discussion has centered within the past two years. There has been a growing feeling that aside from the lack or coordination between the subjects taught in the elementary rural schools and the environment of the rural children, there is also a very pronounced hiatus in the system between the lower agricultural schools and the elementary schools, by which many children naturally inclined to the study of applied agriculture have no opportunity or encouragement to pursue it. The clear-cut demand voiced in many quarters for the establishment of distinctive rural schools has, in a degree, taken the place of a move for the development of the elementary schools along specifically agricultural lines, being popularly regarded as a substitute for these. Yet many persons interested in education have pointed out that, while each project has its peculiar advantages, the incorporation of elementary agricultural and horticultural courses in the already existent elementary schools is more practical, reaches a larger proportion of pupils, and can be more speedily put into operation, with far less expense and difficulty of adjustment of teachers and courses than would be possible with the distinctive rural schools projected. A foreshadowing of this will be seen below in the section devoted to the training of teachers, where it is emphasized that preparation for imparting instruction in sciences adapted to local needs has been given a prominent place in the new teachers' courses.

(d) AGRICULTURAL SCHOOLS.

By royal decree of 1907 elementary schools of agriculture were established with the aim of preparing students for intermediate and advanced institutions. They offer a three years' course in Italian, language, history, and geography, mathematics and applied geometry, surveying, drawing, calculation, elementary physical and natural sciences, and in the last year intensive training in agriculture and related industries. In 1917 there were 29 of these, only one of which was for women. They are situated in larger centers, enroll local students almost exclusively, and do not especially appeal to rural students. On the latter account, some dissatisfaction has been expressed with them, and plans have been projected to remove them from their town and urban surroundings, and transplant them to sites where experimental farms and first-hand study of concrete problems may be feasible. Such removals would also afford valuable object lessons for the native rural population, as showing the desire of the Government to become acquainted with and to remedy back-

ward conditions in remote communities. It was largely out of this dissatisfaction that the demand for the establishment of rural schools and agricultural courses in the elementary rural schools grew.

The entire subject of agricultural instruction, in all its grades, has drawn unprecedented impetus from the growing conviction brought home to the nation by the war that in the economic and social reconstruction after the war agriculture must play the largest part, and, furthermore, that if education is to be nationalized, the start must be made by giving the study of agriculture the most prominent place in the schools. Thus the different phases of the discussion of agriculture in the schools are but interrelated branches of the one uniform and urgent problem.

(e) VOCATIONAL SCHOOLS.

The auspicious start made toward building up a complete system of vocational training by the provisions of the law secured by Minister de Nava, in 1912, has not been followed by satisfactory actual results. That law called for the establishment of one elementary vocational school based immediately upon the lower elementary schools in each commune of 10,000 or more inhabitants, excluding the larger cities. There are estimated to be 800 such communes; and as the aggregate expense, amounting to 13,000,000 lire ($2,600,000), was from the first a deterrent to the execution of the law, only a few have been established in the most progressive communes. Another article in the law provided for the establishment of vocational schools for the advanced training of young workmen from 13 to 18 years who have attended the upper elementary schools or have had practical apprentice instruction for two years in addition to the leaving certificate of the lower elementary schools. It is estimated that the number of these youths is approximately a million, and that to establish and adequately equip the necessary number of such schools at least 5,000,000 lire additional would be required. Attention has repeatedly been called by social workers to the great good such schools would do; and it is to be hoped that among the first tasks undertaken in the reconstruction of Italy's school system after the war will be the revival of the De Nava law on vocational education.

An interesting experiment in lowering the age and requirements necessary for pupils to enter essentially vocational schools has been made near Castillo, in Umbria, for boys of the invaded district between 9 and 14 years. Organized under the legal title of *Colonie dei Giovine Lavoratori*, and by private beneficence, the project was regarded as of such social significance that an original grant of 75,000 lire ($15,000), supplemented by subsequent ones, was made by the Minister of Arms and Munitions, and later increased by

subscriptions from the American Red Cross and private benefactions. The first *colonia* to be established has for its scope to secure tracts of unused land, to organize the labor of the boys applying for entrance, and to offer not only agricultural courses but also, by arrangements with the industries of neighboring centers, training in trades and handicrafts. There is also contemplated an essentially instructional side in a four years' elementary course, supplemented by a two years' popular course, but of more intensive character than the *scuole popolare.* In view of the unusual circumstances of the students, especial attention to ethical training is felt to be necessary. If successful it is hoped that the Government will take over the movement, and the experiment be expanded to a chain of such *colonie.*

(f) EXTRA-SCHOLASTIC ACTIVITIES.

Signs of the awakening of the schools to national service along many lines apart from the strictly scholastic abound during the past two years. Exhibits of didactic material, manufactured by school children, have been held at various points, notably at Naples, showing both regional products and use of materials, as well as national character and utility. The real economic value, also, was plain, in view of the closing of the Italian frontiers, and the cutting off of school supplies as well as others. Amid these most adverse conditions the discovery that Italian talent was able to devise and make school-room equipment constituted a long step forward in Italy's economic emancipation. In pursuance of the project of a national system of book printing and binding set forth by a meeting of all interested in handicrafts, held at Milan in April, 1917, courses in bookbinding in certain city schools were attempted, and excellent work along this line has been exhibited. The Association of Teachers of Physical Training in Italy, meeting in June, 1917, vigorously urged definite courses in physical training and especially that sports be incorporated in the elementary schools. The latter demand drew unexpected impetus from the physical training imparted recruits, with the consequent radical improvement in physique and morale. Advocates of the movement claimed to see in the final triumph on the Piave the manifest proof of the value of sports and athletics. Schools of child welfare have been established at various points, generally in connection with orphanages and *asili* for destitute children from the invaded regions. Their aim has been to give a practical and solid basis of training to all persons intrusted with the care of children, to diffuse a knowledge of the rules of hygiene among the women of Italy, especially in the crowded centers and in remote sections, and thus to combat Italy's high rate of infant mortality. While not under the control of the Government, these schools have

had its cordial encouragement and frequent subsidies for certain lines of investigation, and they have exercised a definite reciprocal effect upon the official system of public instruction.

(g) HOSPITAL SCHOOLS FOR WOUNDED ITALIAN SOLDIERS.

Wounded Italian soldiers were given elementary instruction in hospital schools at various points, conducted by teachers assigned from the public schools and by volunteers. Chief of these were the schools at Milan and Naples, which led the way in securing governmental inspection and concession of the right of examinations for the third-grade finishing certificate of the elementary schools. The work was organized along the two lines of instruction for total illiterates, and for backward soldiers of mental advancement measured by the work of the fifth and sixth elementary. Classes in choral singing were introduced with the aim of discovering wounded men of musical abilities and training them for popular choral instruction. Marked interest was aroused among the pupils of the public schools by a governmental appeal for voluntary contributions to a permanent fund for reeducation work among the soldiers. Practically every elementary school in the Kingdom contributed.

Accounts of this eminently successful work are of real pedagogical value to students of the relative capacities and aptitudes of children and adults. The following extracts are taken from the account of Signorina Paltrinieri, one of the teachers in the Milan school, who has best outlined the spirit and significance of this work in the life of the nation:

> These schools were not for the physical rehabilitation of the wounded, nor for their training in trades and crafts; they were for the teaching of book subjects and for adults, most of whom, even the youngest, would seem beyond the plastic age. And yet the results were amazing.
>
> As regards the teaching material, all were peasants or drawn from the lowest urban classes, economically and socially. Most were unable to read and write, though many had attended one or more of the first three grades of the elementary schools, but had dropped out and had forgotten practically all they had ever learned. The distinctive characteristic common to all was the intense desire to retrieve lost time and opportunities. The hospital schoolroom was not only crowded during school hours, but was after hours a center for those wishing to finish tasks and to talk over problems connected with the lessons. There were many points of difference between the ordinary school urchin and these feverishly ardent boys of larger growth. These soldier pupils forgot that the day was a holiday. They always had in the bookbag the book and copybook and pencil needed and were always proof against such distractions as impede the usual elementary school. To them the conquering of the task in hand was the vital point.
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> The reasons given by the soldier pupils for their ignorance were strikingly illuminating for the life and psychology of the people; the schoolhouse was too far from home, the boy had no good clothes, the family could not or would

not get along without his earnings, etc. With yet others plain laziness and loafing, confessed with boyish ingeniousness, made them shirk, and they quit school as soon as possible. "If my daddy (pare) had only given me a sound licking and marched me off to school" was the most common lament, voiced in all the dialects of Italy.

In point of *intelligence*, pure and simple, the child has an undoubted advantage over the adult. His mind is fresh, open, ready to receive the stamp upon the proverbial wax. The adult is what he is. We can make him better; we can change the directions of his thoughts and ideas; but mold him as we will—no.

In *application*, of course, the adult has the indisputable advantage. He knows the hours for lessons are limited. He is determined to get the very most out of them. His attention is seldom distracted. Even distinguished visitors—so eagerly welcomed by children—can not break the severe and imperturbable calm of these soldier pupils. Visitors pass from bench to bench, smiling, enthusiastic, patronizing. These model pupils look up, answer respectfully, smile from the depths of those inscrutable eyes—and even before the disturbing element is well out of the room have plunged again into their tasks.

As regards the *will*, this is the wedge for the adult. By dint of patience, of study, of determination, they do the impossible. The will, too, acts powerfully on their physical condition. Men, wounded in the right hand, grasped the pen and guiding the wounded member with the sound one, day by day by desperate efforts gained freedom of movement. Men with head wounds suffered terribly under certain atmospheric conditions, but they never missed school.

In *experience of life* and *stock of ideas* no comparison is possible. Other considerations apart, an enormous saving of time and energy was found in not having to explain the ordinary phenomena of life to the adult, as has to be done with the child. The adult applies everything as he progresses. In point of *stock of words*, however, the child does not differ so markedly from the illiterate adult. The Italian peasant, no matter of what dialect, has an extremely limited vocabulary. So has the child. But the child is always, consciously and unconsciously, enlarging his stock of words; the adult is content with what he has.

Coming now to the application of these diverse mental aptitudes to the acquisition of school subjects, less difficulty in *direction* was encountered by the child than by the adult. The child has a *tabula rasa* of a mind. He hears a sound clear and distinct. He does not confuse it with other sounds. It does not start in him a train of kindred concepts. He puts down what he hears. The adult, on the other hand, hears a sound; it awakens innumerable dormant associations. His dialect is another ever-present obstacle. The struggle to cut these away is unceasingly hard. Repetition, untiring repetition by teacher and pupil, is indispensable.

On the subject of *composition* for literary form the child's composition is better; for subject matter, the adults. A soldier had for some time been in an agony of suspense at not hearing from home. One day he had assigned to him as a theme to write a letter home asking some favor. He fell to work and wrote desperately, the teacher watching him. The letter was full of ardent affection, of deep grief, of hope, of encouragement to his dear ones, but on the theme assigned nothing. He protested with emotion that he could not write to ask a favor of poor folk who had hardly a roof over their heads.

In *arithmetic* and *calculation*, as is to be expected, the adult far outstrips the child. No time is wasted on the tables with soldiers—that inexhaustible fountainhead of wasted time for children. The man does the problem, does it

correctly, verifies it, out of some incident in his old trade or calling and goes on acquiring new facility.

In *penmanshp* and *drawing*, as between the man and the child, the adult has a hardness of muscle, the child a weakness of hand. The man has the better trained eye and sense of proportion, the child a singleness of vision and an ability to isolate the object.

In *reading*, the adult has advantages of application that enable him to do in two or three months what it takes the child a year to do. The intensive drill upon individual letters is feasible and fruitful with adults, being a drill soldier pupils enjoy and continue after hours.

As regards the *explanation of passages read*, adults make a better showing than children. The quicker witted and more attentive the child is, the more does he tend to repeat the words of the original. The adult, on the contrary, changes, adapts, discourses on it, if he is talkative, brings it to the touchstone of his own experience, approves or rebukes, in brief, incorporates it into his mental life.

So with *grammar*, with *history*, with *geography*, with *oral arithmetic*, with the elements of *physical sciences*, each one chronicles a series of victories for the adult over the child. Take the field of history. The child thinks the reign of Servius Tullius the least interesting of all; the adult, though a peasant, grasps the force of its economic and social changes. The child will glibly tell of the exile of Charles Albert, adding pathetic personal touches; the man will tell of the importance of his connection with the constitution of 1848.

Now, what are the net results of this teaching of adult soldier-pupils? Illiterates, or practically such, in less than one year passed the examination *di compimento* (admission to the fifth grade). At the *Ospedale della Guastalla*, an illiterate Sicilian lad, with a severe wound in his head, from which the fragment of shell could not be extracted, and with his left side completely paralyzed, passed the examination with the following marks on a basis of 10; 8 in dictation, grammar, oral and written arithmetic; 7 in explanation of passages read; 6 in penmanship, composition, and reading.

Rather industrial than instructional in scope, but closely related is the work of the National Association for Artistic and Industrial Assistance to the Wounded and the Invalided, organized in July, 1917, and counting among its membership thousands of eminent men and women in all parts of Italy. Its aims are to forward the artistic and industrial progress of soldier pupils by governmental and local encouragement, to assist former pupils in the establishment of business, to assist in the disposal of their products for them by the establishment of provincial and urban magazines, to enlist the active cooperation of eminent artists in all parts of Italy, and to organize committees in every part of Italy. The work of the association has been of great value in spreading an interest in matters artistic among the masses of the people, and in showing them the means of developing latent talent.

(h) PROJECTED PLANS FOR SCHOOLS AFTER THE WAR.

Since early in the war steadily increasing attention has been devoted to the subjects and methods of public instruction adapted to post-war conditions. This took definite shape in the appointment,

in June, 1918, by royal decree, of a commission, headed by the Minister of Public Instruction and composed of members of the Consiglio Superiore and persons eminent in the educational life of Italy, to study and report upon the subjects and form of education adapted to the solution of the most urgent problems that will then confront the nation. The scope of this commission as a whole is practically unlimited, comprising, as it does, all forms of national, social, and educational activity. It will work by sections, one of which will have under its especial charge the study of national culture, educational and instructional. The tentative outline of the activities of the commission indicates that it will study not merely the transitory and superficial measures necessitated by disarmament, but the graver problems consequent thereon. The commission is instructed to take a historical survey of Italian school life under all its phases and to avail itself of all social and educational investigations undertaken by official and private organizations. The appointment of the commission has been received with enthusiasm by Italian teachers of all grades, who indicate an ardent wish to cooperate in all its labors.

By an interesting coincidence the composite report of the commission appeared the same week as the signing of the armistice. The plan of the several educational reforms, unanimously approved and recommended for immediate action, fell under the following heads:

1. The thorough execution of all school laws and the overhauling of the national financial system to this end.

2. The organic inclusion, within the national system of education, of kindergartens and nursery schools by means of the subsidizing or nationalizing of existing ones, and the establishment of many others.

3. The continuous construction, within the period of five years, of all school buildings lacking to the needs of population and the legal announcement of compulsory attendance upon them.

4. The establishment of at least one compulsory school of four grades in each commune.

5. The establishment of especially adapted secondary schools for the preliminary professional training of teachers.

6. The raising of the minimum salary of teachers to 3,000 lire ($600) and the investing of the teaching profession with enhanced moral and social prestige.

7. The lengthening of the school year and the requirement of the teacher to take part in civic and communal tasks.

8. The fixing of the final leaving age of pupils at 18 years.

9. The establishment of compulsory schools for illiterate adults up to 45 years.

10. The establishment, on the application of communal authorities, of popular courses, schools of hygiene and sanitation, languages, etc.

11. The subordination of the national budget to the needs of popular education, and not vice versa.

12. The paying of greater attention to woman's place in the national life, with especial regard to the needs of peasant and laboring women.

To students of education the striking feature of this move is the proof it affords that Italy conceives of no renewal of her economic life without the accompanying reform in her educational system.

III. MIDDLE SCHOOLS.

In the Italian scheme of education the *scuole medie* are held to include industrial and commercial schools, the *istituti tecnici*, the normal schools, the *ginnasi* and the *licei*.

(a) INDUSTRIAL AND COMMERCIAL SCHOOLS.

The exigencies of the war have brought out clearly the need of reform in the general group of industrial schools, occupying as these do so important a place in the practical training of the nation's youth. Especial attention began to center two years ago upon the industrial and commercial divisions, and early in 1917, by ministerial decree, the few schools of this type already in existence were developed, their numbers largely increased, and their relations with the elementary schools below and with the *istituti tecnici* above were clearly defined.

The industrial schools thus enlarged are denominated Royal Industrial Schools of the Second Grade. They are 103 in number, situated in the populous centers, and designed to offer in a four-years course the theoretical and practical knowledge necessary for the future heads of artistic and industrial manufacturing establishments. To the first class of these schools are admitted pupils having either (*a*) a certificate of promotion from the vocational schools of the 1st grade, or (*b*) the leaving certificate from the higher elementary schools, or (*c*) in the discretion of the director, those 12 years of age and presenting an examination upon selected subjects comprised in the programs of the higher elementary course. Continuous progress in the industrial school group was further sought in the new rules for the admission of pupils from the industrial schools of the 2nd grade to the more highly specialized schools of the 3d grade. For this was accepted, (*a*) the leaving certificates of the technical or

complementary school, royal or private, or (*b*) the certificate of promotion from the second to the third communal course of the Royal Institute of Fine Arts, or (*c*) certificate of promotion examination, or (*d*) the leaving certificate of a royal commercial school of the second grade with special examination on selected subjects. The 19 royal industrial or vocational schools of the third grade offer specialized courses in weaving and dyeing, silk industry, working on hides and skins, mechanics, paper industry, forestry, typography, electric engineering, and radio-telegraphy. Admission of pupils of the second grade to them also requires the certificate specifying the specialty in which the pupil has worked, or the leaving certificate of the commercial school embracing subjects continued in the royal vocational schools.

Similarly the 27 royal commercial schools of the second grade hold the same rank as the industrial, affording instruction for managers and employees of commercial pursuits, and offering a course covering four years, or, in the case of schools annexed to a royal commercial school of the third grade or advanced grade, three years. Admission to the first class of the commercial schools of the second grade is (*a*) upon completion of 10 years of age and the certificate of the *maturitá* examination from the higher elementary schools, or (*b*) the leaving certificates of the royal commercial school, or (*c*) certified three years' attendance thereon, or (*d*) in the discretion of the director, completion of 12 years of age and the passing of examination upon selected subjects of the course of the commercial school. The 11 royal commercial schools of the third grade, located in the large cities, admit only complete graduates of schools of the second grade.

By the regulation, especial attention is paid to the professional qualifications of the directors of these respective schools. The director of the industrial school shall be in immediate charge of instruction in the technical subjects and the related applied sciences. If in a women's school, the directress shall be in immediate charge of the subjects of a domestic or graphic nature, or those constituting the basis of the school's existence. Similarly, in the royal commercial school the director shall be in immediate supervision of instruction in the subjects of international commerce and trade, physical, political and commercial geography, and legal and economic subjects.

(b) TECHNICAL SCHOOLS.

Ranking immediately above the industrial and commercial schools of the second grade are the technical schools intermediate between the higher elementary schools and the *istituti tecnici*, admitting pupils upon the completion of the higher elementary courses, and upon special examination in Italian, mathematics, and the elements

of the physical sciences. Their courses cover three years, and upon their completion the pupil is admitted to the *istituti tecnici*, the most highly specialized of all the divisions of secondary education. In the field of the lower technical schools Sig. Berenini has proposed to the Consiglio Superiore certain reforms calculated to subserve more fully the scientific needs of the nation. Chief among these are:

1. The decrease of two hours weekly in the schedule of each class, thus leaving three afternoons per week free of teaching, to be devoted preferably to physical education and the combination of the sciences and mathematics, thus preserving in the school all the subjects prescribed by the law.

2. The lightening of some subjects and distribution of others through the three years, as, for example, in Italian, the abolition of all rules of composition as well as all memorizing of names in Italian literature; the coordination of all study of Italian literature with history, substituting for the systematic and chronological study of history the biographical and episodic method; the reservation of the difficult points of cosmography for the second class; the beginning of geometry in the first class, and its limitation to a purely experimental and graphic nature.

3. The rendering identical the technical schools for girls with those for boys, in subjects, arrangement of courses, and schedules, except for instruction in domestic arts.

(c) NORMAL SCHOOLS AND TEACHERS' INSTITUTES.

The training of teachers for the elementary schools of Italy was earnestly and continuously discussed for years before Italy's entrance into the war. With new and unprecedented demands upon the schools, there has been a growing conviction that the traditional subjects and methods of training teachers were too exclusively literary to prepare teachers for the elementary school and that they must be thoroughly reconstructed. Under the existing system, teachers are trained in normal schools, separate for men and women, and offering three years' courses in pedagogy, lectures and theory, ethics, Italian language, literature, history and geography, mathematics, elements of natural sciences, hygiene, drawing, penmanship, elements of agriculture, gymnastics, and practice teaching in the first grade of the elementary school. For men, gymnastics and manual arts, and for women, household arts and kindergarten teaching are also required. Completion of the studies of the higher elementary school with examinations on selected subjects is necessary for admission.

In the criticism of the old order of training, and the demand for a more modern type, individuals, teacher's associations, and the

press participated. The National Teachers' Association, meeting in Rome in 1918 and using as a basis the results of the referendum taken among the teachers of 17 cities and towns, well summed up the situation as follows:

The elementary school had in the last few years become completely transformed in its character, and the demands made upon it had changed as well. It had doubled its content, and in its programs, no matter with what shortcomings, was at least attempting to embrace a new field of activities, and so to keep abreast of modern conditions. With this development, the normal schools, through no fault of their own, had not kept pace. They had been forced to continue to train teachers for the simple and primitive schools of half a century ago, long since outgrown, and they simply could not give adequate preparation for the complex demands of modern life.

This nation-wide demand for normal teaching reform crystalized early in 1918 in a bill presented by Sig. Berenini for passage by the Italian Parliament. Its progressive nature once made known, the bill found instant and hearty support, and the senate passed it with but little delay. In the Chamber of Deputies, however, it encountered unexpected opposition, and in June, 1918, was referred to a conference committee. Though its actual enactment was thus postponed, yet its passage is confidently anticipated. In content and scope this bill marks so decided an advance in the training of national teachers as to merit a careful examination of its main lines, based upon the actual legal provisions.

1. Purpose.—The teachers' institute (*istituto magistrale*) has the aim of preparing teachers for the elementary and popular schools. It shall be for men and for women, separate. If for men, it shall be of four years; if for women, seven years, the first two years to be counted as belonging to the *istituti* of the first grade, and the last five to those of the second grade.

2. Relation to the present normal schools.—The existing normal schools for women, with the annexed practice schools, are to be transformed into women's *istituti magistrali* of seven years; those without annexed practice schools are to be transformed into men's *istituti magistrali* of four years, corresponding to the last four years of the seven-year type, particular details to be left to the ministerial decree. Existing provincial, communal and other *istituti* for the training of teachers may secure rating as *istituti magistrali* upon conforming in all respects to the present law.

3. Subjects to be taught.—The subjects of the first six classes of the women's *istituti* shall be: Italian language, literature, history and geography, general pedagogy and ethics, French, mathematics, physical and natural sciences, domestic arts, drawing and penman-

ship, singing and physical education. The subjects to be taught in the first three classes of the men's *istituti* shall be identical with those for the corresponding years of women's *istituti*, except for the addition of agriculture, hygiene, and two years of manual arts. In the last class of all *istituti* shall be: History and methodology of pedagogy, hygiene, agriculture, singing, advanced physical education, and practice teaching in the annexed elementary or popular school, or kindergarten. Instruction in hygiene is to be imparted by specialists, and that in agriculture by a traveling instructor, or by an instructor in a neighboring practical school of agriculture, or by governmentally certified individuals. In localities where constant emigration exists, instruction may be imparted to pupils of the last year by qualified persons on the Government, industries, social conditions, etc., of the countries to which such emigration tends, in 10 lessons outside the regular schedule. For each such course of instruction in hygiene, agriculture, and emigration a fee of 20 lire ($4) per year may be charged. The weekly schedule of the *istituto magistrale* shall not exceed 24 hours for any class, not including those devoted to singing and physical education. Details of the order of subjects, etc., shall be determined by the subsequent ministerial regulations.

4. Annexed practice schools.—To every *istituto magistrale* shall be annexed for purposes of practice teaching at least one complete grade of the elementary or popular school, under the direction of the head of the *istituto;* and if there are more than three sections of the e there shall be annexed one additional grade of the practice school for each section. To every women's *istituto* there shall be annexed one class at least of the *asili infantili*, it being left to ministerial regulation to reorganize the existing Frœbelian classes in accordance with the needs of the *istituto.* Subject to the general oversight of the head of the *istituto*, the management of the annexed practice schools shall be entrusted to the professor of pedagogy, except that the courses in mathematics, physical and natural sciences in such practice schools shall be entrusted to the teacher of these sciences. In instructional matters the teacher of pedagogy shall be assisted by the professor of manual arts and drawing in such manner as shall be determined by ministerial decree.

5. Admission to the istituti magistrali.—Admission to the first class of the women's seven-year course shall be the same as that required for admission to the first class of the middle schools of the first grade; to all other classes by promotion examination.

Admission to the first class of the men's four-year *istituto* shall be by certificate of promotion from the third to the fourth class of the *ginnasi* on the basis of the required examination; to all the other classes by promotion examination.

6. Relation to other schools.—The relation between the several classes of the *istituto magistrale* and the other middle schools shall be determined by the Giunta of the Consiglio Superiore. Promotion shall be governed by the rules in force for the other middle schools; but examinations shall be obligatory throughout the school year, and in pedagogy and ethics up to the end of the next to the last year. A special examination on hygiene and agriculture is required at the end of the course. Passing of the yearly examinations upon singing and physical education is required for promotion and for the qualification for teaching.

7. Diplomas, fees, etc.—The *istituti magistrali* confer the diploma of qualification for teaching in elementary and popular schools upon the completion of the respective seven or four years' courses. Candidates must have completed their eighteenth year.

Graduated fees for admission, attendance, and examinations in various subjects and years are charged.

8. Equipment.—Every *istituto magistrale*, both for men and women, shall be provided with (*a*) a scientific cabinet for instruction and experiment, in charge of the respective teachers; (*b*) laboratories for manual arts, hygiene, agriculture, drawing, and practice teaching, each in charge of the respective teacher; (*c*) a teachers' museum for instruction and practice teaching, in charge of the teacher of pedagogy; (*d*) a library and reading room, in charge of the teacher of history and geography; and (*e*) a well-equipped gymnasium and hall for teachers of physical education and singing. For expenses incurred under this head, 150,000 lire ($30,000) shall be appropriated for 1918–19, to be increased by 50,000 annually up to 300,000 lire.

9. Maintenance.—The Province in which the *istituto* is situated shall provide the site and building, the furniture and school equipment, exclusive of the strictly didactic apparatus detailed above, and lighting and heating service. The commune in which the *istituto* is situated shall provide the site, buildings, and equipments of the practice schools annexed, and the salaries of the teachers employed in them. The Government shall provide the salaries of the teaching personnel of the *istituto* itself.

10. Teachers.—The teachers of the *istituto* shall be as follows, with the grouping of subjects as indicated:

One teacher (Class A[1]) of pedagogy, ethics, and practice teaching; 3 teachers (2 of Class A and 1 of Class B) of the Italian language, literature and history, and geography; 1 teacher (Class A) of French; 1 teacher (Class A) of natural sciences; 1 teacher (Class

[1] By Class A are denoted incumbents of the full chair, with complete control of subject and methods. By Classes B and C are denoted assistants and subordinates, responsible to higher authority.

A) of manual arts; 1 teacher (Class B) of drawing and penmanship; 1 teacher (Class B) of domestic arts; 1 teacher (Class C) of physical education; and 1 instructor of hygiene and singing.

If in women's *istituto*, 1 teacher, of Class B, of domestic arts, and 1 mistress of the infant class.

Especial care shall be had in the selection of the teacher of manual arts. He shall be selected only by competitive examination and must be a person holding the regular qualifying degree in manual arts; or, under temporary provisions of the ministerial regulation, a person who has for four years taken summer courses in these subjects, with successful qualifying examinations. For the men's *istituto*, also, an instructor in agriculture is required. With the view of ultimately establishing distinctive schools of manual arts, provision shall be made in the men's *istituto*, in the discretion of the Consiglio Superiore, for two years' courses in manual arts, embracing practical exercises, mechanics, technical training, drawing, and the history and theory of manual-arts education.

11. Application of the law.—The present law, in its practical effects and modifications of groups of studies, shall be gradually applied from the beginning of the school year of 1918–19, in accordance with specific regulations to be promulgated by the Consiglio Superiore. Administrative heads of the present normal schools shall be ex officio heads of the new *istituti magistrali.*

Despite some points on which there is a difference of opinion among educational thinkers—as, for example, the organic grouping of Italian history and geography in one chair—the spirit and provisions of the projected law receive practically universal approval throughout Italy. It is regarded as realizing reforms long needed in the training of teachers, especially in the following respects: In prolonging the course of study, in reducing the excessive number of hours of weekly schedule, in abolishing pretentious striving after effect, in combining related courses of instruction, in organically correlating them, and so leading the pupil up to the concentration upon exclusively pedagogical subjects during the last year. The consensus of opinion is that while a more radical project for the training of teachers might have been presented, the one actually formulated is practical and feasible, and, while not too far in advance of the existing system, yet marks a long step forward in securing a national body of teachers better trained than any preceding one.

(d) GINNASI AND LICEI.

The wave of criticism directed against the various grades of education did not stop short of the traditional, and by their very nature, conservative middle schools of these titles. Appealing as they do

almost exclusively to boys intended for the universities and the professions, they have more steadily and successfully resisted all innovating projects than any other type. However, even the traditional *ginnasio-liceo* of the classical type, while it has maintained intact its eight years of prevailingly cultural character with emphasis upon the ancient classics, has yet had to accept one hour additional weekly in history throughout the course, an hour additional in mathematics for two years, and compulsory study of physics, chemistry, and physical education. These modifications were the work of the Consiglio Superiore, in 1917, which thus sought to adapt this type of institution to the urgent needs of additional instruction in sciences brought out by the war. Furthermore, criticism of static conditions shown by the enrollment of schools of this narrow type as contrasted with the far younger technical schools of the same grade had its effect in the demand for change. It was pointed out that the 458 schools of the traditional type, scattered over Italy, enrolled only 13,000 more pupils in 1917 than they did in 1901—54,000 against 44,000; whereas the newer technical schools, numbering 461 and existing only in central and northern Italy, had advanced from 50,621 pupils in 1901 to 182,194 in 1917.

Italian critics of this traditional type of school maintain that its chief weakness is the excessive extension of the programs of study, due to the desire of the educational authorities to please both parties and to impart at once a general and a special culture. Out of this very complexity has grown, however, an institution of a very useful nature, and one that, properly modified, bids fair to arrive at a happy mean intermediate between the two systems of training. This is the institution denominated since 1911 the *ginnasio-liceo moderno*, and approaching closely the type of scientific high school in America. By a species of compromise, the Consiglio Superiore in 1917 increased the total number of hours of instruction in Latin to 41, the largest assigned any one subject, but at the same time it increased the requirements in modern languages by one hour weekly in each throughout the entire course, allowed alternation between English and German, and increased the already existent scientific requirements. Despite the demand in this as in other fields for the diminution of hours of weekly recitation the excessive number already existing was left untouched even in the *ginnasi-licei moderni*, ranging from 22 to 27 or 28 hours, thus affording proof of its unchanged conservatism.

Discussion of the modifications in the middle school best adapted to suit needs after the war has already arisen. It is agreed that more attention must be paid the sciences, modern languages, and the modern sociological subjects; that the undue preponderance of examinations must be abolished, with transfer of emphasis to the daily

tasks: that the excessive number of pupils assigned to each teacher must be decreased to 30 or 40; and that better training must be demanded for teachers.

IV. UNIVERSITIES AND HIGHER EDUCATION.

While no fundamental university reform, projected or actual, is to be chronicled for the past two years as in the case of other branches of education in Italy, yet in spirit the universities have sustained significant changes in adapting themselves heartily to the war needs of the nation. It is safe to say that no other intellectual influence has been so powerful in waking the nation to a just conception of the historical and ethnological reasons for Italy's entrance into the war, and in keeping alive the sentiments of patriotism and consecration to duty as has been that of the universities. The first meeting of the National Association of University Professors to be held under war conditions gathered in Rome in December, 1916. The subjects proposed for discussion reflected the new and vigorous spirit that had come to be infused into the ancient seats of learning:

1. The future of the Italian book, and the ways and means of developing the national publication of literary and scientific material.

2. Methods of fuller participation by the universities in the aims and prosecution of the war.

3. The attracting of foreign students to Italian universities, and the proper rating to be given them for work presented.

4. The development of a national system of science, with endowments of scientific museums, cabinets, and laboratories.

5. Fundamental reforms in university administration and instruction relative to war needs, especially in the schools of pedagogy, the literatures of allied countries, and the applied sciences.

6. War-time preparation to be required of entering students.

7. Reasons for the resumption of the competitions for university chairs falling vacant, the naming of the rectors by the ministry only for the period of the war, and guarantees of impartial hearing of university professors under charges before impartial and competent authorities, and a system of international interchange of professors.

Formulated reports embodying the sentiment of the association upon these topics were transmitted for the approval of the minister and for his support for legal enactment.

In the essentially instructional domain, of interest is the concerted move to enlarge and extend the teaching of modern languages in many of the larger Italian universities. Fostered by the Minister of Public Instruction and the Consiglio Superiore, especial efforts

have been made to establish chairs of English language and literature, with immediate installation of "lectors" for a limited period of service, thus allowing time and opportunity to secure men of eminent attainments for permanent professorships. In the modern languages the courses of instruction are of the same standard as those for Latin and Greek, except that in addition to the teaching professor, a lecturer is engaged so that students may perfect themselves in the actual pronunciation and use of the language. By decree of the Minister of Public Instruction, issued in November, 1918, eight university chairs of English language and literature were established, the designation of the particular universities being reserved. The Universities of Bologna and Turin have already established courses for the study of French, English, Spanish, and German.

Of even greater importance were the recommendations of the special committee appointed upon the project of a special scientific baccalaureate. These were approved by the minister and by him transmitted to the Consiglior Superiore. As finally amended March, 1917, their main outlines were as follows:

1. In addition to existent degrees not affected by this regulation, the royal universities are empowered to confer on Italians as well as foreigners a special degree based on specific scientific training and studies freely chosen in accordance with these recommendations. Except in case of approved equivalence such special degree shall not have the value of professional qualifications, nor for admission to competition for posts in official service.

2. The studies for the attainment of the special degree shall have a duration of at least four years and embrace at least 12 duly certified courses, chosen by the candidate in the several faculties or schools. For such courses shall be counted only those specially related to the sciences, to be taken contemporaneously under diverse teachers or successively under the same teacher and leading uniformly to the development of one general theme. The years of instruction followed in foreign institutions are counted as by the rules hitherto in force; and for a fourth of the course to be pursued enrollment in the courses of the free universities may be counted when the programs and the development are adjudged of equal value for the ends contemplated in this regulation.

3. Not later than the end of the third year of his studies the candidate must indicate the group in which he intends to take his degree, the course pursued, and those he intends to pursue. All details are left to the discretion of the teachers of the special group concerned.

4. The student, upon completion of his studies and presentation of the dissertation, shall be admitted to the examinations under the

rules in force governing degrees, which shall still be in force in all matters not expressly mentioned in this regulation.

The council of ministers enacted the recommendation into a royal decree, but only as applying to foreign students. Subsequently recognizing that this action denied to native students privileges granted to foreigners, they engaged at an early date to resume action upon it.

Further administrative action necessitated by the war was taken in decrees of the minister and consiglio superiore providing for special dates and places of examinations for university and higher secondary students in military service convenient of access to posts and family residences; conceding to all students enrolled under professional and advanced academic faculties and called to service formal enrollment for 1915–6 in the immediately higher courses as if actually present; and admitting to any institution of higher grade, without fees, students from the invaded territories or from allied countries as a result of war conditions upon evidence of satisfactory attainments.

Noteworthy is the inauguration, in 1917, of a "summer course in the Italian language and literature for foreigners of the allied nations," located in Siena. No other studies than those of language were offered. Courses were as follows, each of two hours weekly: Italian grammar, reading and pronunciation, readings in Dante, history of Italian literature, history of art, practical exercises in translation, correction of themes, and professors' conferences. Instructors were drawn from the faculty of the Royal University of Siena and from the teaching corps of the local *ginnasio-liceo* and the royal normal school. Social and archæological features planned were excursions to monuments, buildings, and historical scenes in the vicinity. The use of all facilities of the local educational institutions was freely accorded.

By royal decree of December, 1917, the exchange of teachers between the royal middle and normal schools of Italy and the secondary higher schools of France was arranged for. The Italian teacher is to receive a compensation of not more than 2,500 lire ($500), in the discretion of the Minister of Public Instruction, an allowance of as much as 30 per cent of his regular salary, and traveling expenses. The same purpose is manifest in the wider field of the *Associazione italiana per l'intesa intellettuale fra i paesi alleati ed amici* (Italian Society for Intellectual Relations between Allied and Friendly Countries), founded in 1917 at the University of Rome. Its president is Senator V. Volterra, and the names best known in the literature of Italy are represented in the committee which directs its work and in the trimestral review setting forth its work. Its aims are as follows:

(1) More active relations between the universities, academies, and, in general, educational institutions of the allied and friendly countries.

(2) Intensification of the teaching of the Italian language in foreign countries, with wider teaching of the languages of allied and friendly countries in Italy.

(3) International exchange of teachers of every rank.

(4) Acknowledgment, based on reciprocity, of credits of admission to the universities and of the courses of lectures of the friendly and allied countries.

(5) Exchange of students either for special studies or for general acquaintance with the different countries.

(6) Facilitation of the exchange of publications and books devoted to a better knowledge of modern Italian literature.

(7) Translation of the best Italian works into other languages.

(8) Mutual cooperation in the field of science and its practical applications, and specially in that of private and international law.

(9) Intellectual relations of every kind to render more close, durable, and fruitful the union of the souls of the nations who fought the battles of civilization together.

At the beginning of 1918 the committee presented its plan of operation. It proposes to institute in the Ministry of Public Instruction an independent bureau which aims to promote and direct the exchange of teachers with foreign countries, to send abroad Italian savants for the purpose of teaching or pursuing scientific and historical researches, to invite to Italy with kindred purposes foreign teachers or students, to regulate and assign the matter of international fellowships, to provide eventually for the foundation of Italian institutes of higher education outside of the boundaries of Italy, and to favor in every way intellectual relations with the other nations.

The bureau is to consist of a council and an executive committee, both presided over by the Minister of Public Instruction. In the council, composed of 21 members, the faculties of the universities, the Ministry of Public Instruction with the two directors general of higher and middle instruction, the Ministries of Foreign Affairs, of Agriculture, and of Industry and Commerce, and the Parliament, are all duly represented. Representatives of private educational and intellectual agencies outside the school and state administration may be included at the discretion of the Minister of Public Instruction. The executive committee, composed of seven members and elected by the council from its own members, is charged with all practical details.

The Italian teachers who go abroad for research or for study, according to the plans of the bureau and with the approval of the

ministry, are distributed in three classes according to the probable or actual period of absence from the Kingdom—those for less than one year, others for more than one year and less than five years, and still others for a longer term. Foreigners teaching in Italy shall have conferred upon them the dignity of the Italian professor of equal rank, and under certain conditions legal validity is given the course of lectures conducted by them.

The projected law also determines the value of the studies pursued outside the Kingdom, those pursued by foreigners in Italy, and the value and status of fellowships. In general the studies and examinations pursued in foreign countries in the State institutions or those of established reputation are accorded the same value as studies and examinations in equivalent schools of the Kingdom. The fellowships are not restricted, as hitherto, to graduates, but are granted also to university students doing special work in laboratories, libraries, and foreign archives. Every year a certain number of fellowships shall be granted students and graduates from the high schools, normal and professional schools and special institutes for a period of not more than two years of study abroad.

To give a rapid development to this plan and cooperate with the State institutions in Italy and abroad for its accomplishment is now the most important task of the Italian Association and of such similar associations as may be established in allied and friendly countries.

CHAPTER V.

EDUCATION IN GERMANY.

By I. L. Kandel.

CONTENTS.—General tendencies—Secondary education—Training of secondary school-teachers—Separation of church and State.

GENERAL TENDENCIES.

The development of education in Germany during the past two years must necessarily remain obscure until the sources of direct information are again opened up. From extracts and references here and there the educational situation does not appear to have been very happy, and, if reports such as the following may be trusted, the machinery so carefully built up seems to have failed at the crisis. Writing in the Vossische Zeitung of January 23, 1918, Dr. Paul Hildebrandt contrasts the early enthusiasm manifested by the German school children and their war activities with the situation at the beginning of the year (1918):

The sixth-grade pupils of 1914 are now about to be promoted to the upper third. They have become accustomed to the war. Who can wonder, then, that now in the fourth year of war our children exhibit signs of change? Too many of the restraints have been removed which should shape their developments; the loosening of family ties, the father at the front, the mother employed away from home, and in the lower ranks of society doing the work of men; the relaxation of school discipline. Of the teachers of the Berlin public schools, for instance, two thirds have gone into the army. The remainder are overworked. Dropping class periods, or combining classes together is the order of the day. In the higher schools half of the teachers are in the army. Furthermore, standards in the higher institutions of learning have gradually been lowered until the final examination has been pushed back fully two classes. All of these conditions have influenced our students and have weakened their persistence, since they see that they can attain a scholastic standing without effort that formerly demanded the severest application.

Young people follow the law of their nature. They are guided by the impressions of the moment and they can not permanently resist them. In addition, as time went on, especially in the case of students of higher institutions, and particularly in the towns, the hardship of inadequate nourishment appeared. It is the unanimous judgment of medical specialists that the children of the middle classes suffered most in this respect. General attention was attracted to the fact that the children were less sensitive to reproof, that they paid no more attention to threats, because the school authorities had directed that they should be treated with every leniency, and since promotions no longer represented any definite standard of accomplishment. This special consideration for the children was most obvious in the schools of the large cities. Was

not harvest work and the country vacation necessary to maintain the health of the coming generation, and was it not necessary for a great many to be set back in their studies so that they required repeated concessions to maintain their rank and thereby continually lower scholastic standards of their classes?

That spirit of voluntary service which at the beginning of the war revealed itself in its fairest aspect has now disappeared. Everywhere we hear lamentations over the increasing distaste shown for military services. Pupils collect articles now for the reward, not from patriotism, and the older pupils have their struggles. Shall they take advantage of the opportunity to leave school with a half-completed education, or shall they avoid placing themselves in a position where they will have to enlist for their country? What an unhappy indecision even for the best of them, those who really think about the matter.

Furthermore, in those ranks of society which are less influenced by tradition, discipline, and education, we find increasing violations of the law. At the first this manifested itself merely in an increase of theft. More recently it has taken a decided turn toward personal assaults. It is true, the latter are still negligible in proportion to the total number of juvenile offenses, but they are increasing every year. Already the number of violent crimes committed by youths in the city of Berlin is more than three times the number reported in 1914.

Thus, dark shadows are falling over the brilliant picture of 1914. Every disciplinary influence, every effort of the still fundamentally sound German nation must be exerted to oppose this tendency, and to lead the children back to the path of rectitude.

Another picture, but one also indicating the difficulties that attend the conduct of the schools, is given in the Leipziger Volkszeitung for February 8, 1918.

The Saxon minister of education recently drew attention in the Saxon Diet to the injurious effects produced by the war on the elementary schools of the Kingdom. In addition to the shortage of fuel, which last year frequently necessitated the closing of schools, and this year has required the removal and amalgamation of whole schools, the unsatisfactory health of the teachers has had an undesirable effect.

War conditions, according to the minister, have caused great emaciation and premature ageing, and have diminished the capacity for work (alike physical and intellectual) and the sharpness of the senses. This state of things is attributed not only to the food supply situation, but also to the increased difficulty and extent of the professional work falling upon teachers (only 8,965 elementary school teachers were at work in Saxony on 1st of October, 1917, as compared with 14,800 before the war), and to the large amount of auxiliary service imposed upon teachers in connection with war economic measures.

These accounts hardly seem to be in keeping with the eulogies heaped on the German school system during the first two years of the war in the daily press, in professional magazines and by the Government. It was then felt very universally that the elementary school, the training ground of the discipline and physical strength and comprehensive culture that characterize the German soldier, had triumphed signally over the illiterate Russians and Italians, as well as the decadent French and the treacherous English. It was the elemen-

tary schools that produced the patriotic, loyal, thorough soldier whom the consciousness of a good cause carried to victory. This unguarded flattery of the elementary schools and their teachers helped somewhat to give a new impetus to a movement to which attention had been redirected just before the war. At an educational conference which met at Kiel in June, 1914, and was attended by representatives of all branches of education, it was urged with much enthusiasm that on the basis of a national common school higher education be made accessible to as many classes in society as possible so that intelligence might be recruited wherever it was found. Opportunity for ability could best be furnished through the establishment of the Einheitsschule or common school system. The program also included the unification of all branches of the teaching profession with the further implication of a uniform system of training for all and equal access for all to the highest positions in the educational profession. The elimination of social and sectarian distinction is another plank in the platform for educational reorganization.

The idea of the Einheitsschule has a long history in Germany; it has always been advocated by the leaders of progressive politics and thoughtful educators. When last agitated in the eighties, Prof. Rein and Mr. J. Tews, now the doyen of the elementary school teachers, were associated with the movement as they now are with its revival. The principle underlying the system of the Einheitsschule is that all children between the ages of 6 and 12 shall have a common educational foundation to be followed by educational opportunities thereafter suited to their abilities. This implies the elimination of the Vorschule, or special fee-paying school, which prepares pupils from the age of 6 until their entrance into the secondary school at about the age of 9 and which is a distinctly class school. The further implication of the Einheitsschule is the postponement of the beginning of secondary education to 12, a change that has much to commend it on grounds other than the provision of democratic opportunities, and is at least a better age at which a correct choice of a course and a career can be made than 9.[1]

A new stimulus was given to the movement in the early days of the war, when politics was adjourned, when enthusiasm and victory had welded the Nation together as one, and when Hindenburg was claimed to be superior to Hannibal and the captain of the *Emden* to Leonidas. The commercial and industrial classes had, it was generally felt, proved themselves equal to the demands of the hour. The greatest inability to meet the situation had been shown by the politi-

[1] The present account is based on a study of the movement in the *Pädagogische Zeitung* between 1914–1916, when direct information ceased to be accessible. A valuable analysis of contemporary educational literature is contained in an article on *Les Projets de Réformes Scolaires en Allemagne,* in *Revue Pédagogique,* Vol. 69, pp. 250–267, September, 1916; and Vol. 70, pp. 498–517, May, 1917.

cal and diplomatic leaders who had enjoyed the traditional opportunities for higher education. The demand was at once renewed for the establishment of a common school from which pupils of promise in all classes of society might be recruited to place their intellectual abilities at the service of the state and to furnish an intellectual and spiritual reserve to make up for the physical and intellectual losses incurred during the war. It was no longer a question of providing an easy road (*Bahn leicht*) for ability but an open road (*Bahn frei*).

The war changed the aspects of the problem; the need of the hour was a German national school with opportunity for all to cooperate in promoting the great aims of the German cultural state. National unity could only be advanced by a national common school, which, according to the progressives, including the Deutsche Lehrerverein and the social democrats, must be established as a free, undenominational and nationally uniform institution placing gifted children of the poorer classes on the same footing for promotion to higher education as the children of the richer classes. Cultural and social equality must be established for the working classes who were anxious to play their proper part in the development of common national aims. They desired not so much to reach the top, but that their abler members should have opportunities opened to them suited to their ability without reference to school privileges and certificates.

For the member of the working classes the question is not so much, "How can I raise my son socially through education?" as "How can I secure for my class or rather its abler members appropriate influence in the adminstration of the state and of the community, in industry, commerce, transport, and how can I put an end to the influences of privilege that are socially detrimental?" Selection for educational advantages must in the future be based in the opinion of the advocates of the movement not on privilege but on the common right of all classes. The proposals for the Einheitsschule are well summarized in a resolution passed in June, 1918, by the Association of Prussian Women Teachers, meeting at Hannover:

> National unity, returning stronger than ever after the war, will demand a unified school system for all Germany. The reconstruction of the whole system will have to be made with a single compulsory elementary school as its foundation. Reasons for this are of different kinds; reasons of social justice, that every gifted child shall be able to advance to a higher education; national and economical reasons, that the state shall be able to make use of all native talent in the most suitable place, and shall be able to economize in the heavy and useless expenses which are incurred by the presence of poorly endowed scholars in the secondary schools.

Karl Muthesius, long a leader in educational affairs, is opposed to class barriers and restrictions on intellectual development merely

because of poverty. The elementary school up to 12 must be the national school offering a common foundation for all; beyond this opportunities must be created for differentiation according to the needs of the individual and of the nation. The common school must be free from clerical control and permitted to be self-directing. He expresses his opposition to the classical tradition in days when German culture is fully developed to furnish a sound basis for education. Prof. Rein, in a work by Fr. Thimme,[1] in which are collected the opinions of leading Germans on the subject under discussion, declares himself most emphatically, as might be expected, in favor of the common school, whose establishment would make a real and effectual contribution to the development of national feeling in the hearts of all children. Such an organization would give inner unity to the whole system of moral culture in Germany.

Dr. Kerschensteiner[2] approaches the whole question of reform from a broader standpoint than any other of its advocates. He not only questions the existing basis and aims of education, but seeks to bring the reform into line with the modern needs of society. The acquisition of knowledge is a secondary and subordinate end; the school's essential task is to make men capable of devotion to the cause of society and of humanity. Character, moral courage, energy, and sense of civic duty are qualities that are more vital than mere information. Contrary to prevailing thought among his countrymen he opposes the theory that the state is a separate entity existing apart from the individuals composing it. He accepts the Roman and Anglo-Saxon view that the state is an association of individuals organized to promote and protect the interests of all. In such a state the free and willing collaboration of citizens should mean the elimination of restraint and coercion.

The educational implication, according to Kerschensteiner, is that "it is essential that the school should cease to be the playground of individual ambitions and egoisms, in order that it may become the home of social devotion." The aim should not be intellectual culture or knowledge for its own sake but training for human intercourse and just action. The sense of civic duty can only be called forth in a state that furnishes scope for the development of personality. "If we wish to realize the true civic spirit, we must subdue the narrow national spirit." The school must accordingly fulfil a twofold duty—it must take account of individual differences and at the same time keep in the foreground the universal element—practical conduct. Educational reform must start from these premises.

[1] Thimme, Fr. *Vom inneren Frieden des deutschen Volkes.* Leipzig, 1916.

[2] *Deutsche Schulerziehung in Krieg und Frieden.* Berlin, 1916. Kandel, Jessie D. Liberal Tendencies in German Education. Educational Review, vol. 57, May, 1919. Pp. 399 ff.

The state, says Kerschensteiner, must guarantee the right of every child to an education suited to his ability. He combats all the arguments of opponents of this movement—overcrowding of secondary schools, difficulty of selection, lowering of standards, increase of the intellectual proletariat, and the danger of social conflicts. The Einheitsschule should, therefore, be an educational institution for all up to the age of 22 or 24, with selection all along the line according to individual differences. Unlike Rein, Kerschensteiner does not desire to keep all children together as long as possible but would begin to differentiate as soon as individual bent appears. For such a system flexibility and elasticity are indispensable; bureaucratic control and uniformity are dangerous. Selection might begin at as early an age as nine, when those who show intellectual aptitude may be transferred to secondary schools. For those who remain in the elementary school variety may be afforded by a departmental system. There should be transfers back and forth between schools and departments to give the individual every opportunity for realizing himself.

But whether a child remains in an elementary school or goes on to a secondary or vocational school, the fundamental task of education continues to be the preparation of citizens; the civic spirit must saturate the whole of education; not the emphasis on nationalism or on German language and literature, but the sovereign idea of preparation of all for society, can successfully promote the desired end. Education is a State function, and since the State has claims superior to those of smaller groups and societies, it should have the right to arbitrate and decide between conflicting interests, without, however, ignoring particular characteristics. Centralization that is too strict will stifle local effort and individual initiative; competition and rivalry are essential to life and progress.

Opposition to these claims was immediately aroused and came from the secondary schools, teachers of traditional subjects, school inspectors, administrative officials, and the clerical and conservative elements in politics. The secondary-school teachers in general feared overcrowding of their schools. The specialists were alarmed at the thought of the postponement of the beginning of secondary education from the age of 9 to 12 and the consequent lowering of standards. The inspectors and administrative official produced arguments against a radical change based on considerations of the good of the lower classes; higher education would only lead to unrest and discontent, to dissatisfaction with the social position of parents, and ambitions for higher positions that are limited in number; pupils from poorer homes and humbler environments do not enjoy the same advantages and opportunities that are possessed by the children of the upper classes—a condition that in itself might be fraught with danger consequent on the sudden transfer from a humble to a higher status.

In any case the work of the elementary schools furnishes no criterion for the selection of pupils for advancement to higher education, so that early selection would be surrounded with risk for the aspiring pupil, while no account would be taken of or provision made for late development. It would also be unjust to the elementary school teachers to deprive them of the pick of their product and the promotion of gifted pupils would mean the withdrawal of an ever-present incentive to the less well endowed. If the views of the radicals were realized and the selection of able pupils for advancement to secondary schools were made by the schools, the rights of parents would be outraged; at the most all that the schools should do would be to advise parents and allow them to act if they choose. The fear was also expressed by no less an authority than Rudolf Eucken that the realization of the common-school proposal would endanger traditional values in school, lower standards, compromise the precious things of German culture, and in the last analysis lead to the establishment of private schools and the perpetuation of a social class to preserve these heritages. Curt Fritzsche,[1] in a work on the Einheitsschule, claims to see the purport of the whole movement in the reception accorded at the Kiel congress of 1914 to the declaration of two French delegates that it represented the international ideal common to all Europe—clearly the aims of the movement are internationalism, democratization, radicalism, antireligious secularization, egoism, and social feuds.

Finally, Ferdinand J. Schmidt, professor of education at the University of Berlin, attacks the movement in an article in Preussische Jahrbücher, October, 1916. He charges the reformers with basing their agitation on political prejudices and class interests. The proposal to establish an extended unified school system, with six years of elementary education, three years of intermediate and three of secondary, without distinction for all would lower the standard to meet the needs of the poorest intellect; it would tend to a reduction of the elementary school subjects, and, by consequence, would lower the standards of the secondary schools. Foreign languages would be begun too late, and the boy going out into the world at the age of 15 would have studied French or English for only one year; ultimately languages would disappear entirely from the intermediate stage and with them the most effectual instrument for broadening the mind would be gone. The reformers are the dupes of a pedagogic materialism which would be disastrous to the nation in diverting the aim of education from its true goal—moral culture. Emphasis would then only be placed on developing those qualities and those abilities that would yield most profit.

[1] Fritzsche, C. *Die Einheitsschule in Bibliothek für Volks- und Weltwirtschaft*, No. 21, Dresden, 1916.

This is the American method in education with all its dangers. The reform would not result in social equality; class distinctions continue even in countries that have a unified school system open to all. By boundlessly developing the understanding, which divides and separates, by releasing, without check or hindrance, the intellectual abilities of individuals, by freeing them from that wholesome and indispensable discipline of social morality, they are bringing about, with the best intentions in the world, the overthrow and dismemberment of national unity.

Early in 1916 the subject came within the realm of practical politics when the educational estimates for 1916–17 were brought up for debate in the Prussian House of Representatives (*Abgeordnetenhaus*). The Social Democrats and the Progressive Volkspartei came forward with a demand for the abolition of the Vorschule and the throwing open of opportunities for ability in whatever grade of society it might appear. The Vorschule is merely a school for those privileged by class, who made no other use of their educational opportunity than to advance as far as the Einjährigenzeugnis. If the principle of the Einheitsschule were adopted the best pupils would pass on completion of their elementary school course to the secondary school and in five or six years obtain the Reifezeugnis or certificate of maturity that would admit them to the universities. Both proposals met with opposition from the conservatives and the clericals who feared that the common-school movement would involve secularization. They were prepared to grant one concession that the transfer of pupils from the elementary to the secondary schools should be made as easy as that from the Vorschule. On behalf of the Government the minister of education admitted the need of establishing facilities for transferring able pupils from the elementary to the secondary schools and suggested the organization of a Mittelschule for this purpose. He referred to an experiment that had already been conducted in Berlin whereby pupils from elementary schools were transferred to the Quarta class or third year of the Realschule and in four years attained to the Einjährigenzeugnis. Such pupils could then move on to the Oberrealschule and at 19 or 20 be ready to pass on to the universities.

In the course of 1916 announcements appeared in the press that the ministry of education was preparing regulations to enable fit and selected pupils, after three years in an elementary school, to be transferred without further examination to a secondary school, thus enjoying practically the same privilege as the pupils of the Vorschule, with the difference that, if found deficient, they could be returned to the elementary grades. This proposal met with a storm of opposition; it was feared that the secondary schools would be invaded and that the teachers and principals of these schools would not have the power to turn pupils back to the elementary schools. The result was

that the ministry denied that it was even considering such a suggestion, and stated that it was merely planning to codify the regulations for the entrance examinations to secondary schools which had remained unchanged since 1837. When the new regulations were issued in August, it was found that they benefitted the Vorschule rather than the elementary schools.

The question of the Einheitsschule again came up in the course of the debate on the estimates for 1917–18 and the Government was then compelled to act. The position of the minister of education showed clearly that the ground had been shifted. From the consideration of the Einheitsschule and of plans for facilitating the transition from the elementary to the secondary school, the problem had been narrowed down to that of selecting gifted elementary school pupils for advancement to higher education. The minister announced that he had early in 1917 addressed the following questions to all district inspectors:

(*a*) In what elementary school organizations can a good pupil pass into sexta of a secondary school without necessitating special arrangements or alterations in the school program?

(*b*) If such organizations do not exist, what changes would have to be made in the program to render these transfers possible?

(*c*) Can such changes be made without disadvantage to the other students? If not, suggestions should be made for special arrangements to meet the needs of the gifted pupil.

It was announced that an experiment was being conducted by the Government at Königsberg and plans were in progress for dealing with the needs of gifted children in Berlin, Frankfort, Breslau, Mannheim, and Hamburg.

The new movement for the selection of gifted and exceptional children seems to have had the effect of checking completely any further demands for the Einheitsschule. In the schools systems to which reference is made above Begabtenschulen have been or are in process of being established, and it is not improbable that this compromise will be accepted by both sides. Nowhere has a common school been put into operation, and teachers' associations appear to have been active in promoting the new experiments, which are limited to facilitating access to middle and secondary schools to gifted and exceptional (Begabten and Hochbegabten pupils) in elementary schools.

In Berlin such an experiment was introduced on the suggestion of Geheimer Justizrat Cassel, a member of the Progressive Volkspartei, who urged, in the Prussian Abgeordnetenhaus, in 1916, the establishment of facilities in each province to enable pupils on finishing the elementary schools to continue to a higher school and reach the Reifezeugnis or maturity certificate in five or six years. Such a plan, he stated, would be of advantage to children of poor parents in larger

cities as well as to children in small towns and rural areas who could enjoy the blessings of home influences up to 14. Dr. Reiman, the director of education for Berlin, adopted the suggestion and the Begabtenschule was established in 1917 for the admission of exceptional and studious pupils who have completed the first seven years of the elementary school course. The work of the Begabtenschule begins with that of Untertertia of a secondary school; during the first year the pupils are under probation and, if they fail to meet the standards, may be discharged, that is, at the age at which they would ordinarily have reached the close of the compulsory attendance period. After two years, that is after Untersekunda, a choice is open between the course of a gymnasium or of a realgymnasium. The schools do not grant the privilege of one year military service, but after six years lead to the maturity certificate which admits to the university. The Begabtenschule is open to able pupils of all classes; fees are remitted for poor pupils, and books and, in case of need, maintenance grants up to 300M ($75) a year are granted. The pupils must be recommended by their schools and are selected on the basis of psychological intelligence tests. The first tests were conducted by W. Moede and C. Piorkowski, psychologists who had met with success in selecting motor transport drivers for the army by tests which were used in all sections of this branch of the service. This selection is based on tests of attention and concentration, memory, combinations, wealth of ideas, judgment, attention, and observation. The authors of these tests declare that "reviewing the precise results of the analytical and systematic tests, the professional psychologist can not refuse to accept the responsibility for his decisions based on good scientific principles." Dr. Reimann plans to test pupils with artistic or technical bent and select them at 13 or 14 for higher trade schools to train as painters, jewelers, designers, embroiderers, cabinetmakers, lithographers, and other crafts. Dr. Rebhuhn has prepared an observation sheet which was presented by the Association for Exact Pedagogy to the city school board to be used by teachers as soon as pupils commence to show marked ability and to serve as a record from the second year up.

A similar plan was inaugurated at Leipzig for boys, and provision will be made for girls. Special classes were established at a Reform School and an Oberrealschule, closely coordinated with the elementary schools. The course begins in Untertertia with intensive study of French for three quarters of a year, when English or Latin is taken up. After another year the pupils are ready to take their place in the normal class of the school (Untersekunda). Tuition, books, and maintenance allowances are granted in case of need. Since the number of selected pupils is restricted to 20 each year, they are the very exceptional only (*hervorragend Begabten*). In order not to flood the academic and professional careers similar experiments will

be attempted in other schools, e. g., school of commerce, technical school, and trade schools.

A somewhat different plan has been adopted at Hamburg, where it was originally intended to establish a transition or special class to coordinate the elementary secondary schools. In place of this, owing to the insistence of the teachers and the House of Burgesses, a new type of school is organized that avoids such half measures. At 10 years of age; that is, on completing the fourth school year, pupils are specially selected for the new schools, of which 22 have been established (14 for boys and 8 for girls), to provide either a four-year German course or a five-year course with foreign languages. These schools are similar to the Prussian middle schools and carry the privilege of admission to certain higher trade schools and to the State examination for the one-year military privilege. The pupil who completes the course of such schools can by way of the Oberrealschule or the Realgymnasium pass on to the universities.

The selection of the gifted pupils is based partly on the psychological observations by the teachers and psycholocical tests by an expert, for both of which Dr. W. Stern, of the Psychological Institute, is responsible. The psychological observations are recorded in a specially prepared folder indicating the home conditions and school record of the pupil, his adaptability, attentiveness, susceptibility to fatigue, powers of observation and comprehension, memory, imagination, thought, language, industry, disposition and will power, special interests, and abilities. The psychological tests include the logical arrangements of ideas, explanation of concepts, completion test, building of sentence on the basis of keywords, the derivation of the moral of a story, the discovery of logical absurdities, the finding of a legend for a series of pictures, and test of attentiveness. Stern claims that the cooperation of the teachers makes the Hamburg system superior to the Berlin plan of selecting on the basis of tests alone; it should also be mentioned that the selection in Hamburg is under the supervision of a committee of the superintendent, inspectors, principals, teachers, and psychologists. For pupils who develop at a later stage than those for whom these arrangements are made transition classes have been established in two Realschulen in which after one year they can pass on to the last year of the school and qualify for the one-year military privilege.

Breslau has established special classes for boys and girls of great ability (*Hochbegabten*) selected at about the age of 12 by a psychological expert on the basis of intelligence tests similar to those used in Hamburg. Pupils who succeed in these schools will be encouraged by the city to proceed along suitable lines. The city will look after the education of selected pupils, who could thus be under the observa-

tion of the psychologist until they pass into their chosen vocation. Facilities have been instituted in Charlottenburg to enable gifted pupils to advance more rapidly in the elementary schools and complete the work of a middle school. At Frankfort gifted pupils, on leaving the elementary schools, may be prepared in one year to enter Untersekunda of an Oberrealschule, and in four years to attain the *Reifezeugnis*. The Mannheim system is already well known in this country.[1]

The experiment is thus confined to the larger towns, and complaints are already heard that the state should take over the further development of such plans to bring them within the reach of all. In the meantime critics even of this precipitate of the more ambitious and more democratic movement for the Einheitsschule are not wanting. There are those who express concern lest the gifted pupils become spoilt and conceited; that selection in itself would set up class distinctions; that school ability is not necessarily a guarantee of ability in after life; that pupils should not be selected on the basis of school marks, but on the basis of character, pronounced bent, and moral force. Further, the plans involve the danger of robbing the lower classes of their intelligent members, of depriving industry of its abler workmen, and of overcrowding academic and professional careers. Finally, *faute de mieux*, psychological tests are not yet sufficiently developed to serve as a basis of sound and scientific diagnosis, and are inadequate until they have found a more extensive place in the schools. It is clear that the mind of the German reactionary follows the same kind of logic in domestic as in foreign affairs.

SECONDARY EDUCATION.[2]

The movement for the common school, in some of its aspects, involved the reconstruction of the secondary school or at least the organization of a new type based entirely on a purely nationalistic foundation and open to all without distinction. This agitation was reenforced from another direction. The successes at the front were felt to be due to the excellent technical preparation given in some schools and the continued collaboration of the leaders in the field of the applied sciences. At the same time the megalomania of the early period manifested itself not merely in a feeling of physical superiority but in a sense of moral and intellectual self-sufficiency that needed no reenforcement from external sources. There was still a third point from which the traditional curricula were sub-

[1] See Auxiliary Schools of Germany. United States Bureau of Education, Bulletin, 1907, No. 3.

[2] See especially Friedel, V. H. The German School as a War Nursery. London, 1918. This is a translation of a French work carefully analyzing German thought on education as it appeared in the daily press.

jected to criticism—their failure to give a real preparation for the needs of modern life. The classical gymnasium in particular was attacked as an anachronism to be swept away as soon as possible and to be replaced by a genuine German nationalistic school adapted to the needs of to-day. To devote time to subjects that do not "function" or pay is a gross mistake. The schools should teach things and not words, realities and not tradition. Business men, practical politicians, and nationalistic educators found themselves united in a campaign to secure a school that would bring up German citizens in a pure German way and that would make the German civic spirit the core of the curriculum.

The charge is made that the so-called reforms resulting from the Emperor's conferences in 1890 and 1900 did not result in a modification of the gymnasium, where Latin and Greek still form the core of the curriculum with an emphasis on the grammatical and philological elements. The pseudo-humanistic ideal of teaching nothing that is directly useful for life still animates such schools, which continue as ever to be the homes of conservatism. "*Deutschtum*," German *Kultur*, must be the center around which secondary school studies should revolve. The classics may have been the roots of German *Kultur*, but Germany now possesses the fruit and flower in her own culture and that alone. So far as antiquities are concerned, a knowledge of them can in these days be readily obtained through photographs, reproductions and models, and translations without the waste of time involved in studying grammar and rules. As for the disciplinary value of such studies, much better results can be obtained from mathematics.

The same attitude was manifested on the question of the study of modern foreign languages, although the material loss that might be involved in their total abandonment made the discussion of the subject a little more wary. It was argued that, since the enemy had evidently not taken the trouble to understand Germany, it was waste of time for Germans to attempt to study their languages. Statistically it was proved that next to the English language German was the vernacular of the world and after the war English would inevitably be ousted. It was even proposed, and a motion to this effect in the Prussian Upper House met with the support of all the university representatives, that the languages of Germany's eastern allies should be introduced into the schools. Flemish was added to the list subsequently. The more cautious were not so ready to see English and French ousted, and, while admitting that Germany could gain nothing culturally from the enemy languages, suggested that commercially it might still be found profitable to retain English and add Russian and Spanish as the languages necessary for Germany's future commercial development. The one aim of the schools to-day

should not be formal training but an education for life founded in moral idealism; there must be, as the Emperor had urged in 1890 and 1900, "a more decided nationalization of secondary education" to develop citizens of a German state.

The blatancy of these claims was not allowed to pass unchallenged. The advocates of the classics protested strongly. Did the opponents wish to make Americans of the youth of the country "to dry up their dreams, and to turn boys of 15 into makers of machinery, into dentists, or into surgeons"? The German moral and intellectual forces of which all were proud were founded, it was claimed, on the ancient cultures. The particular character of German culture was derived from the cult of the classics. One secondary schoolmaster sums up the arguments of the classicists in the statement that "Three persons have become one in us, the Greek, the Christian, and the German"—hence each must have its place in the development of youth. Nor were there lacking students of modern foreign languages to insist on their retention, but even here it was suggested that such languages and literatures be studied only in so far as they can contribute toward a clearer comprehension of German national culture. The attitude of the ministry of education on this subject is indicated in an instruction of March 20, 1915, which permitted the employment in secondary schools of Germans expelled from France and England to teach the languages of those countries, even if they did not possess the prescribed qualifications or previous teaching experience.

It is obvious that no matter what the opinion on any subject might be, all who entered into the discussion of educational values were unanimous in accepting the nationalistic aim. This aim was stimulated by the Government in various ways, direct and indirect. Teachers were urged immediately on the outbreak of the war to turn the attention of their students to the study of the war events and patriotic endeavor. The ministry of war with the support of the ministry of education and other ministries interested in education urged the organization in schools and elsewhere of battalions and companies of boys of 15 or 16 (*Jugendcompagnien*, *Jungmannen*, *Jungmannschaften*) for physical training and instruction as a preparation for military training. Militarism in these organizations was at first disavowed, but it began progressively to enter and by 1917 no secret was made of their primary purpose.[1]

The direct method for the inculcation of patriotism, national pride, and devotion to the dynasty was adopted by the ministry of education when on September 2, 1915, it issued its "New Organization of the History Syllabus in Higher Schools of Prussia." It appeared that the history syllabus for the secondary schools had

[1] See Friedel, *op. cit.*, Chap. II.

grown too cumbersome, so that it was impossible to handle it satisfactorily in the present overcrowded condition of the curriculum. "Since it is just the period from 1861 to the present that for us Prussians and Germans surpasses in importance everything else that has happened in the history of the world, the earlier periods must be treated much more briefly and comprehensively, so that the history of the past 50 years can be dealt with in detail." Under existing arrangements the modern period is not taken up until Untersekunda. The new regulations require Prussian-German history to be begun in Sexta and continued concentrically so that pupils will acquire a mastery of national history. The emphasis throughout it is urged should be on the outstanding character of the Hohenzollerns, more especially from the time of the Great Elector down to the present. Ancient and medieval history are retained but teachers are advised to dwell only on those movements whose influence has been more or less continuous. Briefly analyzed the suggested syllabus is as follows:

Sexta—Stories from recent history. Quinta—Outline of Prussian-German history. Quarta—Ancient and medieval history to about 476 A. D. Untertertia—History of Germany in Middle Ages to the middle of the seventeenth century. Obertertia—Amplifications of the outline given in Quinta at least to 1870 or even the present day. Untersekunda—Review ancient history, begin Germany history, if not already begun in the previous class, and deal in detail with selected parts since 1870. Obersekunda—Close the ancient period and go on to the thirteenth century. Unterprima—German history up to Frederick the Great. Prima—German history from 1786 to the present.

Some flexibility was permitted to the teachers in the organization of the work. The experiment was to be inaugurated at Easter, 1916. By a prophetic anticipation the reports on this experiment in molding patriots to Hohenzollern standard were to be made in October, 1918.

TRAINING OF SECONDARY-SCHOOL TEACHERS.

The system of training of teachers for secondary schools has been somewhat modified by new regulations issued in June, 1917. The rules for the admission of candidates remain unchanged. At the close of the necessary period of university study of four years candidates are required to undergo a general examination (*Wissenschaftliche Prüfung*). This examination is conducted by a special board (*Wissenschaftliches Prüfungsamt*), which includes university instructors and schoolmen. The paper in general knowledge is abolished, but every candidate is examined in philosophy with special reference to education, including psychology, logic, and ethics related in particular to child life. Familiarity must be shown with

the works of the leading writers in the special branch of philosophy bearing on education and with its place in the history of philosophy. This general examination is followed by examinations in the special fields selected by the candidate from the following subjects: Christian theology, German, Latin, Greek, Hebrew (only as a minor), French, English, history, geography, mathematics, physics, chemistry, botany, and zoology. Of these subjects two, instead of one as hitherto, must be taken as majors and one as a minor. An innovation is the addition of a large number of supplementary subjects that may be substituted for the minor. These include philosophical propædeutics, pedagogy, applied mathematics, mineralogy and geology, classical archaeology, history of art in the Middle Ages and modern times, comparative languages, Polish, Danish, Russian, Spanish, Italian, Turkish, drawing, singing, and gymnastics.

Candidates who pass the requirements in this qualifying examination must undergo two years of practical training. Six to eight probationers are sent to a selected school for one year at a time, so that at the end of the period each candidate becomes thoroughly familiar with two schools. During each of the two years regular sessions must be conducted for the study of education by the director of the school to which candidates are assigned. At least two hours a week must be given to history of education, principles of teaching, psychology, and ethics. The probationary period of two years is closed by a second examination, the pedagogical examination (*Pädagogische Prüfung*), conducted by a pedagogical examination board (*Pädagogisches Prüfungsamt*), which consists of a provincial school councillor, the director, and faculty of the schools in which the candidates have been trained. The subjects of the professional examination include the history of education and principles of teaching.

It is claimed that the new regulations represent an advance in separating the professional from the general examination. The regulations are based on the view that a true insight can best be obtained into the problems, principles, and philosophy of education during the two years of practice. It is objected, however, that an intellectual appreciation of the problems involved could be better imparted in university courses, and the theory can then be subjected to the criticism of practice. The regulations, since they do not require attendance at lectures on education at the university as they do in the case of general subjects, depreciate the place of education as a science and deal a blow at the development of the subject in the universities. The new system, which came into force on April 1, 1918, involves the danger of reducing education and teaching to the level of a handicraft. It is suggested by critics that candidates should as a condition of admission to the examination be required to

have attended courses and seminars in education at the universities and psychological institutes, that psychology take the place of philosophy in the general examination, and that in the professional examination questions be given in the oral test on the organization, history, and psychology of at least one school subject, on moral instruction, and on psychological tests and measurements.

THE NEW SPIRIT IN SCHOOLS.

The tendencies that are already apparent since the overthrow of the monarchical government in Prussia are indicated in a number of decrees and circulars that have been issued by the new minister of education. Thus the Kölnische Volkszeitung of November 16, 1918, printed the following decree:

1. Wherever the teaching of history and other subjects have been used to arouse national hatred it must be discontinued in the future; it must be replaced by an adequate presentation of subjects dealing with natural history. All biased and false teachings about the war and its causes are to be avoided.

2. All books which glorify the war are to be removed from the school libraries.

3. At no time should the teachers pass adverse or false remarks about the causes and consequences of the revolution or the present Government which are apt to debase in the eyes of the school youth the achievements of the revolution.

4. School authorities and teachers must avoid in their intercourse with the school youth any matter that tends to arouse a counter-revolution (especially in the Lowlands), as such action is at the present moment greatly endangered by the possibility of a civil war.

5. Pending the decree about the separation of state and church, the children of dissidents and persons holding religious views for whom no provision has been made in the present curriculum must be excused from the lessons in religion without any further proof, on the request of persons responsible for their education.

This was followed at the close of November by the Socialist program of education issued by the Socialist Kultus-Minister, Herr Konrad Hänisch, of which a translation appeared in the Times (London) Educational Supplement, December 19, 1918:

A. GENERAL.

1. The separation of church and state has been settled in principle. 2. Religion has ceased to be an examination subject, and the introduction of unsectarian moral teaching is being prepared. 3. Supervision of schools by the local clergy and participation of the clergy in the district inspections are abolished. 4. Mixed education of boys and girls has already been introduced in some schools. 5. Teachers and scholars receive powers of self-government. 6. All chauvinism is banished from the instruction, and especially from the instruction in history. 7. Prussia will propose the assembly of a school conference for the whole Empire. 8. The uniform school (Einheitsschule) is secured, and the abolition of all class schools will be begun immediately. 9. The office of rector will be deprived of its autocratic character and built up upon a collegiate basis. 10. The school authorities are instructed to promote among

teachers' unions and at official conferences discussions of educational and cultural questions of policy in the spirit of the new age. 11. The ministry of education will include as representatives of the Socialist Party two ministers, one undersecretary, one principal adviser, and two assistant advisers. 12. Touch will be kept with champions of the new movement throughout the whole country, and a list will be made of suitable candidates for freshening the body of officials and teachers. 13. The leaving examination from the secondary schools will be transformed and the number of examinations will be reduced. 14. The Prussian ministry of education claims a share of the confiscated royal castles for the purposes of national education—as training schools, boarding schools, model seminaries, museums, and national high schools. 15. Physical culture has been deprived of its military character.

B. TEACHERS.

16. No teacher may in future be compelled to give religious education. 17. It has been proposed to the ministry of war that all teachers shall be released immediately from their military obligations. 18. Work for the willing! Immediate provision of employment for teachers who return from the field by reducing the size of classes, filling of all vacant posts, and establishment of special courses. 19. The amnesty will be applied to all teachers who have received disciplinary punishment. 20. Teachers who have been punished for their political or religious convictions are to be reinstated. 21. The teachers will have representatives in the Government and in the school administration. The socialist teacher Menzel has been appointed principal adviser in the ministry of education. 22. Tried teachers will be appointed to local inspectorships of schools without special examinations.

C. UNIVERSITIES.

23. Prominent representatives of scientific socialism and of other tendencies which have hitherto been systematically excluded are to be appointed to university chairs. 24. A system of national high schools is to be built up on large lines and to be placed in organic connection with existing schools and high schools. 25. The reorganization of the technical high schools will be effected in close connection with the universities. 26. The social, legal, and financial position of the assistant teachers in universities (privatdozenten) is to be raised. 27. Freedom of doctrine in the universities is to be rid of its last fetters. 28. Professorial chairs and research institutes for sociology will be established.

D. GENERAL CULTURE.

29. The theaters will be put under the ministry of education. The theater censorship has been abolished. 30. Opportunity for work, and relief where necessary, will be given to unemployed artists and writers on their return from the field. 31. The system of appointments will be reformed in association with the organizations of artists of every school. 32. The royal theaters will become national theaters, and the court orchestras will become national orchestras.

SEPARATION OF CHURCH AND STATE.

The appearance of this program created considerable alarm throughout the country among those who feared not only separation of the church and school but the elimination of religious instruction. In response to numerous telegraphic and letter inquiries Herr Konrad

Hänisch addressed to the Rheinische Zeitung in Cologne the following telegram:

Repudiate most vigorously the baseless rumors that the Kultus ministry intends immediately and by a mere decree to bring about unawares and with a single stroke the separation of church and state. The carrying out of this program is, to be sure, in line with our policy, and the initial steps are already in the course of preparation. But it is to be understood, and the members of the ministry are unanimous, that representatives of the church will also be invited to the preliminary work which involves financial, judicial, and, in general, political questions. Preliminary discussions with representative clergymen and instructors of canonical law have already been initiated. Efforts have been made to guarantee the interests and spare the feelings of the church circles in Prussia. No one will be slurred. Irrespective of all other considerations, such action would be in opposition to the general political situation. The Prussian ministry of education conducts no narrow provincial, but state politics. There is no reason for apprehension on the part of the Catholic population.

An official statement of our ministry regarding these questions will be issued in the nearest future.—[Frankfurter Zeitung, Nov. 26, 1918.]

Several points seem to stand out as indicating the future development of Prussian education. These are the secularization of the schools, the introduction of professional inspection in place of clerical supervision, increased participation of the teachers in educational administration, and the establishment in some form or other of the Einheitsschule. Students who are interested will find it profitable to compare the tendencies here outlined with the proposals of the teachers laid before the Parliament at Frankfort in 1848.

CHAPTER VI.

THE SCHOOLS OF AUSTRIA-HUNGARY.

By Peter H. Pearson.

Division of Foreign Educational Systems, Bureau of Education.

Contents.—Conditions prior to the war—State or local control—The problem of the *Einheitsschule*—Problems of higher education—The teacher, the pupils, and the war—The responsibility and the service of the schools—Consolidations of teachers' unions—The new order—Political reorganization in its effect on the schools.

CONDITIONS PRIOR TO THE WAR.

The political changes now taking place in Austria-Hungary will be followed undoubtedly by far-reaching alterations in the school system, whereby old modes will be swept away and new ones inaugurated. In the present sketch the attempt is made to treat only such problems and movements as are likely to continue in some form and thereby maintain a living interest, even under a new political administration. Whatever the new political units may be, school men will continue to give attention to centralized control of schools as against local control, which is the substance of the State public school problem that has long occupied the attention of teachers in Austria. In regard to school organization, the "Einheitsschule," in which are involved the opportunities of the great mass of pupils, is likely to receive further attention, even under an altered administration. In the reorganization of the schools that Austrian teachers and statesmen are about to consider, they will try to realize the thought that special talent of any kind is a treasure belonging to the State, which, for the good of the State, should be brought to its own complete fruition. To discover such individual talent and to find the means, inside or outside of school, for its development will be more fully realized and accepted as a duty of the State. While it is premature to attempt a forecast of the character the educational movements inaugurated by the present upheaval will assume, it is quite certain that they will break the barriers within which the schools have hitherto done their work; new duties demanded by actual life will come within the scope of the teacher's labors; new agencies from the practical activities will be enlisted in educational work.

In treating the schools of Austria in their present condition of change, it is, of course, disappointing to be unable to follow any

departure or movement to a stage of finality. Perhaps, however, there are compensations in observing how the schools and teachers have adjusted themselves to the emergencies created by the war and have met the crisis; the balance they have been able to maintain; the encouragement, advice, and example they have furnished; and the pressure of autocratic domination under which they have labored. At this moment full details are not at hand, but there are enough to show that the teachers in Austria are, as would be expected, better prepared than any other class of that country to accept the political changes in a spirit of sanity and poise.

The educational currents created by the war receive their special character from the original lack of solidarity among the people of Austria-Hungary. The Germanic, Slavonic, and Hungarian Provinces, each comprising within itself races differing from one another in politics, religion, and ethnic origin, have been unable to effect an amalgamation of their units.

They have been only loosely united into one commonwealth held together by a governmental machinery which is necessarily cumbrous. The two dominant Provinces, Austria and Hungary, have had a ruler in common, but little else. The provincial parliaments, 17 in number, have been virtually autonomous in determining their internal affairs as well as in the ordering of their schools. Members of Parliament from the Crown lands have been elected by a constituency split up by 7 or 8 languages, and by differences in religion, tradition, and industry. The qualification best recommending a candidate was the ability to further some provincial interest rather than measures of nation-wide scope. In the Imperial Parliament the Austrian part of the assembly, consisting of Czechs, Poles, Ruthenians, and Italians, have been still more divided than the Hungarians. In the factional struggles, therefore, the plans of the latter have generally prevailed. Each political faction set up unity as its aim, but each made itself the center to which the others should be united. "The Magyars revolted against being Germanized, but saw no inconsistency in insisting that the Serbians, Croats, Rumanians, and Slovenes should be Magyarized." Yet up to the time of the war no dismemberment seemed probable, for the Provinces were so related that while "they had a hard time to live together, they would have a still harder time if they parted company;" hence the struggles have been, not for secession, but for the fullest freedom within the union.

The Germans of Vienna are different from their kinsmen of Berlin. They are not so robust; they are less diligent, less inclined to orderliness, less commercial, but more cheerful, good natured, and genial. Austrian patriotism has always been far more a product of reasoning than an instinctive attachment to the State. With the

Austrian, feeling for the State has never been sufficiently strong to supplant the attachment for his native crownland.

In Germany there was, in 1900, only one case of illiteracy among 2,000 recruits, while in Austria there were 356. Since then the figures have become considerably less. This result should be judged in the light of the fact that Germany examines her young men at the time of recruiting, while Austria and Hungary at the time of taking the census. In Germany three generations have passed since school attendance was made obligatory, while in Austria two and in Hungary only one.

The incessant conflict among 8, 9, or 10 different races has obscured the view in respect to social, cultural, and educational needs, and here is at least one cause of the lack of determination vigorously to combat the condition of illiteracy that prevails.

STATE OR LOCAL CONTROL.

The solution of the problem of State or local control over the public schools will be fundamentally affected by the political changes now pending. As a public issue it may, indeed, be obscured for a time by the larger one of the reorganization of the State itself, but it will reappear as the new administration sees the necessity of uniform instruction in the rudiments of citizenship under the new organization.

In Austria-Hungary the Ministry of Education exercised supreme control over all schools with the exception of certain institutions under the management of the Department of Agriculture. The immediate control was vested in the provincial legislature and carried out through (*a*) a school council for the crownland, (*b*) a district board for each district, and (*c*) a local board for each community. The legislature selected the members of the crownland councils from the clergy, the citizens, and the specialists in education. The same authority also ratified the appointed membership of the district and local boards, determining the power vested in the several boards and the details of arrangements under which they discharged their duties. The school programs and schedules were drawn up under the direction of the Ministry of Education on the basis of outlines furnished by the crownland councils.

The power of enacting laws for the folk school was apportioned between the State and the several Provinces, according to the constitution of 1867. The power of determining the principles was reserved to the State; all other matters, such as founding and maintaining schools, insuring attendance, inspection, fixing the legal status of teachers in respect to appointment, salaries, retirement, discipline—all these matters were left to the legislatures of the crownlands.

In placing the management of the schools and the responsibility for their progress in the hands of local bodies, the lawmakers had in mind the example of Switzerland, where a similar distribution of control created a healthy competition among school communities. In Austria, however, no such rivalry set in. The people did not then recognize the intimate dependence of the productive industries on the work of the schools; they regarded the outlay for schools as unproductive. To this was added dissatisfaction over the unequal distribution of the expenses. The appointment of teachers, the regulation of teachers' salaries, and the school inspection were left to the crownland and the individual districts, with the result of frequent complaints of arbitrary action; teachers were appointed,[1] not with regard to professional merits, but for reasons that had nothing to do with the vocation of teaching, such as political and factional adherence.

Now one racial division, now another, placed a prominent personality at the head in the Ministry of Education. The political forces that could be mustered would effect a change in the board of education and thereby a change in the system. German, Polish, Czechish, Magyar leaders, in their efforts to draw a following, proceeded on different lines. The school system became unsettled and troubled by innumerable regulations issuing from no dominating central idea. Desirable reforms were obscured or set aside in order to enhance the prestige or power of a faction. If the crownland nations are ever to draw together in a closer union, some way of imparting instruction in citizenship should be adopted for all the schools of the State. Such instruction has indeed been included in the programs of schools above the elementary, but there was no concerted effort in the direction of general unity; hence the subject created differences rather than common purposes. Again, the greatest latitude was permitted to each school in the mode of imparting the instruction, whether as a subject with its place among the other subjects, or as an informal discipline to be imparted anywhere within the general framework of the curriculum.

In the efforts toward unity and integrity, one class of institutions is brought prominently to the front. Unity among the schools requires unity among the teachers and the institutions that train them. Some power must be wielded from a central point to steady their efforts into cooperative activity. The interests here involved can never be of a merely local character and as such can not safely be intrusted to local authorities. They are intimately connected with the rebuilding of the forces that the war has destroyed and of replenishing the depleted sources of subsistence. In the House of Representatives the Austrian Minister of Finance gave expression to these

[1] Pädagogische Rundschau, February, 1917.

thoughts in the discussion of the war budget in September, 1917, when he said that expense for measures to improve the people's health and education should be regarded as productive expenditures and as such to be furthered by the State. Thereby school questions become State questions of the first magnitude. From this it follows that schools for the training of teachers are the chief prerequisite for extending and improving public education. At present there are 84 State institutions, as against 64 private—crownland, city, denominational, and other—founded for the same purpose. The training of the teachers for the State in consistent and coordinated notions of duty and service that extend beyond provincial limits is an obligation resting on the State itself. This duty the State already exercised with regard to the middle schools and the universities, but to have charge of the entire training of the teachers is in a still higher degree the duty of the State.[1]

The thought is gaining prominence that the development of the entire people, together with national events, such as those now taking place, furnish instruction material for a national school, and that the elementary and the advanced folk schools should more fully utilize this national material. Then, too, the war has shown how deep and dangerous were the ruptures that threatened the Austrian people. In order to check these disintegrating tendencies the State must take direct hold of the folk school and thereby foster the interests of a firmer union.

The difficulty in bringing the folk school under direct control of the State lies in the fear that the general population would thereby be excluded from participating in the management of the schools. This fear appears to be unfounded, for while the State would, under the change contemplated, exercise direct control without the intervention of other legislative bodies, it would be in continual conference with the crownlands to ascertain the wishes and conditions of specific localities. The school district and communes would be relieved from the burden of expense, regularity of attendance would be secured, and the communes be free independently to further education in their respective localities.

The transfer of folk school management to the State would meet squarely the criticism, coming from the crownland school districts, that the gymnasia and the universities with their aristocratic patronage are liberally supported by the State, while the schools for the people are left unprovided and neglected. By taking these schools under its own protection the State would effectively silence such criticism.

The idea of the State folk school has gained currency and favor especially in those Provinces that, on account of political dissensions

[1] Pädogogisches Jahrbuch, 1918.

and financial stringency, have been unable adequately to support their schools. But the principle of centralization, which it embodies, involves the choice of central authority in which the controlling power should be vested.

Just here Austria felt that her interests were vitally concerned. In organizing for the keen industrial competition which the coming years will bring, the German language must be the center and rallying point. It is not enough for the State, therefore, to enact a law and leave the realization of its ends to the crownlands. She must with a firm hand guide the schools herself, for with respect to the schools crownland autonomy has been a disappointment.

Under more favorable circumstances, defective or inequitable laws could be remedied by legislative action. When, however, the State passes a general enactment under which relief might be sought by communities and school boards, this enactment will be construed and interpreted by 17 different legislative bodies. In the opinion, therefore, of the foremost educators of Austria, national uniformity with equity in its operation can not be secured through a State law interpreted and enforced by the crownland legislatures. In the State folk school these men see relief from the random expenditure of money and energy which thus far has had the lamentable effect of increasing the contentions among Austria's numerous factions.

THE PROBLEM OF THE EINHEITSSCHULE.

As in all civilized countries, the war has brought home to the people of Austria the importance of fully utilizing all its resources, intellectual as well as material. It has emphasized the relations which the public school sustains to industrial life and thereby added new interest to the study of better coordination between the country's education and its industries.

Judging from the views reflected in the Pädagogische Rundschau and in the Jahrbücher for 1916–1918, a new impetus has been given to the movement for extending all forms of education to the largest number in order to help the schools more fully to contribute toward industrial needs. Hence there is a stronger insistence on, first, a regrouping of studies to meet individual capacities as these appear between the ages of 10 and 14 years; second, a more rational guidance in vocational selection; and third, an articulation between the elementary and the advanced courses that shall permit a pupil to pass on to his chosen work without waste of time and without social handicap.

Readjustments of this kind, to which the stress of recent events has given new significance, constitute the outline of what in the countries of Europe is known as the problem of the *Einheitsschule.*

More fully stated, it includes everything that affects the organic connection between school types, conditions of admission, educational aims, and vocational selection.

Fundamentally the problem arises directly out of the origin and growth of different classes of educational institutions. Historically the folk schools had an order of development different from that of the higher institutions. The higher educational aims were set up by the church and the state; and the church and the state founded institutions adapted to realize these aims in their advanced character. The university grew up within the church, often under the immediate patronage of some prince, who hoped to secure its power and prestige for his principality. Schools of gymnasium rank and scope were then established to prepare pupils for the universities, eventually becoming the exclusive ports of entrance to these. The authorities of all advanced institutions prescribed a special form of dress and conduct of life to be observed by masters and pupils, conveying the idea of separateness as well as of corporate rights and privileges. The gymnasia again required a certain amount of elementary instruction for admission; to meet this requirement special preparatory schools (Vorschulen) were founded, which in their status of preparatory schools for the gymnasia partook of the exclusiveness of the latter.

The origin of the public elementary schools may also be credited to the church, for some knowledge of reading and writing was necessary for the church to do its work. But the instruction imparted was of a humble order, stressing usefulness, obedience, and religion, with no impressive associations. There existed in the early times a feeling that the duties of an elementary school teacher could be intrusted to anybody, of even modest personal education. Unfortunately the terms "school for the poor" and "charity school" were close at hand, and were frequently used to characterize these early institutions for the children of the poor.

Educational leaders eventually saw the importance to the country's prosperity of a more adequate education of the public. The public schools then entered on their own mode of growth. Schoolhouses and school facilities better adapted to the work were provided; institutions for the training of teachers were established; then laws requiring attendance; and, finally, school programs and courses growing out of the needs of the people. As its scope expanded the folk school grew into the advanced elementary (Bürger) school, the latter type being common to all the Germanic peoples of Europe. In the same continuity from the original public school appeared the modern school (Realschule), which did work equal in advancement to parallel schools of the classical type.

In such a development of the school system from opposite directions each of the two parts came to have definite ends and implica-

tions. The gymnasium and the university became the institutions which opened the way to the professions and the sciences. But the long and arduous road leading to distinctions through university studies can be successfully pursued only by the student whose parents have wealth to assist his natural endowments. Again, these institutions came to be considered as places to prepare for social position through the prestige the university confers.

The folk school, on the other hand, and the institutions which grew from it, have been associated with the everyday needs of the people. Their educational aims have been more modest. After completing the required school period, their pupils were expected to return to an occupation like that followed by their parents rather than to enter on advanced studies.

The present sweep of democratic ideas, augmented by the exigencies of the war, is breaking down the traditional school boundaries and demanding that each member of the commonwealth be given the fullest opportunity to train for the service he is best fitted to perform. First of all, this requires that whatever faulty coordination or other handicap attends the schools as a result of their mode of development be corrected or removed, so that the pupil's progress may be limited only by his own capacity.

Structurally, it means that the series of school types that have developed from the two opposite directions—from the university and from the folk school—be brought together into a single organic sequence of schools. Practically, it requires the consideration of a number of separate problems that arise partly in completing the amalgamation and partly from the various social and industrial interests thereby affected. Whatever adjustment of this kind the schools may be able to make is to that extent a solution of the einheitsschule problem.

The problem is not a new one. Pestalozzi and, in later years, Friedrich Paulsen and Kerschensteiner saw the regrettable effects of a system that separated pupils into categories on the basis of their parents' means, thereby causing the schools to further social cleavage. The earliest plans to carry out the unity idea—which are almost the same to-day—took the form of a common required primary period which alone should admit to secondary institutions. The early objections were that the plan was impossible of realization, that it was urged in the interest of certain classes of teachers, and that it was calculated to advance the interests of political factions. Most of these objections came, however, from school men unwilling to disturb the existing structure. At this time vocational selection had not become a part of the unity idea, or the number of objections would have been still greater. Notwithstanding the opposition, the plan gained favor to such an extent that some recognition was

given to it in the school enactments of several countries. In "Die Einheitsschule" Richard Ballerstaedt traces its development and points out that in France a law of 1869 caused the founding of State preparatory schools to be discontinued. In 1873 a law was passed in Sweden approaching the unity school idea. Norway in 1869 replaced the preparatory school by a common foundation for all advanced schools. The school laws of Denmark, passed in 1903, advanced the principle in that country. In the United States it has never been a problem, for here the common undivided school has always been the basis of the entire system. Though an approach to it was made in Austria by laws passed in 1869 and 1883, slow progress has been made up to the present time. Now the war has made the Einheitsschule idea a living and vital issue. The educational press combats the notion that a few only are entitled to enjoy the achievements of art and science, and that the many are destined to perform the labor through which these achievements are reached.

Just as every pupil must be admitted on equal terms, setting aside the distinctions of wealth or station, so must all kinds of work requiring trained skill be admitted to the schools on equal terms, free from every taint of association. From every consideration, pedagogical and practical, enlightened opinion in Austria demands that practical work be brought within the scope of the school activities and placed on the same plane as other subjects, whether it is done in the workshop, the school garden, or the school kitchen. In so far as the process of reorganization may affect the inclusion or exclusion of subjects, there will be the opportunity to have the prestige of labor officially proclaimed by assigning it equality with other studies. In urging this step the schoolmen are not clamoring for mere monotonous equality. The democratic contention for equal opportunity must heed the aristocratic insistence on strictly determining the value of an achievement and the superiority of personal worth.

All plans embodying the unity principle include a common, undivided, elementary period for all pupils as the first essential, as already pointed out, and hence the discontinuance of the preparatory departments attached to State or municipal secondary schools. The basis for this common period is found in the folk school, which in Austria usually comprises five years. But the length of time it is expedient for the children of a community to attend the same elementary school is a matter on which educators are not agreed. Some teachers and most parents believe there should be a departure in the direction of a chosen calling as early as possible. Postponement of the choice by a year beyond what is necessary would, in their opinion, be a loss. Just here arises the consideration that, in their eagerness to select a specific line of activity, the guardians of pupils should not overlook the importance of teaching them the purpose

of work in general, to which their own proficiency must be related. There must be the general training for citizenship to give meaning, balance, and coordination to the vocational training.

To carry out the principle gives rise to numerous problems. At what stage of a child's development, for instance, do its powers and capacities appear with sufficient clearness to furnish a safe basis for the choice of calling? In Norway, where this question has been much discussed, teachers vary in their estimates between the ages of 9 and 13. Kerschensteiner, of Germany, holds that a child's aptitudes are seen at the age of 10 or 12, with the exception of memory by rote, which appears with marked differences among children much earlier.

The mode of determining a child's advanced elementary studies is fraught with its own perplexities. In most countres of central Europe, where a free road is now urged for all gifted pupils and special roads for the most gifted, this question has become prominent. Should the choice be left to the parent and the teachers, who would be guided by the gifts and inclinations that have come to light during the pupil's three to seven years in the primary school, or should resort be had to special intellectual tests?

The choice of calling carries with it the responsibility for choice of courses consistent therewith. In the Pädagogiches Jahrbuch for 1918, Prof. Theodore Šteiskal contends that it would be advisable to have a board consisting of teachers, school physician, and parents to determine what courses of study a pupil should take up. In the decisions of this board the teacher and, if necessary, the faculty should have the deciding vote, with the understanding, however, that their conclusions be based both on tests of knowledge and on general tests of the pupil's intelligence and endowments. The decision of the parents would be simplified in so far as they would choose only among the several school types the one that would best meet the gifts of their children, as explained during the conference with the advisory board.[1] The full purpose of this advisory board would be to protect the intellectual, moral, and physical welfare, and, in fact, the future happiness of the children, against the vanity of the parents. In view of these purposes, Prof. Steiskal urges the employment of tests for scientifically ascertaining a pupil's fitness for a specified department of work and study. Intelligence tests, vocational psychology, and school organization would thereby be brought together and comprise a field for the solution of the weightiest educational problems of the present time.

As it would diminish a pupil's chance for success to be ushered into a calling already overcrowded, industrial and professional de-

[1] Based on lecture by Prof. Steiskal, as published in Pädagogisches Jahrbuch, Vienna, 1918.

mands have to be considered in the selection. Statistics showing the fields that offer the best openings would have to be compiled for the use of the selecting board. Again, the interests of the pupils are fully guarded only when the selection of courses may be freely altered within a reasonable time, as experience may show that the first choice was erroneous. The structure of the school units, therefore, must provide alternatives and equivalents that can be accepted within limits as leading to more than one calling.

Even though carried out by conscientious advisers, acting under the most favorable conditions, the selection of vocations and studies for others is not free from objections. Many teachers are reluctant to take these matters out of the hands of the parents in the manner indicated. Again, they hesitate about assuming the responsibility involved in selecting some pupils for ambitious higher studies and assigning others in advance to special tasks of social servitude.

In respect to organization the principle of the unity school moves toward complexity rather than simplicity. It must prepare divergent roads for the increased number of student groups formed by vocational selection, each group moving on toward specialized studies. It must provide transition possibilities, so that the pupils may, in case of altered choice, pass from one road to another without too great loss of time or effort. Again, as circumstances allow some to continue at school longer than others, points of conclusion must be provided to permit pupils of various means and gifts to finish their periods of study at different times, yet with some degree of completeness in each case.

The principles of structure as set forth by Kerschensteiner, Lang, and Steiskal give particular prominence to vocational selection, which is now associated with the unity idea. As individual capacities appear earlier in some children and later in others, the selection can not be made so that pupils are classified into categories at a fixed time. The earliest grouping should be general and tentative.

A preliminary inquiry like that for some years conducted by M. Belot, of Paris, would be easy to make and cause no derangement of the work. He invites each pupil to complete the following form:

1. When I become a man, I wish to be_____. I wish to be _____because_____.
2. If I can not be_____I should like to be_____.
3. If I can be neither_____nor_____I should like to be_____.

Assuming a period of six years required of all pupils, the first four years would undoubtedly suffice for a selection along broad and basic lines. Accordingly, some differentiation in the study program would come at the end of the fourth year, probably with added language study in one group of courses and increasing stress on science in the other. Further division would take place at the end of the obliga-

tory period when some would enter the trades as apprentices, while others would continue in the advanced elementary school for another year; others would enter the continuation schools to pursue studies in the direction of technical vocations and industries, while still others would continue toward the gymnasium. Further selection, or alteration of selection, would come at different times between the ages of 12 and 14 as the pupils would complete units of the continuation work. Again, a selection of advanced technical or university studies would be made at 16 or 18 with specialized grouping in the direction of the career in view. Details of studies and schedules can not be settled until the altered articulations among the school units, as required by the plan, are effected. Many teachers of Austria do not regard the present as an opportune time to attempt radical reforms. Questions of reorganization involving the interests of people in all stations in life should not be settled under the pressure of abnormal influence, yet insistence on reforms comes both from the folkschool with the cry of equality of opportunity and from the secondary institutions with demands for relief from the adverse conditions under which they labor.

As one of the heaviest tasks assigned to the Einheitsschule is to remove social barriers, its opponents ask whether this task does not belong to society rather than to any one of its institutions. The demand for such a school is, in reality, an effect of what is evolving among social orders. Whether the schools in their practical arrangements can further this cause is extremely doubtful. Assuming that all children, those from homes of poverty and those from homes of opulence, could be brought together in the same classroom and set to work on the same lessons, would they not segregate into groups at every recess and every free period, and would they not regard the enforced association as a grievance? Children are not skilled in concealing notions of superiority fostered in their homes, and they can not be expected to exercise the tact and forbearance that their parents lack. The social functions connected with examinations and commencements would be embarrassing to the student from a home in poor circumstances. Will not the functions in which he takes part cause him more fully to realize the difference in rank, and, hence, emphasize the lines of social division? It is further pointed out that parents may reasonably be permitted to exercise discretion in the choice of schools and hence the association of their children. What if rich and superior families refuse to send their children to the public schools and reject the common undivided period? Again, assuming that obstructions can be removed so that a free road to advancement is opened for all, the means of travel must also be provided, a matter which thus far has received little attention in the discussion of the Einheitsschule.

These objections are met by pointing out that the changes in question, like all far-reaching changes, can take place only gradually. Time must be allowed for pupils to accommodate themselves to the new adjustments. In the meantime, it is urged, ameliorate the conditions both of the public schools and of the pupils in attendance. Improve the hygienic arrangements; reduce the number of pupils in a class, and, above everything else, appoint the best teachers at salaries commensurate with their work. The State and the community will see that it is to their advantage to discover and develop talent, and they will create the funds necessary for this purpose. Eventually the best human qualities, the best powers of heart and intellect will win and find their just level in these associations. In both its general and practical character the most enlightened school men look upon a system of education as a structure continually subject to changing emphasis, and, hence, to constant readjustment of its units. It is a living thing, an organism rather than a mechanism; it must respond to the shiftings and the changes that take place in the society from which it grows. As the directing of the schools was transferred from the official power of the church to the state and the commune stress was laid on new features of its work. Varying phases of school problems, therefore, are accentuated as they appear against a social background of different times and different countries.

In Germany the Einheitsschule at first concerned itself with attempts to "satisfy divergent educational requirements, especially in the domain of secondary education."[1] Later the emphasis shifted to that of a common undivided elementary period to serve as the foundation for "either a classical or modern education." The Frankfurter curriculum preserves the spirit of the unity principle while it sets up several distinct aims due to modern needs. More recently another phase of the proposed reform is uppermost—every talent is a treasure belonging to the nation; the school must find it and open an unobstructed way for its fullest development and utilization. In Austria, too, educational leaders see the importance of the early discovery of talent and its fullest development for service; they see the waste and disappointment bound to follow an indiscriminate encouragement of the fit and the unfit alike to pursue advanced studies; hence they are concerned with plans for checking the influx by means of rational selection. As there is danger of erroneous selection, they wish divisions of the school work so correlated as not to leave the pupil irrevocably committed to a course of education upon which he has entered through ill-considered reasons. The unity principle to be embodied in the altered organization of the schools must take

[1] From terminological notes prefixed to "German Education Past and Present," by Friedrich Paulsen.

into consideration the enlarged scope of their work, and reconcile, so far as possible, a number of divergent trends due to present social needs. The function of the schools is no longer limited to imparting instruction; the schools become the centers of welfare work, first of all in behalf of the children, and then of entire families; they become distributing centers, with activities which are ordinarily only remotely connected with teaching. All these endeavors have the character of cooperation and collectivism, and carry with them the notions of a socialized community and group initiative. To bring the schools into organic cooperation with these activities requires time and can be done only by gradual alterations of the present system. As moving in best accord with these democratic currents of thought, some educators [1] hold that these reforms should proceed from the folk school as an extension of its present scope. By starting from the folk school it will be possible to continue the reform not only with the least disturbance of the present system but also in closest conformity with the needs that arise directly from society. The folk-school type would extend into an advanced folk school (Bürger Schule), adapted to impart a general education to all pupils alike, whether they were destined eventually to become merchants, officials, or directors of industry. In the opinion of the same authority this advanced secondary school could be made the basis of all higher schools by organizing it in two divisions: A four-year folk school, upon which would be founded a four-year advanced secondary school. From the latter division would extend various branches such as teachers' normal schools, military, middle, industrial, agricultural, household, and professional schools. Special preparatory courses could be given in the Bürger Schule admitting to advanced standing in the gymnasium. This arrangement would not encroach upon the province of the gymnasium, for the latter would in general be left intact and receive its pupils directly from the folk school. An organization on this basis would expand, Dr. Wettstein maintains, so that a continuation school would be provided for those pupils who leave the folk school at the end of the first four years just as an extension of the last four years would develop to receive pupils who would not enter the gymnasium.

The advantages that would follow from this succession and relation of units is thus summed up by the same authority:

> The course of general education would be simplified and extended to the greatest number. There would be a common period of education up to the pupil's 14th year. A significant gain would be the postponement of the vocational choice to the more mature age of 14, a time when the pupil's real capacity rather than general reasons would be the deciding factor. The middle schools could be founded with greater independence of local conditions, for

[1] Among them Dr. Wettstein.

pupils of maturer years could more easily be away from home. There would be an economic gain; for villages and smaller communities, relieved of maintaining gymnasia, could open school for a wider patronage. The plan would counteract the estrangement among social ranks, as pupils by being educated together until the age of 14 would find a greater number of interests in common.

He concludes that the details of schedules and curricula to come within this framework of the system can be arrived at only after full discussion conducted in the light of the effects that the present events will have upon society.

PROBLEMS OF HIGHER EDUCATION.

At the universities there has been of late years, according to Dr. Richard von Wettstein, a regrettable lowering of the intellectual plane of the student body.[1] Among the causes of this is the fact that so many people attend the universities who are not naturally fitted for a university career. Neither do they possess the means indispensable to a successful pursuit of advanced studies. Many come to enter the universities through the peculiar position that the advanced secondary schools (Mittel-schulen) hold in the system. These confer the "one-year privilege" with reference to military service, and make a university career possible. Once started, it is only in exceptional cases that students change their direction toward a calling in better accord with their aptitudes. Another reason for the lowered standards is that in some localities gymnasia are maintained not in response to educational needs but as centers of political influence. Once established, every effort is made to increase their attendance; accordingly, the requirements are lowered so as to bring the largest possible percentage up to the leaving examination and swell the numbers that move on to the university. The attendance at the middle schools increased from 79,383 in 1893 to 160,000 in 1913.

Again, the privilege of substituting examinations for studies is responsible in part for the undesirable influx. Many girls, after completing the courses in the lycée, pursue private studies as preparation for the advanced secondary (Realschule) school, and are then admitted to the university. While occupied with their university studies they pursue extra work leading to the gymnasium finals to the neglect of the regular work they have then taken up. They and their guardians overlook the fact that attendance at a school of the right standing, with its prestige and spirit reinforcing their work, is essential to scholarly maturity. No compensation for this can be acquired in a few weeks' residence nor by examinations.

These and other causes have crowded the universities beyond their capacity and entirely out of proportion to the economic demand for

[1] From Pädagogisches Jahrbuch, Vienna, 1916.

people university trained. In 1893 the total number of students attending the universities of Austria-Hungary was 16,288; in 1913 the number had increased to 43,225. The immediate consequence was to make the equipment and accommodations inadequate. The same lecture rooms had to be used notwithstanding the fact that the attendance had trebled. The most unfortunate results of the influx are an overflow in all callings requiring academic studies as a prerequisite, and the creation of an academic proletariat. Other serious consequences follow, such as a debasing competition for place among people of university training in which not always the best but often the most insistent wins.

Qualitatively, too, the education and scholarship of the universities suffer from this indiscriminate influx. Even the best students—those coming from the gymnasia—show a discouraging lack of independence in intellectual matters.[1] The gymnasium student "is trained to use what he has learned, but he is at a loss when it comes to giving an independent judgment." Too great reliance is placed on textbooks and notes, and not enough on efforts to transmute these into independent achievements. Dr. Wettstein adds that, while the students have an open mind for the practical usefulness of what they learn, their opinions are easily swayed, for they depend more on the teacher's word than on their own observations. When the Austrian student enters the university he is invested with personal independence as a student and as a citizen, assuming also the duties and obligations that go with these privileges. But those familiar with the facts as they come to light see that he is badly prepared for his new responsibilities. He is unfamiliar with the ordinary affairs of daily life, even with the duties arising from his position in the State and the community. Others have hitherto attended to his personal affairs, depriving him of the self-government and character training that should go with practical experiences. His inexperience of life is responsible, in part at least, for the factional troubles arising when he takes part in political and social movements.

The absence of school-type coordination from the earliest stages on has created an unfortunate departmental separateness among both students and teachers. At the age of 10 the pupil enters the gymnasium, and associates only with those of his own group; the same exclusiveness continues throughout his university career. After this continuous education within narrow circles he enters the service of State or the community as official, teacher, or physician, in which capacity he should be in sympathy with all classes.

While the university men are confident that some relief from these unfavorable conditions would follow from the adoption of the unity principle in the school sequence, others are not so sanguine. The

[1] Dr. Richard von Wettstein in Pädagogisches Jahrbuch, Vienna, 1916.

opponents maintain that to institute a type of folk school as the only means of entrance to advanced secondary schools, thus sending all pupils a considerable distance on the way to the university, would augment instead of decrease the influx to these institutions. The principle of vocational selection as an essential part of the unity idea would not operate toward a diminution of numbers, for it would be difficult to carry out with sufficient severity.

The champions of the unity idea reply that, whether the contemplated change would check the increase or not, growth in attendance can not in itself be regarded as an evil or a danger. To extend education in its highest form to all classes of society should be encouraged and not checked by arbitrary articulation of school types. Not fewer educated people but their more rational distribution according to the professional and economic needs of the country is desirable. It is true that there were 160,000 students at the gymnasia and schools of that rank in 1913–14, but at the advanced commercial schools there were only 8,000, at the State vocational schools only 4,800, and at the forest academies only 2,000. There is then a real shortage of students who prepare for the work in forestry, commerce, trades, and industries requiring skilled management and leadership.

THE TEACHERS, THE PUPILS, AND THE WAR.

The enormous losses occasioned by the war in human lives and in human means of subsistence, with consequent privations and distress, have brought new and urgent questions before the people. One of the most vital is how to recover from these losses, and particularly how to replenish the depleted food supplies. With the statesmen in Austria and Germany these have become school questions in so far as it is the schools that must furnish the training for the work of production. Hence educational problems have become linked as never before with industrial and political life. The discovery and utilization of energy and talent came to be regarded as service in patriotism. The work of schools, teachers, and pupils was mobilized and hence invested with a military glamor. During the first year of the war every subject, every activity, and mode of instruction was touched by a feeling of exultation that deeply affected the schools, making it difficult to move in steady courses. The immediate effect was to interrupt the instruction by abridged terms. As men teachers were called to military service, there came to be a shortage of teachers with consequent vacancies often filled by women.

The official reports show that the pupils promptly responded to appeals to place themselves in the service of the Government for war work. They assisted in tilling vegetable gardens for war purposes. They collected wood, rubber, metals, herbs, and leaves. They took

part in the Red Cross drives, and in collections for consumptives and for wounded and blinded soldiers. The help of the children in subscriptions to the third and fourth war loans was especially efficient. They caused money withheld from circulation to come into use through the State treasury. The self-sacrificing spirit of the children was also seen in connection with the "Savings Day" instituted in many places.

Gradually the school work began to resume normal regularity. School buildings that had been used for military offices, and soldiers' recreation rooms, were returned to their former uses. Upon the request of teacher's organizations, barracks vacated by the soldiers were also turned over to the schools to be used as gymnastic rooms, or, when suitably located, as forest and vocation schools.

The Yahrbuch for 1917 shows that in the third year of the war the children labored as before as collectors for useful purposes; they helped to plead for the war loans; they tilled the potato gardens, and in winter helped to remove the snow. The Ministry of War issued a formal note of thanks and appreciation in which the children's services were recognized. They were exhorted to further efforts in behalf of their native land, to be self-sacrificing and constant in their devotion to their country, home, and sovereign.

But there was then no longer the military glamor and esprit. A deep yearning for peace began to be felt among the ranks and masses. They began to lament that the Government, although it had abandoned its unlimited war aims, had taken no direct measures for peace in response to the longings of the people. The privations, which became more and more distressing, while the hope of relief was still remote, were harder to support with the same fervor of patriotism. The school régime had to yield to the necessity of protecting the children, so far as possible, against actual suffering from want of the necessaries of life. In 1918 about 70,000 children from Austria were sent into Hungary, which was better supplied with food. To afford the children time to benefit by their stay, the vacation was extended till September 18. Later on children from both Austria and Hungary were sent to Switzerland, where foodstuffs could be more readily obtained.

An order issued by the Ministry of Education in 1918 permitted teachers partially disabled in service to resume their duties in the schools. Teachers of the State schools who through no fault of their own were unable to resume their work had 10 years added to their service record for purposes of computing the pensions.

The return of teachers to their former duties caused many women teachers who had been filling vacancies to lose their employment. The protests that arose brought on a general discussion of women's privileges in the profession. The women teachers not only objected

to the abrupt termination of their services, but they pointed out that they were excluded from the schools for boys and from the coeducational schools and that now efforts were made to exclude them also from the girls' schools. In the course of the discussion, which drifted away from the original issue, it was shown that all teachers, men and women alike, were at liberty to apply for positions at any school and to show that they were eligible. A woman who shows that she has the courage and the energy to teach boys should have the opportunity; if she proves efficient she should be retained; if not, she should be transferred to another position.

The abnormal prices made it necessary for the teachers to campaign for an increase in salaries in some proportion to the increased prices. To that end teachers' associations, local and national, drew up resolutions laying before the authorities their needs and urging an increase. In some cases the censorship weighed heavily on them, so that their reports and resolutions were often repressed. It appears, however, that the War Department favored the teachers by a special indorsement of their petition to the Minister of Education (Yahrbuch, 1918). The recognition of the teachers' services in the struggles of the State is apparent throughout. In the autumn of 1917 the Government made an appropriation of 70,000,000 marks available for the living expenses of the 100,000 teachers of the country. The conditions for disbursing the appropriation extended it to all classes of teachers, whether they are regularly employed, enrolled for military service, or substituting for some one on duty at the front. This action caused great relief and encouragement; coming as it did in December it did something toward dispelling the gloom and investing the Christmas season with its old-time cheer.

THE RESPONSIBILTY AND THE SERVICE OF THE SCHOOLS.

In the early stages of the war the exultation over reported successes of the German-Austrian arms swayed the sentiments and feelings of all classes, teachers included. They were led to look upon their country's military success as in a large measure the fruition of their own work. Not all prominent men stated the case with the moderation of Gen. Plüskow.

> My heart goes out to the teachers of the folk school. In peace they taught their pupils the love of their native land and in war they fought as brave men, whereby they have elevated the position of their profession.

The Austrian school journals print the words of Dr. Hieber and Dr. Rudolph Eucken. The former maintains that:

> Our progress in war is due to German technic and industry, German organization and discipline, in fact to the work done by the German schools. To maintain the schools at this point of superiority and efficiency is the best security for the future.

Dr. Eucken, whose words are also published with apparent indorsement by the journals of Austria, states the case still more pointedly:

> First of all, let us constantly bear in mind that the victories of our arms are the victories of our schools. For the men whose heroism we admire to-day have been trained in our schools and through the faithful work of these have become fitted for what they to-day achieve. This should be a hint to us that the German school by no means needs an upheaval from without, that it has no need of an abrupt break with the past.

In these connections, though the words of praise were usually accompanied by cautions against the danger of complacency in present achievements, the teachers were led to look upon present and prospective military success as their work. The words of Bismarck and others gave ample warrant for identifying the labors of the schools with the success of the Army. It will be interesting in the further development of the international situation to see whether the teachers of Germany and Austria will carry the assumption to its conclusion and accept the failure of the imperial armies as the failure of the schools of these countries, and, if so, what defects in their work the teachers will discover in their analysis of the case.

In Austria the teachers of German regard the moment as opportune to advance the prestige of the German language. The war has shown with startling clearness "the damage that a foreign word does" and the worth of the native word. The moment has come which will determine the prestige and acceptance of the German language, not only in Austria and Germany but throughout the world. "Our time," says the Rundschau (May, 1917), "must make reparation for sins committed during the past centuries against the beauty, purity, and correctness of our mother tongue." "The aim of the enemy, which is to crush Germany and thereby our language, must ingloriously fail." "The will to victory over every foreign intrusion (Ausländerei) in our language has, like an elemental force, burst into a veritable folk war against all foreign word-mongering." Among the arguments against foreign words are that they make important sources of information inaccessible to a great part of the German people who intend to pursue scientific or individual studies; moreover, that they commit grievous sins against the highest law and purpose of the language, namely, its independence; hence, the foreign word should be kept out of the press, commerce, and society. All official authorities, such as those of the army and the judiciary in State and Province, are in earnest in their efforts to expel foreign words from administrative departments. Again, the verbal resources and the word-creating power of the German tongue are pointed out. Counting radicals and derivatives, the Rundschau claims 500,000 words for the German language as over against

200,000 for the English and 109,000 for the French.[1] The war has given rise to so many new formations for the use of the army, for food and clothing, for commercial and social purposes, that Grimm's word book will soon have to be supplemented by an additional volume.

If the language question involved only a vigorous opposition to the intrusion of words from Latin, French, or English sources, it would be comparatively simple. The chief contention arises, however, from the efforts of the crownlands to make their own languages supreme. In these struggles the Hungarians are gaining an ascendency over the Germans. The appeal in behalf of the German language, though proceeding from patriotic motives, is made emphatic also by the fact of Magyar preeminence. The words of Count Tizsa in the Hungarian Parliament illustrate the position the German language in some parts of the Empire has been compelled to take. The count complained that the Germans in Hungary were not permitted to educate their children in the German language, and it appears that his words are substantiated by the statistical reports from Hungary, giving the population of each district and the number of schools each nation has:[2]

TENESVAR.

		Folk schools.
180,000	Roumanians	128
70,000	Serbians	44
3,000	Slovaks	1
165,000	Germans	18

BAIS-BODROG.

145,000	Serbians	66
30,000	Slovaks	11
190,000	Germans	18

TORONTAL.

200,000	Serbians	74
80,000	Roumanians	40
16,000	Slovaks	4
166,000	Germans	13

Aside from the question touching the status of rival languages, the character of courses and textbooks was examined in the light of the aims of the struggle. The readers used in the Czekish folk-schools were called in and replaced by others more decidedly Austrian in patriotism. New matter comprising the most recent military events was incorporated and presented in a way to appeal to the young.[3]

The Ministry of Education has ordered that instruction in the care of infants shall be given in the middle and the upper classes of

[1] These figures, which obviously would not be accepted by American, French, or British scholars, are here given as they appear in the Rundschau.

[2] Pädagogische Rundschau, June, 1918.

[3] Rundschau, March, 1917.

the folkschool. The instruction is to deal with diseases peculiar to the early days of an infant, also facts about cleanliness and clothing. In the readers several selections are to be devoted to suggestions on the health and general welfare of young children. These subjects are reviewed in the advanced folkschool in more comprehensive treatment. Still further attention is given to this branch of study in the young folks' associations, for the purpose of supplementing and completing the subject. The instruction will asume the form of talks to young people, to girls, and mothers. The teachers of Hungary are aware of the new and weighty duties thereby placed upon them. The Ministry of Education has offered three prizes of 4,000, 3,000, and 2,000 crowns, respectively, for the preparation of the best textbook on the subject.

The war, according to published reports, has relieved the State of sectarianism in the instruction. The educational journals announced with gratification that when the country called there were no dogmatic conflicts in religion. The Lutherans, the Catholics, the Jews, and the Mohammedans sang the same hymns in the trenches. Members of the same denomination may have had grievances against one another, but all defended the dearest blessings of their State in loyal fellowship. Regarding instruction in religion in the schools, the view early gained acceptance that the truth or correctness of this or that creed as over against some other should not be touched; that instruction in religion has an educational value as a key to understanding the past; and that the universal element in religion—its power to steady, comfort, and sustain—should enter into the instruction and into life without embodiment in denominational formulas.

The war has given a new direction to the sweep of educational currents. Instead of studying the remote past as a key to understanding the world of to-day, attention is directed to the present, the development of one's own nation, the spiritual achievements of one's own State. In these sources the schools should be able to find instruction material of more direct application to the living present.

How to realize aims of this kind has received the earnest attention of the teachers of Austria. The association, "Freie Schule," regards the present as the time for the agitation for a modern school. The reorganization of the schools was continually discussed so far as the censorship did not interfere. It opposed all attempts to compel children of nonsectarian parents to attend instruction in religion; it favored plans to make the attendance at the middle schools easier for children of poor parents. The association, Lehrerakademie in Graz, conducted lectures and discussions to develop principles along which modern educational laws should be enacted. Laymen have taken part in these activities. The deliberations have been charac-

terized by the absence of scholastic remoteness. That forward-looking efforts have been dominant is indicated by such topics as "The gates to the future," "What large problems confront the schools and education?" With the view of attaining results to their resolutions, the teachers have memorialized the Ministry of Education.[1]

Gradually a borderland between the schools and the industries has been discovered, a domain that promises to be the scene of the country's most hopeful endeavors. But as emphasized by Prof. Victor Fadrus in a lecture, December 1, 1917, without folk school teachers of large outlook and endowments nothing can be accomplished. To do their work these men must step forth from their seclusion and take an active part in scientific, industrial, juridical, technical, political, and art problems of everyday life. The tenor of the lecture, which appears to express the view gaining acceptance, indicates that the teacher should bring together the people and the sciences, the teachers and the arts; to that end the teachers must, on the one hand, be in touch with creative men and women of their times and, on the other, with the masses that apperceive and follow. Practically, teachers at all stages should be able to recast and to refashion instruction values so that these may be apprehended by the naïve perceptive powers of the young. They should clarify the laws of achievement; financial resources, for instance, employed in united and cooperative combinations can achieve vastly bigger things than can the same resources as scattered units. Teachers should be prepared to point out what a given community needs, what it further would like to have, and also what it may have above its needs.

The teacher must, over and above the educational requirements, be informed on the resources and the economic arrangements of the country. These demands have already taken form in the growing vogue of home locality study (Heimatkunde). Again, while the teacher is an intermediary between the world and the children, he is at the same time an intermediary between the people and their aims, between the present and the future. He must share with the parents the responsibility for the future of their children; he must help to formulate the problems of the community and the nation and assist in solving them instead of leaving their solution to self-appointed party disputants.

CONSOLIDATION OF TEACHERS' UNIONS.

The success of the armies of central Europe in the early years of the war gave vogue to the dream of Middle Europe (Mitteleuropa). The "Schulgeschichte" covering the time from July 15, 1915, to July 15, 1916 (Jahrbuch, 1916), shows that the teachers anticipated the

[1] Pädagogisches Jahrbuch, 1916.

educational problems that would arise from this union of empires. The reports from many teachers' associations in Austria and Germany indicate that the teachers welcomed the idea, and that they, within the scope of their work, tried to hasten its consummation. Their efforts became directed toward uniting the teachers of the countries to comprise the new federation. On the 4th and 5th days of March, 1916, negotiations were opened between the German Teachers' Association and the German-Austrian Union, looking toward a unification of the teachers' associations of the future Mitteleuropa. Propositions were drafted and a decision taken to complete the federation in the early future. It was further unanimously decided to have committees appointed from all teachers' associations of the middle-European peoples for the purpose of furthering public education and more firmly to cement the fellow-feeling among the teachers of these countries. The executive committee of the German Teachers' Association, which in December, 1915, had started the movement, was charged with the task of carrying the resolution into effect.[1] The initiative taken by the German association was favorably viewed by their colleagues in Austria,who regarded the movement as opportune for affiliations of the kind contemplated. The idea of solidarity and union became general. The problem of Mitteleuropa and reorganization after the war was eagerly discussed in the associations of Austria. The provincial associations, however, found difficulty in reaching a working basis of unanimity. Efforts were made to unite the associations of all the crownlands into one union without regard to party lines or denominational adherence. (Rundschau, August, 1918.) The folk school teachers of Germany resolved on cooperating with those of Austria-Hungary; there was even some talk of organic union with those of Bulgaria and Turkey. The teachers pointed out that it was desirable to learn more about fellow teachers in the allied countries and thereby reach a better understanding of the professional interests they had in common.

The teachers of Germany sent 40,000 marks to the teachers of Austria to help relieve the distress created among their families by the invasion of the Russians. This sum was used to assist fugitives and other destitute persons for whom no other funds were available. This act of good will was to be an enduring monument to the mutuality of good feeling between the teachers of the two countries. The officers of the teachers' associations were charged with the disposition of the sum. "In the war," says a journal for April, 1916, "we have lost much of our unfeeling selectiveness; the struggle between classes has been replaced by common interests; former enemies have

[1] Pädagogische Rundschau, May, 1916.

become confederated heroes; nations are extending their hands in friendship to one another."

As the movement toward consolidating the teachers' unions of these nations was inseparably connected with the war, it rose and came to naught with the successes and reverses of the Teutonic armies.

THE NEW ORDER.

The new order starts with the dismemberment of the Austro-Hungarian Empire, from which eventually new Commonwealths will arise. Confronted by the impending disruption, each nation is making an effort to maintain its identity and to consolidate with itself assimilable portions of other nations. To that end the Czechs, Jugo-Slavs, and Polish leaders have reaffirmed their nationalistic programs in uncompromising terms and have denied the Austro-Hungarian Government the right to speak in the name of any save the Germans and Magyars.[1]

During this period of uncertainty, of dissolution and of reorganization, the teachers have been, so far as it is possible to observe their status, swayed by conflicting sentiments. At this moment of disillusion, so we are told in a journal of October, 1918, the Austrian teachers are awaiting the coming reorganization with equanimity. They are aware that the growth of national feeling and national consciousness is so vigorous among the separate Provinces that it is hopeless to try to consolidate them into one Imperial Commonwealth. The teachers find comfort and compensation in the prospect of relief from racial dissensions in new States where each State gets its own. The internal struggles have been weighing heavily upon the schools, making the enactments of suitable and progressive laws impossible, and paralyzing the power to advance. Political considerations have swayed and wrenched the school regulations from their just Province. "With every change of ministry—and such change was frequent in Austria—came a new system. The German, Polish, Czechish, etc., ministers of education did not pipe the same tunes." * * * Hence a definite national trend could not be maintained.

The teachers and others appear to look forward to the new era as a time when further social progress shall be made through improved opportunities for all. The line of demarcation between wealth and intellectual work on the one hand and manual work on the other had of recent years come to be more sharply drawn than a decade ago. The same authority (Rundshau, Jan., 1918), says that the wealthy and the educated were moving farther away from those who work with the hands. They no longer touched elbows in social affairs; they had no celebrations in common; they did not intermarry.

[1] New Europe, October, 1918.

The distance between a factory owner and his workmen was greater than that between the nobility and the plebeians during the seventeenth century or between master and servant during the Middle Ages. Should the war, which has exposed so many defects, also find a means to bring social classes into closer sympathy with one another?

The teachers also hope the upheaval may bring relief from inner dissensions, from bad school laws and obstructive social traditions. They view prospective changes without regret, apparently looking forward to better conditions under the republican forms of government that may be established. "How republics may prosper is shown by the examples of Switzerland and the United States of America, which we have before our eyes," and where "the will of the people and the sentiments of the people prevail."[1]

PROBLEMS AND IDEALS NOW UNDER DISCUSSION.

Rapidly moving political changes have imparted a new momentum to school reforms, which are ordinarily slow in taking shape. The rising administrations are aware that their principles can gain permanence only through the schools. In the new democracies it is more obvious than in the older monarchies that policies must reach the people and become accepted by them through the schools.

A few of the current problems and movements which are either in sight or already under way as peace is restored are here given. Their outcome will depend on the complexion of the political party that comes into power.

First, the country and its leaders hope to find in the closer cooperation between the schools and the industries the way to recovery from the appalling devastation caused by the war. The safety of the State and the ascendancy of the schools depend, in the first place, on technical efficiency in production and on equitable distribution. With this in view, laws expanding the continuation work of the schools and the industrial training are urged by the school men.

The feeling has long been uppermost that much excellent talent goes to waste for want of opportunity and encouragement. Hence the demand has arisen that its discovery and development should not be left to chance, but that the schools in their work shall effect an arrangement adapted to bring special gifts into sight during the period of the folk school, and that funds be provided to afford such gifts the opportunity for full development.

Then, too, it is felt that the teacher's duties to the pupils do not end with the completion of the courses. The teacher's counsel and guidance should be extended to them while they are being established in the trades or in business.

[1] Jessen, A. Chr., in the November–December issue of Pädagogische Rundschau, 1918.

The teachers' field of labor is being extended into new provinces that the war has discovered. They will have a larger share than formerly in the responsibility for the health of their pupils. Infancy and childhood are the periods when physical defects threatening to become permanent afflictions should be discovered and dealt with by the specialist. The teachers will be charged with the duty of seeing that this is done.

That the family is the center from which all educational work must proceed is gaining recognition. This conception is leading to endeavors to protect the children and their mothers, to look after the homes, to see that necessaries and reasonable comforts are provided. It is also seen that children need protection against the bad influences of the crowded cities and sometimes even against the arrangements made by parents who are not morally fitted to take care of them.

The moral welfare of pupils is a cause of much concern to the schools and the authorities, hence the demand is set up that the protection and care they get shall be better regulated and placed on a more comprehensive basis than hitherto and that funds be procured for the erection of schools, homes, gardens, playgrounds, training schools for defectives, and places of refuge for neglected or wayward children. These educational and welfare institutions are to be administered by teachers and physicians rather than by the judicial authorities. Among these measures there is a proposition to assign the surveillance of each street and the children and youth there to one or two reliable persons. Sensational or inciting papers, illustrations, and pictures are to be kept from the hands of children. Posters of this character are to be kept out of show windows; children's attendance at motion-picture entertainments is to be strictly regulated.

The increased scope of woman's work will demand adaptation of the schools to better and more consistent plans for the training of women in household work and domestic duties, the care of infants and the sick. The schools will also be expected to provide better physical training for girls. Some training or guidance of value to girls as social members of the community will be imparted.

Physical training must be continued through the entire period of schooling, beginning in the earliest days of infancy and adapting itself to the changing needs of childhood and youth. Upon leaving school the young men should continue the work in the preparatory military schools and the young women unite into voluntary association for continued physical exercise, a requisite also to be set up for the young men who have completed their military service. These endeavors have, first of all, the obvious value of improving health and strength, but they have also the very important value of bringing

together persons from all classes for purposes that tend to unite them in closer fellow feeling.

In regard to school control, a general sentiment prevails that State control of the folk schools would obviate many of the difficulties under which they now labor, particularly the ever-present tendency to disruption due to partisan conflict. The salaries of teachers would, under State administration, be more equitable. This topic, as well as that of the Einheitsschule, involves the organization of the entire system.

The educational associations of Austria urge that the institutions for the training of teachers should also be taken over by the State, and that, as a consequence, private teachers' colleges and seminaries should be gradually discontinued. They set up further the aim of extending the course for teachers from four to five years. To have attained the age of 15 should be the only entrance condition. But as teachers' training schools continue from the folk school (Bürgerschule), and as these dismiss their pupils at the age of 14, it might be advisable, in order to avoid the omission of a year, to extend the teachers' course to six years and consequently admit pupils at the age of 14. Entrance examinations should be omitted; the certificate from the Bürgerschule should suffice, perhaps on the condition that a pupil may be found insufficiently prepared before the end of the first semester. The curriculum for teachers should comprise, besides the native tongue, one modern language, with the privilege of selecting also a second modern language and Latin. The Society for the Education of Teachers regards the inclusion of Latin as essential in the course for teachers, maintaining that:

(*a*) "Of all languages, Latin is best adapted to support the instruction in the mother tongue."

(*b*) They cite the words of Dr. Rudolph Heinrich, a prominent educator of Vienna:

> We have gone to school to the ancients for a thousand years, a fact which has charged our modern spiritual life with the conceptions of the ancients, which we can not fully comprehend without tracing them back to their sources. Most sciences owe their terminology to the ancient languages. The fundamental educational sciences, as psychology, logic, ethics, in their basic ideas, point back to the intellectual work of the ancients. It is further pointed out that the inherent exactness and consistency of the Latin tongue have a powerful formative value in education. In Roman history we can study the rise, the spirit, and the decline of a world power and observe what makes a people great and what is the cause of its downfall.

As the present sketch is being completed reports from the schools of Austria-Hungary come to hand, indicating the sweeping changes that may follow in the wake of the present upheaval.

The present Government of Hungary, according to *La Vie Universitaire*, contemplates bridging the chasm between social orders by re-

quiring students of the learned professions to devote certain hours a week to a trade or to strictly manual work.

The Berne correspondent of the London Times Educational Supplement for April 17, 1919, telegraphs:

> The Budapest schools reopened last Friday. The Soviet government is preparing a complete revision of the educational system in accordance with the new spirit and aspirations of the world proletariat. The teachers are to begin by an explanation of the ordinance of the new government. The schemes of instruction in history and citizenship are to be revolutionized by the substitution of Marxian teaching for capitalist doctrines of socal economics. Ethics will be substituted for religious instruction. The teaching of jurisprudence for advanced students in the commercial colleges will be abolished, as the system of laws under the communist government is entirely different from that of the capitalist régime.

But such enactments are likely to move back from the extremes till they reach a balance in true accord with the new order. The recent school laws of Germany, which eliminated religious instruction from the curricula, are already in danger of repeal under the protests coming from school associations in all parts of the country. In Austria-Hungary, as in Germany, the schools need an influence to steady them in their labors, some element of permanence that factions may feel they have in common. While the stress has been on the necessaries of life—hence productiveness, industry, commerce—the coming days will find equal stress laid on ideals, for without them chaos will prevail. The highest educational aims of the future will be sought in human mutuality, truth, self-determination, in which educational, social, and philosophic endeavors will make common cause. Duties to one's fellow mortals must be taught; and from whatever source the teaching comes, it can not be made conclusive or effective merely as a legal formula. The State will need—and the schools must help to furnish them—ideas of permanence to polarize the present flux of feeling and sentiment. The State needs and the schools must help to train characters of integrity, of love for justice, of irrepressible energy, of comprehensive organizing power, in order to give stability to the new commonwealths.

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CHAPTER VII.

SWITZERLAND.

By Peter H. Pearson,
Division of Foreign Educational System, Bureau of Education.

GENERAL CONDITIONS AND CHARACTERISTICS.

Switzerland has an area of only a little over 15,900 square miles, a population of about three and one-half millions, but 25 distinct political units—Cantons—each virtually autonomous in the control of its schools. There is no Federal educational board to issue plans, decrees, letters, or special instruction tending to unify the system. Under this freedom of development the schools have assumed their character in accordance with the language, religion, race, industries, and historical traditions that prevail in the several Cantons. The resulting variety in organization and methods makes it impossible to give a general account of the schools equally applicable to all parts of the country; hence, features that may be regarded as fairly typical will be sketched from reports coming from specific localities, as Bern, Basel, or Zürich.

The Federal regulations that the Cantons have in common provide for obligatory attendance, free tuition, and, to some extent, free instruction material during a period designated by each Canton, optional attendance at instruction in religion, participation in required gymnastics, uniform entrance examination for students of medicine. The Federal Union also contributes to the support of all primary schools; it prohibits the employment of children of school age in the factories; and, finally, it imposes a uniform educational test on the recruits that each year enroll for service.

The annual recruit examinations have a decided educational significance. On a fixed day of the year, after the young man reaches his nineteenth birthday, he is required to report to the office of his home Canton, where he is examined by a board of health, a board on gymnastics and physicial training, and an educational board. In gymnastics the examination consists of lifting, running, and jumping. In reading the requirement is correct enunciation and emphasis, with satisfactory reproduction of a selection as regards content; in composition a theme is required, correct, or almost so, in arrangement and details of form; in arithmetic the four elements, with integral numbers and fractions, the metric system, proportion, per-

centage, and interest, are included; the test comprises also the history, geography, and constitution of Switzerland. The outcome of this examination will determine whether the man is to be accepted for immediate service in a military unit or whether he is to be assigned for special service, including attendance at a school, to remedy the inadequacies revealed in the examination. The final result is published by the statistical bureau automatically assigning to each Canton the rank held by its schools, with the consequent suggestion for competitive endeavor.

Though it has been objected that the procedure is not a satisfactory touchstone whereby to ascertain the comparative standing of the Cantons, for communal ambition may be tempted to establish circumscribed courses narrowly adapted with a view to the tests, yet some positive advantages are undeniable. It brings all young men together on the same plane of personal worth and human equality, disregarding the distinctions by which they had become segregated—shopkeeper and assistant, teacher and pupil, minister and layman, capitalist and peasant. Again, each commune has thereby been spurred on to see that its compulsory attendance laws were strictly enforced, and also that voluntary as well as obligatory continuation schools were established. The examinations are, moreover, conducted under circumstances adapted strongly to impress each young man with the sense of personal responsibility. To acquit himself well intellectually at the time he enrolls under the colors and takes the oath of service is in itself a distinction; to fail and to be placed under instruction for delinquents is here closely connected with failure in duty to one's country.

In regard to the diversity among the schools, it is apparent mainly in the outer form and organization. The obligatory period varies between six and eight years, but Cantons with the shorter period have generally a form of compensation in obligatory continuation schools of from two to three years. The latter, again, differ with respect to courses given and the general trend of their work. In some communes they supplement the instruction of the folkschools by carrying the subjects of these to fuller completion; in others, new subjects are taken up with the purpose of preparing pupils for the trades. Even within the same Canton local individuality asserts itself by departure from the cantonal type program. For example, an hour-and-subject schedule was adopted in Zürich in 1912 to continue in force seven years, but some communes in the Canton adopted different schedules which were supposed to be in closer accord with their own civic needs and with the psychology of their pupils. The hours of the day and the free afternoons—generally two each week—and also the vacation periods were variously distributed. This departure from the official

type, accepting the official program as suggestive rather than prescriptive, is a distinctive mark of the progressive trend throughout the country.

The age of admission and the length of term fixed for the infant schools differ considerably, the German Cantons receiving children at a later age than the French. The period comprised in the primary school varies a good deal, ranging from six to nine years; the period of the higher grade schools (Secundarschulen) varies from two to five years. In consequence these continue from the fourth, fifth, or sixth year of the primary. The concluding years of the latter run parallel with the beginning years of the former, giving rise to a duplication which, as in Basel, it is attempted to obviate by consolidating the two into one school unit. The communes exercise great freedom in deciding how the preparatory work shall be done, how to supplement the work of the folkschool, whether by schools continuing in trades and specialties or by those straight in the line of progress toward the gymnasium and the university.

The middle schools comprise a number of institutions variously named as gymnasia, colleges, teachers' training schools, girls' high schools, technical schools, agricultural schools. They do not fix any one year as the time of conjunction with the higher grade schools. The one characteristic they have in common is that they prepare their pupils for the university and hence usually retain them until the time for admission, i. e., to the age of 18 or 19. An instance of their diversity is seen in the gymnasium at Basel, which has an eight-year course, receiving pupils at the age of 10 and permitting them to enter directly from the primary, without attendance at a higher grade school. At Berne the course is eight and one-half years; at Zürich pupils enter at the age of 12 and continue for six and one-half years; the technical school at Zürich has a course of four and one-half years, receiving pupils at 14 or 15 and continuing from the second or third year of the higher-grade school.[1]

The flexibility in the scheme of articulation between school types of different degrees of advancement is due to the fact that the schools articulate from the bottom up. The local needs of separate cantons, with diverse industries and educational aims, have given rise to schools varying in aims and length of periods, and with these the advanced institutions make such connection as they can.

Closely concerned with this interrelation is the problem of the uniform school (Einheitschule), which here has a significance different from that of other countries. Like those in most other countries of Europe, the Swiss educators recognize the importance of adjusting the general school plans so as to avoid divisions due to

[1] From Special Report to the Ecclesiastical and Educational Department of Norway.

social cleavage, but they also call attention to other factors of the uniform school which in the general discussion are often obscured. Two conditions in the life of a child, both complicated by the social status of its parents, call for adaptation of the general school plans: (1) The demand which requires a definite course of training for a chosen calling—commercial, trade, industrial, or professional; (2) the selection of a calling according to the child's endowments. The Swiss believe that the child's endowments should first be ascertained and then its calling chosen, but in the deliberations among European educators the latter consideration mainly has been heeded. In dealing with the social aspects of the problem the political advancement of the country helps to eliminate such handicap as may depend upon the status of a pupil in society.

Even a cursory view of the school system reveals a close interaction between the schools and society. Society has demanded that every individual be given the amplest opportunity; that the schools encourage individual initiative, that they teach cooperative effort, that they deal with the industries, and, in general, that they show how each individual pupil can be fitted for the best service. How the schools have responded can be seen in what Switzerland has achieved.

PRACTICAL TREND OF THE SCHOOL WORK.

Touching the welfare of pupils, communal endeavor in Switzerland has created means for taking care of their health from earliest infancy, for seeing to it that they have the proper nourishment and clothing, for founding institutions adapted to the needs of pupils specially endowed or specially hampered. Again, this country has put into legislative form advanced ideas of a social and political character, like federal ownership of railways, socialized control of city improvements, banks, and industries, and, most significant of all, a constitutional proviso that Government enactments shall be referred to the voters for adoption or rejection. Aside from the contributions of these measures to the happiness and sterling character of the people, certain material ones more easily measurable may be mentioned. It appears to be a fact that:

> Switzerland, with no harbors, no coal, no iron, no copper, with high wages for manual labor, with agriculture inadequate to home needs, has succeeded in becoming, per capita, the next most industrialized nation of Europe, surpassing both England and Germany.[1]

In attempting to indicate at least a part of the share the schools have in the intellectual as well as material advancement of Switzerland, it appears that teachers have spontaneously put into practice the ancient maxim, "We study not for the schools, but for life," and that they

[1] Special communication from Dr. Herbert Haveland Field, Zürich, Switzerland.

are impressed with the importance of adapting their work to life conditions. When the health or the future of their pupils so demands, they have been able to move beyond the régime of books, lessons, and traditional programs and to guide their pupils in such other activities as are more closely concerned with their welfare. They are aware that the years of a child's plasticity is the time to discover and to insist on remedial treatment of such physical or psychical defects as may adhere to it from birth, and they appear conscientiously to include this among their duties.

The general system of the schools exemplifies the principle that education is a gradual process, with imperceptible beginnings and without abrupt finality. The service, therefore, that the school renders upon the first admission of a child is not of an instructional character; it assumes this character only after a transition period usually taken up by the child's own self-imposed activities. The nursery school takes care of the child, first of all, as assistance to a crowded home or a home in the distress of poverty, permitting the mother, who is probably a wage earner, to leave her child in safe hands while she is at work during the day. When a child is presented for admission a thorough medical examination is made, and if treatment is required it is given.

Among the institutions for the care of young children, the crèche, which is nearly always private, receives children of almost any age up to 3 years, at which time they may enter the infant school. The infant school has two divisions, namely, from 2½ years of age to 6, and from 6 to 7, the latter division preparing them to enter the primary school. From the first the child finds himself in a congenial environment in the school garden with its play equipment; there is no restraint as to regularity of hours, nothing giving rise to the feeling that in the interest of the school the young pupil is cut off for a certain time from home and parents. When the instructional stage is reached, there are kindly teachers to take him in hand, to see that he learns the correct pronunciation of words and that he acquires good personal habits. So far as expedient the child is left to himself in his first efforts to think, to observe, to understand, and to judge; he is permitted to drift into school tasks without the notion of compulsion; hence he does not come to feel that he is controlled by a rigorous taskmaster.

The first form of instruction assumes the nature of entertaining stories with talks of a practical tinge that furnish whatever nucleus there is in the early teaching. The opportunity for advancement is preserved in the recurrent periods of promotion, usually at the end of the year, though in case of the pupil's sickness they may come at the close of the first semester following the year in which the promotion would naturally have occurred.

This class of schools shows a tendency to increasing use of Froebelian methods. The original idea of assistance to the home and of a place of refuge offering a favorable environment is retained without any modification. To their success it is essential that unselfish people be placed in charge, who may anticipate the needs of the children and keep in close touch with their homes.

Just as the system permits the infant gradually to enter the instruction stages of the schools, it permits the young man or woman gradually to enter on the duties of a vocation while still remaining under the guidance of the schools. This principle is realized in most Cantons by the obligatory continuation schools. These are founded by the communes and by them brought to an accepted standard with regard to buildings and equipment in order to receive State aid. They are of two classes, schools for reviewing and supplementing the general school branches and schools mainly for training in the vocations and the trades.

In most Cantons the compulsory attendance for boys ceases with the completion of the fifteenth year, though in others, like Obwalden and Wallis, it is from 6 to 12 months longer; yet even these have a proviso permitting boys to discontinue at 15 by passing a special examination. In certain localities there is an obligatory continuation school of two or three years for girls, where instruction is given in manual work for girls and in household economy.

In most continuation schools is embodied an idea of the Grundtvig institutions of Denmark, namely, that of an intermission after the compulsory period by which time is provided for the pupil to recover from a species of classroom fatigue by which he is then handicapped; a year or two is permitted to lapse before the continuation; the pupil then takes up the work not only with better vigor, but with clearer conception of educational aims.

The brevity of time in the programs of these schools does not permit comprehensive curricula nor exhaustive study of any of the branches. Hence, only the subjects pertaining to practical and civic life are taken up. As a rule these schools admit only young men, though in some Cantons, as in those of Zürich and Bern, they are coeducational. As nearly all lead to such practical vocations and industries as pertain to the localities in which they are established, they show a strong tendency to specialize in the direction of the trades, in agriculture, horticulture, or commerce. In the Cantons of Fribourg and Thurgau there are household schools for girls; in the former the required attendance is two years, which may be extended to three years if the pupils' progress has not been satisfactory.[1]

The continuation schools specializing in the vocations and the trades are often conducted in accordance with a schedule that permits the

[1] Substance from the Report of Prof. Neuberth.

pupil to be both wage earner and pupil at the same time. The schoolroom and the workshop function in close cooperation. To be properly matriculated the pupil must have secured regular employment in the trade which he makes his chief study. The employer is closely identified with the school; he not only instructs the pupil, but he also looks after his interest as wage earner; he has a definite understanding with the school authorities about the courses and the time the apprentice pupil may reasonably spend at school. The time the pupil is to remain at the work he has begun, together with other particulars calculated to insure his attendance to duty, are embodied in a contract which the pupil is required to sign. The session is held almost exclusively in the winter, with from 6 to 12 hours so grouped as to fall upon two or three forenoons each week. The flexibility of the general system adapts itself to varying local conditions, and the instruction often extends throughout the year. The schools thus specialize in individual directions so that they fall into groups, each of which is characterized by the needs of its general patronage. It would be a mistake to suppose that the dominant endeavor is to impart peculiar technical skill merely to fit the pupil to be an acceptable wage earner. Ethical and humanitarian subjects are always included, to ennoble the work of whatever kind it may be by educational ideals and associations.

A view of the plans and methods prevailing in the teachers' training schools will show that their work is ordered in strict accordance with the one principle of anticipating what the pupils are to do later on in life. In the apportionment of the time between the academic and the professional subjects, those training directly for the teacher's future duties are given the greater prominence. Realizing the need of a review of the general branches, and yet the danger of allowing too much time for this, the regulations concerning it are so framed as to effect a carefully balanced compromise without unnecessary restrictions. The statutes of Zürich order that the future work of the teacher shall determine the allotment of time to each subject, as well as the character of the instruction; they also specify that the instruction in all branches shall be such that it may serve the pupil as an example in his future school work. To secure conformity to these regulations those who conduct the recitations are required to make thorough preparation for every lesson and to keep a book in which the plan of each lesson is preserved. Instruction material, textbooks, plans, programs, and apparatus are fully discussed, so that the prospective teacher becomes familiar with them, and reaches an estimate of their value for his future work. The training is conducted with regard to the twofold capacity of a good teacher: As a master of the details of his subject organically combined and, again,

as the instructor specialist who has the skill to fashion the subject matter for presentation before the class.

The official guides and study programs anticipate in their outlines the practical work of the pupil after his school days. The instruction plan for the Canton of St. Gall sets up as a chief principle that instruction in fact should predominate. In grammar, for example, there is to be less theory than practice; this book should, in fact, be only a guide to the correct use of the language in speech and writing, an aid in composition. The outlines direct the pupil to write on what he has seen or heard or experienced, and hence really understood. Description is to be not simply a list of the characteristics of an object, but it is to be brought into living relation to nature and to man. In history the events of one's country should be seen as related to what takes place about one's home. In the geography of particular localities and countries careful attention is to be given to the life of the people of these places, their work, and arrangements peculiar to their life and calling. In natural history the pupil is to be led to see why the object under inspection has the peculiarities he discovers and how well it is adapted to its mode of existence, what relations of reciprocity it holds to other beings, what value it has for man, and how man accordingly is under obligation to protect it or destroy it.

The report of Prof. Neuberth, of Christiania, supplying details of observations in the classrooms of Swiss schools, gives a glimpse of the actual work of teachers thus trained. He says:

> There was a quiet orderliness in all the activities of the pupils, no trace of indifference, no slovenliness, but evidence of painstaking care and of close cooperation between pupil and teacher. Some, to be sure, would fall below the good marks, but there was no real, and certainly, no general delinquency. The instructor was gifted with particular skill in framing his questions, a matter regarded of such importance that it is pointed out in the statutes of Zürich as the special mark of a good teacher. The questions invariably compelled the pupils to think; instead of furnishing the form for the pupil's answer, they left him to do this for himself. The teachers had, it appeared, carefully weighed and judged both the content and form of their questions, appearing to be indefatigable in training themselves to get their questions stated right. * * * The answers, which were given with very satisfactory readiness, often gave rise to new questions on the part of the teacher and, what was particularly noticeable, also on the part of the pupil. Though the deliberateness seen may be criticized for its dry outline character and for the absence of those spontaneous details that vitalize a lesson, the landmarks through the lesson were certainly charted and established, giving a chance to fill in with appropriate illustrative matter.

The practical life issues of the teaching have, as would be expected, a large share in the deliberations of teachers at their professional meetings. During its session of September 30, 1918, the Zürich Teachers' Association discussed contemplated changes in the higher-

grade classes and the courses to be given in these. As the suggested rearrangements involved time allotment to various subjects, the accepted or alleged values of these were again fully considered. It was evident that the world events and the recent experience of Switzerland made the teachers, even more than formerly, insist on positive answers to questions of a subject's value to the pupil after his years at school. The propositions for the discussion of the classics were formulated with regard to these considerations:

1. What significance does the culture of the ancients have for our own time?
2. Does the instruction at our gymnasia correspond with this significance?
3. Can not the same goal be reached in other ways, and, if so, what adaptation would it entail on the gymnasia of the future?

Early in the discussion it was insisted that Latin, to maintain itself, must show that it leads to undoubted present-day values. Since the war, it was urged, important developments have taken place in the industrial and social life, with new social phases, outlook, and ideals—the position of the individual in the State, the place of woman as a member of the Commonwealth, the principle of the family unit, the international position of the State—time must be found to master and to organize new masses of details to prepare the pupil for the place he is now to take. Hence the question,

Can Latin be dropped as an obligatory study and the time thereby gained given to modern subjects, and can the study of the ancients be extended by reading good translations? Time should be found for psychology which, as it is now being developed, moves close to everyday activities; we constantly come into psychic relations with other people creating perplexing situations and problems. Outside of the schools the pupil is left slowly, painfully, and wastefully to acquire the psychology which the schools could more conveniently give him.[1]

On the other hand it was held that the western world has been influenced by the old classic world for centuries, and hence no matter how high it might tower above the old, its roots get their sustenance from the ancient soil. Our modern social organizations—state, church, school, society—are the result of a development in a straight line from the ancient world. If our present-day intellectual conditions are to be apprehended in their integrity and continuity of development, their origin and growth must be understood.

Earlier in this account the pupil's gradual release from lessons and entrance upon wage-earning employment has been mentioned as a feature in the school arrangements. The transition period thereby created gives opportunity for the teachers to render service to the pupils, no less important because it comes outside of the usual school programs. In a circular published January 1, 1916, and addressed by the school authorities of Zürich to the teachers of district schools,

[1] Adapted from Schweizerische Lehrerzeitung, February, 1919.

higher grade schools, and folkschools, is set forth the duty of teachers to help pupils to find employment suited to their aptitudes. The school boards and teachers have, accordingly, cooperated with the Bureau of Statistics to ascertain what callings were most sought by pupils after completing the period of required attendance. The information brought in showed what callings were most attractive to boys and girls, and also in what fields of endeavor their labor was most in demand. It was taken for granted that the teachers would understand that the prerequisites were bodily force and vitality, power of orderly and sustained thinking, congenial manners, resolution in will and deed, and strength of character. The teacher through personal experience understands the pupil's mental and physical capabilities, and is, in consequence, prepared as no one else to assist the parents in selecting his life work. He would reach an understanding with the parents, and perhaps take occasion to explain to them the moral as well as the industrial conditions depending on the choice, and the disadvantage of being without a trade or calling. If a choice is difficult to make, a pupil may, while yet at school, be guided in the general direction of a trade or one of the commercial lines. In performing this duty the teacher, it was pointed out, would often have a delicate task, for he might have to advise the choice of manual labor in cases where the parents would insist on something they regarded as higher as the calling for their children. If the economic conditions of the parents would permit the pupil to pass through only the primary school, or at most, two classes of the higher grade school, a calling consisting in the main of labor with the hands should not be looked upon as unsuitable, unless marked personal gifts pointed to something different. If, despite the statistical showing that clerical positions and offices are crowded by young applicants, a choice of this calling should seem wise, it becomes the teacher's duty to point out that success here depends especially on tact and personal address, readiness in the use of several languages, skill in figures, and the ability to write a neat and legible hand.

The circular of the Zürich school authorities also states that young men and women should be advised that a great many of their number—most of them insufficiently prepared—turn in the direction of a calling requiring scientific training. These people crowd the middle schools, and when they have painfully and at great sacrifice gone through the courses, they find no opening commensurate with their hopes. It is an especially responsible task to guide those that contemplate taking up the profession of teaching. The requisite endowments and possibilities are not always obvious at the age of 14 or 15. The high order of mental power, with responsive temperament and strength of character, is not always indicated by the marks pupils get as the result of examinations. The teacher should there-

fore be aware of his solemn duty to counteract the vanity of parents by aiding his pupils in a choice which saves both them and their parents from cruel disappointments. Again, he will have the more agreeable duty of encouraging the capable boy and girl whom he finds in his class to take up such scientific or professional lines as appear to be within their powers. In behalf of these he will have occasion to confer with the boards and officials that will come to have charge of the pupils in the branches selected. As the question of expense is also involved, the teacher's further service consists in helping the pupils to secure aid and stipends from such funds as are available.

As an outcome of these early suggestions, educators began to consider the feasibility of a compendium in which this kind of service could be outlined in a form suitable to be taken up as a part of the scheduled work of certain types of schools. With this in view the educational board of Zürich directed that a vocational guide book should be furnished pupils at nominal cost and be studied as an obligatory subject in the eighth primary class and in the first two classes of the higher grade schools and that it should also be adopted for general use in the third class of the higher grade school. Attention was called to the desirability of treating its content as instruction material. The teacher was enjoined to stress the importance of training for skill and attention to duty and to find occasion to give his pupils helpful words of counsel as they entered on their chosen life work. He was reminded that the pupil's choice of calling should not invariably be regarded as final; the main point was to help him earnestly to consider the choice.

The movement here mentioned, which was well under way in 1916, has since then assumed new phases, and a scope beyond what was originally contemplated. In the annual report of the educational board some of the results for 1917 are given.[1] In many districts and communities, says the report, boards for vocational consultation were established. The official school journal for March, 1917, published a comprehensive list of places where applicants might come for consultation. Many benevolent associations, among them the foundation "For Young People" (Für die Jugend) gave financial support to the cause. The expectation was that a general service bureau for the entire Canton would be established.

The Jugendwohlfahrt, Revue Suisse de Protection de la Jeunesse, under date of January, 1919, surveys in part what was accomplished during the years from 1916 to 1919.

The suggestions published by the school board led to cooperation between the schools and the associations mentioned above. They

[1] Jahresbericht der Direktion des Erziehungswesen über das züricherische Unterrechtswesen für 1917, Zürich, Switzerland.

succeeded in getting 42 business places, factories, and other industrial plants made accessible to pupils who in company with their teachers desired to visit these to reach a clearer conception of the work there going on with the view of choosing a calling more intelligently. Similarly, they conferred with about 160 foremen of shops and trades to procure information for those pupils who expected to seek positions as apprentices. Every teacher instructing final or graduating classes of the primary and the higher grade schools was furnished with a list of available positions and also of places in the city where practice in the trades could be secured. The teachers were also furnished with a list of applications from farmers who wished to employ boys having completed the school requirements; also a record of places where girls could find employment. Through the agencies mentioned, the instructors kept in touch with about 140 educational officials throughout the Canton, thereby extending the work until the city of Zürich felt warranted in increasing the stipends and funds for promoting instruction in the trades.[1]

As the importance of this form of school service became more extensively recognized, there was felt the need of organizing for its further prosecution. With this in view the occupational teachers of the Canton of Zürich, in the autumn of 1918, effected an organization of 200 members. The constitution adopted by this body sets up its purpose thus: (1) To guard and to further the material and ideal interests of the occupational teachers; (2) to promote the professional training of its members; (3) to cultivate right relations among the occupational schools, the folk schools, the trades, and industries; (4) to assist in procuring instruction material for the trade schools. The executive agencies of the association are to consist of permanent committees representing the various occupations. Their chief duty will be to further, in accordance with point 3, closer relations among the trades, the industries, and the schools.

REGARD FOR THE PUPILS' HEALTH.

In order to render the most complete service for life the responsibility of watching over the pupils' health has also been brought fully within the scope of the teachers' duties. Childhood is obviously the time when physical defects of whatever kind should be discovered and remedied. Each Canton has specific regulations touching the physical examination of the child upon entrance into the schools, the later periodical examinations, and reports of abnormal conditions discovered.

The school laws and published regulations show that the physician intrusted with this work must himself pass a rigid qualifying

[1] Adapted from Jugendwohlfahrt, January, 1919, and Jahresbericht der Direktion des Erziehungswesens, Zürich, 1918.

test. He must hold the practicing physician's license as required by the Federal Union. Employed by the department of education, he is not permitted individual practice. When the school board deals with questions of hygiene or sanitation, he may be summoned as an advisory member. His professional duties with regard to the schools and the pupils are minute and definite. In the Canton of Solothurn these include the examination of each individual pupil and inspection of every schoolhouse in towns and country districts. He is to visit schools for women's work at least once a year and to make careful inspection of ventilation, heating, lighting, cleanliness, sewers, water supply, courts, gymnastic rooms, baths, pupils' benches, school furniture, school utensils, and sanitation material. The physician must have regular hours for consultation; he must pass on all requests for exemption from attendance at school based on reasons of health; he determines whether pupils should be placed in classes organized for defectives, and whether or not they are to be sent to children's sanitariums; moreover, he enters on a special record cases where pupils are to be under observation for some time and where they need particular consideration during the school work; at specified intervals he is to repeat the examination of eyes, ears, and teeth. Vaccination, disinfection, precautionary measures against communicable diseases, tuberculosis, and diseases of the scalp, attendance on pupils taken ill—these are matters to which the school physician must attend. He may, if he wishes, make his inspection at any time, even during school hours, though it is expected that he shall interfere with the recitation as little as possible. He is privileged to be present at recitations any time when this may help him to an insight into the pupils' state of health. Early in the spring of 1919 the school periodicals discussed the physical measurements of pupils with the view of studying a new type of school bench adapted to their health and comfort, an attempt in which the school physician evidently takes part. Other duties falling to him are to approve the plans for school buildings, to inspect the health certificates of men and women teachers, to teach them how to treat the defects they discover in the speech and voices of their pupils, how to deal with children suffering from nervous trouble, and, finally, to lecture to teachers and parents on topics of hygiene. During the influenza epidemic pupils generally attempted to get back to school before complete recovery; hence they were in danger of incurring bad after effects. The school physicians adopted the regulation that no pupil should be permitted to return until the seventh day after complete recovery.

Various institutions having both curative and instructional purposes are found throughout Switzerland. Some of these are trade schools adapted to the capabilities of certain classes of defectives; but in all these institutions the instruction is subordinated to the restora-

tion of the pupils' health. They often have the character of vacation colonies, where pupils under the supervision of their teachers may come to recuperate. They are by no means limited to the poor, but well-to-do parents realize the benefits there received and send their children to these places in increasing numbers.

One of this class is the forest school, where recitations are held in the open under the trees. The first one was founded through communal initiative in Lausanne in 1908; in 1912 and 1913 two similar schools were founded in the Canton of Geneva through private endeavor; later one was established in Neuenburg, and in 1914 another in the Canton of Zürich. Their origin grew out of the needs of children with weak constitutions, to whom fresh air and nourishing food are the essentials. The location selected is in the edge of the forest; the period for the sessions is from May till late in September.

In El Monitor de la Educacion Comun an account is given of another achievement of Swiss educational and medical endeavor, namely, a sun school, where certain classes of pupils in poor health may do a limited amount of school work while they are receiving the benefits of the curative properties of the sun's rays. A school of this kind has been conducted summer and winter for 12 years at Leysin. The restoration to full usefulness under the treatment here provided is more remarkable in the case of children than in the case of adults, for the reason, undoubtedly, that the former can more readily comply with the necessary restrictions in regard to work. The location selected for these schools is at a high altitude, sometimes as high as 1,100 meters above sea level. The largest school has a farm completely equipped, under an experienced agronomist, himself a cured patient, where agriculture, dairying, and bee and fowl keeping are carried on. In so far as the treatment is adapted to the cure of tuberculosis, all lessons are subordinated to this purpose, the only mention of school proper being as one of the divisions of time among hours assigned to exercises for respiratory development, walks, and light agricultural or garden work.

In his account the author shows how the mental training goes hand in hand with the physical. No special place is designated for recitations, the covered galleries adjoining the chalets being generally utilized. A small, portable seat with writing desk attached, the frame higher than usual and requiring an upright posture, is furnished each pupil. When the weather is fine the class and the teacher roam in search of the most attractive place for recitations—it is the movable school par excellence. In addition to the lessons assigned, the teacher gives instruction on some theme arising out of the local topography, geology, botany, etc.

From the ethical point of view the effect upon the child is most happy. From the first there is an evident growth in evenness of

temper and stability of character, effects appearing as a consequence of the physical hardening.

The writer in El Monitor advocates the extension and adaptation of the best features above mentioned to the general public-school system. He does not attempt to prescribe the exact method by which this may be done, but he is confident that it can be worked out anywhere by a study of local conditions. Various instances of its realization are cited, as in Bern, Basel, and Geneva, where children from some of the public schools receive open-air instruction. In Lausanne, under the auspices of the city authorities, experiments in such instruction have been made with children selected by the physicians. Various cities of neighboring Cantons have organized advanced classes for further experiments. Objections on the score of expense are easily met, as the latter are obviously light, the necessary equipment being of the very simplest.

The Swiss journals and official reports also speak of other arrangements, both for the therapeutic treatment of school children and for special training in usefulness for those whom medical care is not able fully to restore. Under the direction of the health department of Zürich, children who suffer from defects of speech or ailments of the vocal organs are taken in hand. This branch of the medical department is intended first of all to impart such knowledge and skill as will be of use to teachers having charge of pupils afflicted with troubles of the throat and the speech organs. Sessions for these purposes are held in the consultation rooms of the city clinics. Here teachers may receive such medical knowledge as will fit them to discover and relieve the less serious cases that they find in their classes and also to see the importance of promptly referring troublesome cases to the specialists. As instructors, they are taught what to do with pupils that stutter or speak with an unnatural nasal tone, to understand the troubles at the bottom of recurrent or chronic hoarseness, as well as partial or incipient stages of deafness. The diagnosis which the teacher is prepared to make will be the first step toward a course of corrective treatment.

Again, unless the teacher understands troubles like these, he may classify an apparently backward child as below normal mentality, when the trouble is due to difficulties in the organs of speech or hearing.

Teachers in Zürich and Basel having charge of pupils of defective hearing explain the handicap under which these get an education. Many things at school and at home pass by them without leaving a trace. To restore these, so far as possible, to full communion with the outer world and thereby give their lives greater fullness is a worthy endeavor for the schools. It may be added that the knowledge requisite for this kind of service is in essentials also the foundation for elementary language instruction at schools with normal

children, at least when it is a question of raising the instruction from a purely mechanical method to one based on a knowledge of the speech organs.[1]

The Swiss school authorities are giving due attention to those pupils who suffer under some species of more or less marked psychic disturbance, which makes the usual school arrangements unsuited for their progress or recovery. Among the symptoms pointing to such cases are absent-mindedness, sudden rage, depression, unnatural activity of the imagination, delusions, and disturbed sleep. These young sufferers are obviously entitled to treatment such as their conditions require, which can be given only in school homes especially suited for them. Here they could be treated pathologically according to a plan adapted to each; the children could be segregated into groups to prevent harmful influences of one individual or class by another. These ideas are in part carried out in some of the cantonal schools, were special care is given to children of nervous temperament. Dr. Frank, of Zürich, advises that—

> Parents of such children should be visited and thereby a clew obtained to a correct diagnosis of their troubles. The teacher himself should not presume to play the part of a pathologist, for he might thereby do great harm, but he should train himself to detect these not uncommon instances of slight nervous disturbance. Sometimes a quiet word from the teacher will help to remove the slight psychic obstruction; in other cases the trouble is to be referred to the specialist before the damage becomes too great.

Dr. Frank adds that offenses committed by these children should be dealt with in a manner different, usually gentler, from those of others. The experiences reported from such homes in Germany make it plain that a rather long period is necessary to effect a cure, though even a stay of five or six weeks has been beneficial.

For those that can not be fully healed the teachers try to find work that comes within their powers. "This endeavor has not only an economic but a moral and ethical side, for it will help to keep these less fortunate people from feeling that they are a burden." An attempt to realize this purpose was made in Basel in 1917 by opening a little trade school for subnormal children.

> At first it was known as the Weaver's Shop, but it was by no means intended to be limited to the occupation implied in the name. Aid from the Canton and from private donors enabled the originators to carry the plan further. The teachers in charge found that sewing, stitching, covering cushions, and to some extent weaving could very well be done by subnormal pupils. The results were, in fact, so encouraging as to warrant the extension of the idea by opening a school at Stapfelberg for subnormal girls. Since then funds have been secured from other sources, so that it is now contemplated to extend the scope of the endeavor by organizing rural homes where children of this class may become familiar with farm work and thereby be placed in the way of gaining their subsistence.[2]

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[1] Adapted from articles in Die Jugend, January and February, 1919.
[2] From Jugendwohlfahrt, February, 1919.

Movements of this kind have been accelerated by the war, and some new arrangements formerly regarded as of doubtful expediency have been put into practice. From the Canton of Aargau, for instance, several measures taken by the schools are reported that may be regarded as typical of what the schools are doing elsewhere—greater attention to exceptional, criminally inclined, or unhealthy children; increase in the facilities for free lunch and free clothing; more thorough health supervision; improved sanitary conditions of schools and pupils' dormitories; reduction of the number of pupils in a class; conference on the choice of work, together with plans for free instruction of pupil apprentices; furnishing of writing and instruction material free of charge; remittance of tuition in the district schools; increase in the number of stipends for pupils; establishing courses in commerce adapted for girls and manual work for boys; greater freedom in the change, election, and omission of subjects; increase in the efficiency of agencies to secure employment for pupils; reduction, under certain conditions, of the obligatory school period.

In immediate connection with the programs of all schools, there is a marked tendency to investigate the value of work done at the home as compared with that done in the classroom. With the aid of experimental psychology, teachers have reached the conclusion (reported mainly in Schweizerische Lehrerzeitung for Feb. 23, 1918) that:

> The work done at school was generally superior to that done by an isolated pupil at home as home work. In copying and figuring at home it was materially less than it should be in comparison with the same kind done at school. Qualitatively the comparison was also favorable to the school. As over against this, the experiments showed that in the case of certain pupils who were permitted to work quietly at home the work was better than that done in the class. In proportion as higher spiritual qualities entered into it, the assignment (imagination, judgment, presentation, literary style) done at home was better; in proportion as it involved the character of a memory performance, into which little of the pupil's personality entered, the classroom work was better.

Among other conclusions reached was that the pupil, if permitted to select his own time for doing the assignment, would often choose hours unsuited to mental work, such as the time immediately after a meal. As the pupil grows more mature, with clearer realization of his responsibility, the home work becomes more satisfactory. It is obviously the duty of the school authorities to see to it that pupils do not become overburdened by assignments to be done at home. When home work is necessary, it may indeed serve as a link between the home and the school because the parents would be under obligation to see to it that the children have the necessary time for the home assignment.

EXTENSION OF SCHOOL ACTIVITIES DUE TO THE WAR.

One of the first effects of the war on the schools in Switzerland, as elsewhere, was to furnish an incentive to break through the fixedness of the school programs and to respond to the immediate emergencies created. Occasions arose for extending the work of the schools in directions that had been thought to lie entirely beyond their province. The justification of these departures became topics for deliberations by school councils, leading inevitably to a new survey of the usefulness and timeliness of the various branches of the curricula. A new outlook tending to take as its viewpoint the very fundamentals in education began to prevail. If this wholesome disturbance of the educational régime comes to crystallize into any new principle of teaching, its characterizing features will be a more direct regard for the health and the entire career of a pupil, whether such regard can best be observed by the aid of books and lessons or in some other way. The pupil's life interests will be more fully paramount; and the programs of schools will be fashioned toward these ends, no matter how they may come to deviate from the school traditions.

The possibility of suspending the school routine for the sake of greater interests first appeared in the form of an endeavor to help relieve the economic stress the war created. As the Swiss school publications report the early instruction for the guidance of teachers in conducting this relief work, and as later issues of the same publications give the actual achievement, it is possible to trace these endeavors through some of their stages. The Commission on Industrial Information in its report advises that those who have charge of placing city pupils as helpers should always have regard to the spontaneous willingness of the pupils to enter upon this kind of service. Of the two usual modes of making the labor of pupils available for agricultural productiveness, namely, as assistants during harvest and as independent tillers of gardens of their own, the latter is the more promising. To plant and produce crops of their own fosters a spirit of social responsibility and a sense of patriotic duty. Educationally, too, it has a superior value, for it is a form of experimentation in which the young agriculturist is spurred on to inform himself about the best method of tilling the plat allotted to him. It would be highly desirable, if city conditions would permit, to place school garden tillage on the program for the fifth and sixth years; even a further extension of it as a part of the curriculum would be advantageous if weather conditions would make it practicable to give it a fixed place on the daily schedule.

The school publications call attention to the considerations that determine the success of pupils assisting on the farms during the

busy seasons. The experiences of city pupils on the farm have not always been satisfactory either to themselves or to the farmers. Usually the boys come with incorrect and distorted conceptions of country work, and are therefore cruelly disillusionized during the first days; and, again, the farmer does not always have a correct conception of the city pupils' feelings and outlook. In participating in the work of the country it is best for the pupils to be accompanied by teachers and responsible persons who see to it that the stay in the country becomes profitable to their charges as well as to the farmers.

There may not always be the needed accommodations, in which case the village schoolhouse could be used as a dormitory. Here the work group could be kept busy at some form of lesson during rainy days. The help should not be rendered gratis, but should be compensated by a wage; even though nominal, it would be an encouragement.

The substance of the above suggestions, taken from the published instructions to Swiss teachers, is supplemented by information telling of the actual endeavors to carry them into effect. Instances are cited of individual farmers who spoke highly of the efforts made by the city pupils to help, adding that some of them rendered very material aid in harvesting the rye. The pupils from a certain modern school exceeded the expectations placed upon them. One result of these experiments was that an organization of teachers at Basel determined on a plan for carrying them further by making them a permanent school endeavor. To that end they invited pupils—boys and girls—to take part. The press was asked to assist by urging the farmers to avail themselves of the pupil's help at the next harvest. To get the farmers themselves interested was regarded as most important.[1]

As the schools of Switzerland are closely identified in their work with the practical affairs of life, they were closely touched by the economic disturbances of the war. One immediate effect, already mentioned, was to organize for productiveness; another was the necessity for augmenting the salaries of teachers. Where the burden of this emergency increment should fall was at first a matter of uncertainty. The Federal Government looked for a solution which would make the increase 400 francs, instead of 600 as asked by the teachers, and apportion it equally between the Canton and the Commonwealth. Temporary increments were granted until 1919, when permanent salary improvements will undoubtedly be made, arrangements which appeared to be entirely satisfactory to the teachers. Despite the opportunities for more remunerative work, few teachers left their posts of duty for other employment.

[1] Based on various issues of the Scluveizerische Lehrehrzweitung from Nov. 30, 1918, to Feb. 9, 1919.

Some dislocation of the work came about through the general economic stress. School boards received many applications from pupils for dismissal before the expiration of the required time, because the parents wished them released for remunerative employment. In the interests of both the pupils and the schools, these requests were granted only in cases of extreme urgency. Considerable interruption of the work took place, however. In the spring of 1919, for instance, the irregularity had become so extensive that many schools concluded the year's work without the usual semester examinations. Exercises of another kind were then substituted, but in no case did these have the character of tests. These arrangements were so much the more necessary as the influenza epidemic had, in many districts, compelled the schools to be closed for periods from weeks to months.

Increased opportunities for wage earners so diminished the school attendance in some districts as to make it difficult to maintain the school as usual. In the Canton of Zürich this led to the consolidation of several smaller districts, with the result of relieving somewhat the financial straits of each. In almost all these instances, the accounts state, the amalgamation, besides effecting a more equitable distribution of the school burdens, has been an advantage educationally. Hence there is a growing tendency to bring together a still larger number of school groups into consolidated institutions. The union of two schools is often effected by making one primary and the other of higher grade. Even districts and schools denominationally different from one another have in this way been satisfactorily brought together. In view of the ample supply of teachers the movement has not been in their interests, but its justification is upheld by a fairer distribution of the expenses, better equipment, better general instructional facilities, better utilization of the teaching force, a more ample supply of teaching material for each school. Again, it strengthens the community spirit and extends it into larger circles, widening the outlook by fuller sympathy with the people outside of the immediate circle.

Among the more permanent effects of the war is the desire to overcome the tardy processes of carrying out school reforms obviously needed. The procedure now in vogue in Switzerland and elsewhere is delayed by deliberations on petty objections until the needed legislation is postponed for years, by which time the social order has moved on toward new horizons.

An instance of how the usual delay can be overcome was presented when, in response to requirements arising out of altered conditions, vocational selection was brought into the courses. The same conditions also gave rise to a new inquiry into the educational significance of the manual labor that pupils and teachers voluntarily performed

during the war. So favorably have educators been impressed with it that they are unwilling to take the backward step of having it discontinued, hence prompt enactments may be expected that will provide for its continuance and expansion. The direct practical aims that the schools set up insist on a corresponding directness on the part of the school authorities in making provisions for the new endeavors. The more independent of books the instruction becomes and the closer it draws to everyday life, the clearer becomes the necessity of a prompt response to the call for buildings to accommodate the new activities—suitably equipped rooms for girls' work, for boys' industrial courses, school exercises in chemistry and physics, pupils' lunch rooms, gymnastic rooms, playgrounds, and school gardens. Years ago some arrangements were begun for the cantonal and community control of supplies and instruction material. The plan was gradually adopted by the Cantons of Solothurn, Baselstadt, St. Gall, and Thurgau; they effected joint contracts with publishing houses to furnish books at prices which became lower through consolidated purchases. Other Cantons cautiously adopted the same plan, though modified in details. Recently some form of the general plan has been adopted by almost all the Cantons; traditional objections have been more easily overcome, and it is now recognized more fully than before that the movement toward a socialization of the schools in this way is in perfect accord with the democracy of the people of Switzerland.

The democratic trend of recent events is shown in the efforts to bring the problem of school inspection to a solution. When the schools of Switzerland became free from the church they came under the direction of secular inspectors who were governed by rules and directions which many teachers considered vexatious in their character. The argument that such State inspectorship is necessary to maintain uniformity among the schools is not regarded as valid by the Swiss teachers as a body. The defects, they argue, now remaining in the schools can be remedied at least as readily by the associated teachers as by the official inspectors. Through their associations, therefore, teachers are urging that the inspection be taken over by their own organization to relieve the schools from some of the features of the State inspectorship that are objectionable to them.

In the sessions of the school convention at Zürich in September, 1918, the political and social outlook created by the war obviously colored the educational deliberations. There was strong pressure in the direction of opening a still greater number of avenues toward practical work that could be taken up by pupils differently gifted. But the question of the manner in which the school organizations could best be adapted toward these ends gave rise to conflicting views. It was maintained that if an early segregation toward vocational

aims be made possible, the selections could be made from fuller numbers and on a broader basis. The trades would thereby gain many pupils who under the present organization are encouraged to go on to the middle school, though they are able to follow its courses only in part. By an early choice of calling the crowded middle schools would be relieved from the influx of a great many pupils whom neither gifts nor aims justify in going on with higher studies.

On the other hand it was argued that an early departure in the direction of a chosen calling can not be made from the safe basis of sufficient data on the pupil's endowments and aptitudes. Such early choice is therefore likely to be influenced by the social and economic position of the parents. The children should be encouraged to travel the same school highway, so far as possible, under the same teachers doing the same work, subject to the same tests for segregation toward special lines. An obligatory folk school with a lower division of six classes, and with these an organically united division of two classes—the latter adapted toward specialization of studies—would safeguard all interests of pupils and of society. Here would be room for manual work, real productive labor, which all pupils would be required to take up. The prestige work would attain by its elevation in the schools to a plane with other subjects, and the mutual participation in it by the pupils, were regarded as the most efficient way in which the schools could combat the notions of caste. It is realized that when pupils get together in the manipulation of actual things for industrial, productive, and, as such, patriotic purposes, social demarcations and cleavage tend to become obliterated. Subjects having much to do with criticism and scholastic achievements are a more favorable field for the growth and maintenance of distinctions among classes. Within its organized outlines it was insisted there must be scope for types and school units to specialize in industrial direction and at the same time to preserve coordinated interaction. These aims lie in the direction of decentralization and differences in administrative regulations with the view of adapting the work to fit the pupil's calling and endowments and the wishes of his parents. In brief, the present complicated administrative system should be made simpler and more elastic, so that it can more readily respond to the expanding activities of the schools.

At a teachers' meeting in January, 1919, the discussion seemed to show that new conceptions are beginning to crystallize into definite and positive forms. While due regard will be given to the many new and useful activities that claim admission into the curricula, the teachers of Switzerland are not disposed to neglect the old and established branches. The fundamentals of the system have not been disturbed by the war. The classroom instruction will, hereafter as before, comprise reading, writing, figuring; it will train the

memory and the judgment of children; it will give them constant practice in the analysis and the combination of thought processes. The schools will put forth their best endeavors to help lift the youth to a point above the narrow prejudice of egoism to sympathy with the world in which they live, out of limitations and seclusion, out of contempt for the concerns of the world, to a knowledge of actual life and to a participation in its struggles. Though there will be earnest attempts to remove the handicap which through birth or station may weigh upon a pupil, there will be no enthusiasm for the dead levels of mere equality. The social and educational values associated with manual labor as a required part of the school program will be fully recognized. In the future as in the past, there will be steady efforts made to attain results, material as well as spiritual; but the Swiss teachers will continue to bear in mind that they must compensate for the material things which must come from abroad by spiritual values within their own borders. The war has enhanced the fundamental values by stressing courage, energy, vitality, intelligence, and the love of freedom. In the interests of these values considerations of a merely scholastic character are, temporarily, at least, pushed into the background. The interaction of school units as a system will be subordinated to these ends.

The sessions at the January meeting stated that the school system must never be permitted to assume the character of a business department of the State, with mechanical functioning and consequent deterioration of its spiritual life. The schools must be relieved from routine, fixity of form, and officialdom. Lesson plans and methods should not impose a rigid scheme of instruction material to be mastered or memorized; the aim should rather be to adhere to whatever material or combination of material, or means, further the growth of the human intellect, and encourage its own early and spontaneous activity. Freedom, therefore, within the school régime is a dominant idea which recent events have made insistent. Human feeling begins loudly to protest against the thought that the most youthful, most original, and inherently most joyous period of life should be repressed by official formality.

Again, the teachers advocated Government aid for students, artisans, and teachers, to pass some time in travel to study their respective callings so as to attain a mastery of what was best in usages prevailing abroad. This was one of the most direct ways fully to utilize whatever resources their own country afforded, and thereby rise to a position where they could worthily and efficiently help to rehabilitate the countries devasted by the war.

While the teachers as an organization could advise in matters that the steady progress and the enlarged responsibilities of the schools now required, it remained for the Government to heed the full edu-

cational opportunities that the events of the past years had created. Switzerland occupies preeminently an international position, from which the harsher antipathies created by the war have been absent. According to a communication from Dr. Haveland Field, of Zürich, dated November 3, 1918, this would be an ideal location for a memorial educational institution from which sentiments of amity toward all peoples could radiate. Dr. Field calls attention to the aspirations which the Republic of Switzerland has in common with the Republic of the United States, making it especially appropriate for these two nations to take the initiative in the furtherance of this international idea.

A few educational movements that have gained a new significance by the war have been mentioned. Others now uppermost are: 1. The war has shown that woman can do some things formerly thought impossible to her. The schools will, therefore, adapt courses more fully to woman's intellectual and physical constitution and to the new possibilities brought within her sphere. 2. Teachers will cooperate more closely with the homes of the pupils. They will endeavor fully to enlist the sympathy of parents for the school work. 3. Democratization of the school control. 4. Decentralization of the working organism of the system. 5. Stipends to be made more generally available for talented pupils. 6. Endeavors to guide pupils to select occupations according to endowments. 7. The occupation of the teacher must be lifted above the influence of cliques. 8. Efforts to individualize the instruction. 9. Concentration of the instruction as studies and lessons. 10. Greater use of opportunities for exchange of teachers in foreign languages. 11. Exchange of abilities in city and country. 12. Coordinating manual labor with other studies of the curriculum.

CHAPTER VIII.

EDUCATIONAL CHANGES IN RUSSIA.

By Theresa Bach.

Division of Foreign Educational Systems, Bureau of Education.

Contents.—Introduction: Historical development—Secularization of schools—Administration of schools: Provisional Government; Bolshevik régime—Parents' associations—Abolition of restrictions: National and religious groups; Private instruction—Educational ladder—Teachers' training institutions—Reform in spelling—New textbooks and other publications—Higher education: New universities and faculties—Technical education—Adult education.

INTRODUCTION.

HISTORICAL DEVELOPMENT.

In the press reports bearing upon conditions in Russia since the outbreak of the revolution in March, 1917, little mention has been made of the tremendous changes that have shaken the entire educational system in that country. One needs only read Vyestnik Vremennavo Pravitelstva (Messenger of the Provisional Government), Russia's official gazette for the publication of the acts and decrees promulgated by the various ministries and other administrative bodies since the revolution, to become impressed with the deep and far-reaching reforms that have uprooted the entire system of the old education built on principles of autocracy and the privileges of the few. A school system of such a type could not exist in a country striving for democracy. This was realized by the Provisional Government headed by Prince Lvov and later on by Alexander Kerenski.[1]

To eradicate the evils of that system, to throw the schools open to the humble and the poor, to establish "a single absolutely secular school for all citizens," was the task at which the new authorities set to work.

In this report an attempt is made to indicate the outstanding features of the new laws and regulations since the early days of the revolution. Unfortunately because of the scarcity of material it is impossible to tell at present how far the acts and decrees promulgated by the various authorities and outlined in this report have

[1] The Provisional Government with Prince Lvov at its head was organized soon after the outbreak of the revolution in March, 1917, with the understanding that it should hold power only until the Constituent Assembly should meet to decide Russia's future form of rule. Its first cabinet consisted of former members of the executive committee of the Imperial Duma. In July of the same year a more radical cabinet was formed under the leadership of Kerenski. A few months later (i. e., in November) the Provisional Government was overthrown by the Councils of Workers, Soldiers, and Peasants Deputies, and the Soviet Government, with Lenin as Premier and Trotski as Minister of Foreign Affairs, was established instead.

been actually carried out. Nor is it possible to state with any degree of accuracy the educational changes that have taken place in Russia since the overthrow of Kerenski and the establishment of the Lenin-Trotski régime. For lack of information this report closes, therefore, with the early months of the Bolshevist rule.

The old autocracy, shattered so easily, left a heavy heritage. As is well known, education in Russia is very imperfectly developed. The policy of the czars was to impart to the people knowledge that would strengthen their own imperialistic aims. Nevertheless, it differed with each monarch. The reign of Czar Alexander I (1801–1825), especially its first half, was marked by an endeavor to build up a national system of education; his successor, Nicholas I (1825–1855) saw in the spread of schools and popular education a dangerous weapon against autocracy. The system by which schools of different grades formed one continuous ascending chain was destroyed and a high barrier was set up between the elementary and secondary grades.

Education was intended for the privileged classes only, and, although the school system was divided into four grades (parish school, district school, gymnasium, and university), leading from the primary school to the highest type of educational institution, no peasant's children, according to the Ukase issued in 1813 and reaffirmed in 1827, were to be admitted beyond the district school. A few years later even this privilege was denied them, and the tiller of the soil had to be content with the parish school only, though in Russia 85 per cent of the total population is rural.

The fourth Minister of Instruction, Shishkov, with the approval of Czar Alexander and in his presence, issued the following statement:

> Knowledge is useful only, when, like salt, it is used and offered in small measures according to the people's circumstances and their needs. * * * To teach the mass of people, or even the majority of them, how to read will bring more harm than good.[1]

This attitude was held by the higher authorities for a number of decades, and neither the abolition of serfdom in the sixties nor any subsequent reforms in Russian state affairs had any considerable effect upon educational conditions in that country.

The accession of Alexander II (1855–1881) was marked by an intellectual revival and freedom of speech, but his assassination plunged the country into a state of reaction. A number of schools came under the control of the church and were governed by the Holy Synod, Russia's highest ecclesiastical authority. The church authorities also opened a series of church schools, where the child spent his years in learning how to read church music and church Slavonic characters, the rôle of which in eastern Europe may be compared to the part played in the west by Latin. The inevitable cleavage be-

[1] Musin-Pushkin, Shkola v Rossii, p. 22.

tween the secular public schools and the parochial church schools became wide and deep and the passing over of a pupil from a school of one type to that of another was attended with great difficulties.

With Nicholas II (1894–1917) came a general revival of interest in educational matters, especially during the years following the Russo-Japanese war. The second part of his reign was marked by an era of many pedagogical congresses, of various schemes for reforming the schools, of incessant attempts toward the improvement of the methods of teaching and the organization of schools of a new type. This revival, taken up by the zemstvos (rural councils) and numerous private agencies, did not succeeed, however, in bringing about complete reform. The most thoroughly democratic reforms, for which the progressive elements had been striving for decades, became effective in the early months of new Russia, and only the unfortunate internal strife of later days prevented their complete realization.

SECULARIZATION OF SCHOOLS.

One of the first acts of the Provisional Government of 1917 was the secularization of church schools, in order to put the educational institutions of the various departments under the control of the Ministry of Public Instruction. This important law, passed by the Provisional Government on June 20, 1917, reads in part:[1]

> For an actual and uniform realization of general instruction all the elementary schools, included in the school system, or all those which receive state grants for their upkeep or for the salaries of the personnel, among others, the church schools under the control of the Greek-Orthodox Church, as well as the church seminaries and two-class schools, are herewith transferred to the Department of Public Instruction.[2]

This reform, as can be easily seen, was primarily directed against the orthodox parish church schools, the separatist tendencies of which proved to be a serious obstacle in the diffusion of popular education. The parish church schools differed widely in program and spirit from the neighboring secular schools in the same district. They were under strict supervision of the clergy and had no connection with the zemstvo schools, which were under the jurisdiction of the Ministry of Public Instruction.

The general standard of instruction in the parish schools was reputed to be below that of the zemstvo schools. The zemstvo social workers long tried in vain to take over the parochial institutions. Measures of the Minister of Public Instruction, aiming to increase the general expenditures for secular education, were often defeated on the ground that no similar provision was made for the parochial schools. The latter, although governed by the church, enjoyed grants apportioned by the state, which in 1916 alone, according to the Russian

[1] All the dates in this report are old style, Russian calendar.
[2] Vyestnik Vrem. Prav., 1917, No. 89.

Yearbook for that year, amounted to $11,076,383. The subsidy which the parochial schools received from the state in the end facilitated their final transfer from the domain of the church to that of the state and made possible their supervision by one central authority.

The final blow inflicted upon the ecclesiastical school authorities came from the Soviet of the People's Commissaries, which in its session of January 20, 1918, officially proclaimed the separation of church and school. The immediate effect of that measure was the elimination of the teaching of religion and theology in all the public schools and the doing away of all discrimination between pupils on religious grounds.[1]

ADMINISTRATION OF SCHOOLS.

PROVISIONAL GOVERNMENT.

The administrative machinery by which the state maintained its control over education has undergone radical changes. For the better understanding of these changes, a word as to school administration under the old system seems necessary.

Under the Czar's régime the entire state was divided into 15 educational districts, each headed by a curator. The curators, though nominated by the minister, had to be confirmed by the Czar. The power exercised by the curator within his own district was very large. It consisted not only in general supervision of all grades of schools, from the university downwards, but also the filling of vacancies in the ordinary staff of the schools. In addition, the curator had the right to nominate for confirmation by the minister persons fitted to discharge the functions of directors of secondary schools, and inspectors or deans of faculties in the universities.

The actual inspection of secondary schools was done by his assistants, the district inspectors, while the supervision of elementary education was exercised by the directors of elementary schools and their subordinates, the inspectors of elementary schools. Matters pertaining to reforms within the sphere of authority of the curator were decided by the curator's council, in which the district inspectors also participated.

Through this system of school administration all grades of education were brought into direct relation with the curator and through him with the Minister of Public Instruction. As a counterpart to the ministerial schools, organized and controlled by the state, stood the educational institutions, established and maintained by the municipalities and zemstvos in those provinces where local self-governments were in existence. Though originally enjoying great liberties, the zemstvo schools were gradually correlated to the min-

[1] New Russian News, 1918, No. 38.

isterial schools by a system of provincial and district school councils, which consisted of representatives of the ministry and the local self-government.

The distinct feature of these councils was the active participation of the nobility who, encouraged by the state, played an important rôle in directing the policy of the schools. The inspectors of both the ministerial and zemstvo schools were looked upon with great disfavor by the zemstvo social workers, who considered these officials as state agents interested more in the teachers' loyalty toward the ruling autocracy than in the education of the masses. The profound hatred which the ministerial inspectors had aroused manifested itself at the first teachers' conference, held in Moscow, immediately after the downfall of the Czar. The cries there first heard openly of "Down with the hateful inspectors of the public schools, down with the council! The power of the school belongs to the teacher!" [1] augured ill for the system of school inspection, as hitherto practiced in Russia.

This dictatorship "from above" broke down completely with the coming to power of the Provisional Government. The policy of the new school authorities was to refer the administration of the schools to the local self-governing bodies, the zemstvos and the municipalities. The decree of May 8, 1917, regarding elementary education reads:

> In localities where the provincial or district zemstvos are in existence, the municipal, district, and provincial school councils are to be abolished. In place of the abolished councils the administration of elementary education is temporarily laid upon provincial or district zemstvos, while in cities with a municipal school council administration elementary education is given over to the municipal duma.[2]

By placing the educational affairs in the hands of the local authorities, the post of the curator became superfluous and was abolished by the decree of September 26, 1917. With it went, as a natural consequence, the Curator's Council and its autocratic machinery, the directorates and inspectorates of schools.[3]

Although the new Ministry of Public Instruction outlined a comprehensive and far-reaching program for the reconstruction of schools, it encountered powerful opposition on the part of the radical elements of Russian society. This was due to the old deeply rooted distrust of reforms emanating from governmental bureaus, where the people had hitherto no voice. The Workers', Soldiers', and Peasants' Deputies demanded the organization of a special State Committee of Public Instruction attached to the ministry and representative of the people. Organized in May, 1917, the State Commission of Public Instruction comprised representatives of the All-Russian Soviets of

[1] Russkiya Vyedomosti, 1917, No. 76.
[2] Vyestnik Vospitaniya, 1917, No. 6-7.
[3] Vyestnik Vr. Prav., 1917, No. 178.

Workers' and Soldiers' Deputies, representatives from the union of towns, zemstvos, and various other organizations, mostly political. Educational workers were represented in a small minority. The function of this committee was to devise laws and see that these were laid before the Provisional Government through the channels of the ministry. The sessions of the state committee bore many fruits. Regulations were issued concerning elementary education,[1] the enforcement of compulsory education,[1] the administration of public schools, and the autonomy of the middle schools. The committee recommended also the introduction of the new spelling in public schools, higher salaries for elementary-school teachers, and various other reforms, general and particular.

The decision of the state committee with regard to administration rests on the principle, so familiar to us, that public education is the affair of the local self-governments, by which body it should be administered. For the immediate administration of schools there should be formed special provincial and district boards of public instruction. As to jurisdiction, according to the state committee, the local boards should care, among other things, for the general maintenance of laws and regulations pertaining to public education, the administration of educational institutions, the coordination of all activities pertaining to public education in a given area, and the collection of statistical data on education. In addition, each provincial zemstvo may distribute state grants for education to the various districts and towns according to the decisions of the Provincial Zemstvo Assemblies.[2]

The reforms mentioned above, whether outlined or actually introduced, represent, as can be easily seen, the general trend of democratization of schools, as found in other democratic countries. The action of the Provisional Government was not revolutionary. Local self-governments existed in Russia for over 50 years, and, by granting them a voice in educational affairs, the provisional authorities simply complied with the wishes of those who have in vain sought this privilege for the past five decades.

Autonomy of middle schools.—The projected reforms of the State Committee relating to the autonomy of middle schools received cordial support of the Minister of Public Instruction, Salazkin. A bill introduced in September, 1917, for the approval of the Provisional Government places the control of all schools above the primary grades in the hands of the Council of Education. According to this bill, "the immediate control of the higher elementary schools, boys' and girls' progymnasiums and gymnasiums, real schools, normal schools, and other institutions receiving State grants in full, or sub-

[1] The details are not available.

[2] Vyestnik Vospitaniya, 1917, No. 6–7, pp. 25–35.

sidized by local funds, be it for purely educational or for administrative purposes, is herewith intrusted to the Council of Education." This body is to comprise, besides the teaching personnel and the school physician, representatives of the local self-government and the parents' organizations, wherever such are in existence. The number of the parents' representatives in the Council of Education is not to exceed one-third of the members of the teaching personnel.

In institutions newly created the right to elect a director or other persons holding administrative positions is reserved to the provincial zemstvo boards or to the district or city boards, as the case may be.

The members of the Council of Education have the right to elect the teaching staff from the list of candidates submitted to it by the director or by some other person at the head of the institution. At the end of the school year, upon the written request of not less than one-third of the total number of members comprising the Council of Education, the teachers' tenure of office may be subjected to a new vote. In extreme cases of unsatisfactory conduct or lack of skill on the part of the teacher, such reballoting may take place even before the end of the school year.[1]

BOLSHEVIK RÉGIME.

With the overthrow of Kerenski in November, 1917, and the coming to power of the Bolsheviki, the educational policy was again revised. This time the control of schools passed from the hands of the zemstvos to those of the soviets, representing the masses only. The rules, as issued by the Commissariat of Education,[2] read as follows:

1. For the proper conduct of affairs pertaining to public education in and outside of school, also to normal schools (teachers' seminaries), there are being organized regional, provincial, municipal, district, and county soviets of public education attached to the soviets of workers', soldiers', and peasants' deputies. This refers to institutions with a general or technical bias.

2. The soviets of public education consist of (*a*) representatives of all organizations having the right to send delegates to the soviets of workers', soldiers', and peasants' deputies; (*b*) representatives of local educators and students (among others also from technical schools); (*c*) experts especially invited for consultation.

NOTE.—The total number of representatives from educators and students must not exceed one-third of the total membership of the soviet of public education.

3. General meetings of the soviets of public education take place, if advisable, once a month, but not less than once in three months.

4. The soviet of public education elects an executive committee from its own members.

5. All appropriations from the State treasury are to be solicited by the regional and provincial soviets of public education.

[1] Vyestnik Vrem. Prav., 1917, No. 161.

[2] Under the Bolshevik régime the ministries were changed to commissariats, the post of the minister being superseded by a "people's commissary," appointed by the Central Executive Committee of All-Russian Assembly of Soviets.

6. The soviets of public education work under the direction of the soviets of deputies and in accord with the views of the latter institution. In respect to pedagogical and financial questions the soviets enjoy autonomy and are accountable to higher authorities in the following order: County soviet of public education, district soviet of public education, provincial soviet of public education, regional soviet of public education, and, finally, the State commission of education.

7. The opening of new schools and the sequestration of private educational institutions, in case the expenditures are covered by the State, are to be undertaken with the exclusive approval of the State commission through the channels of the soviets of public education.

8. The soviets of public education shall extend their activities to the people's universities, public courses, exhibitions, theaters, motion pictures, excursions, libraries, etc.

9. In localities where the zemstvos and municipalities have not yet ceased their activities the soviets will take charge of the work pertaining to public instruction. All school apparatus, municipal and rural, as well as all sources of income, will be transferred to the soviets.

10. The soviets of workers', soldiers', and peasants' deputies have the right to make only such changes as are compatible with local conditions.[1]

PARENTS' ASSOCIATIONS.

The rôle of parents' organization in the school council mentioned in the previous section is a recent development and sprang, like so many reforms in Russia, out of sheer necessity.

By the constant recasting of schedules in secondary schools the school authorities under the old régime curtailed the subjects most in touch with modern life. Natural sciences and history were reduced to a minimum and Greek and Latin studies reinforced. The teaching in the boys' and girls' gymnasiums became formal and unattractive.

Protests emanating from the intelligent circles of society became more and more emphatic, until dissatisfaction culminated in 1905 in a general strike not only in university institutions, a common phenomenon in Russia, but also among high-school pupils. The strike, spreading throughout the length and breadth of the Empire, made the authorities realize that to cope with the high-school problem a radical change in the system was imperative. It became clear to them that to win the pupils' confidence was beyond their power, and that to save the situation the parents' cooperation must be first invited.

The importance of the influence of parents in school life had been realized by the school authorities much earlier, notably in 1899, when the Minister of Public Instruction, Bogolyepov, bent upon carrying out reforms in the secondary schools of Russia, issued a circular addressed to the curators of the educational districts, admitting the justice of many complaints of the defects in the secondary schools.

[1] Izv. Sov. Rab. i Sold. Deput., 1918, No. 37.

As a result of this admission a conference was summoned by P. A. Nekrasov, curator of the Moscow district, in which about 200 educators, mainly teachers and directors of secondary schools, took part and formulated recommendations which, timely as they were, did not procure the participation of parents in the affairs of the school. A closer rapprochement followed only a few years later, when the school youth, inspired by the liberalizing movements of 1905, began to revolt from the restriction of the school régime, causing great perturbation among the school authorities. It was then that the latter turned to the parents for help. Officially invited for the first time by the school authorities to lend a helping hand the parents literally "burst" into the schoolroom, and in the hour of distress rescued the situation.

With the slogan that the school should be a temple of knowledge, and not of politics, the parents' commitees set to work. Their influence was at once most beneficial. The pedagogical circles had extended to them their sympathies and won their cooperation. Owing to the influence of the parents' committee interest in the school studies was revived, the students appeased, and politics, at least outwardly, banished from the schoolroom. The parents' committees established cordial relations between teachers and pupils. Leaving no stone unturned, they responded to all the needs of the pupils' school life. In this they saw their right and duty.

By instituting special summer courses the parents' organizations assisted the backward students in subjects in which they had previously failed. They suggested to the school authorities that the home lessons be modified by furnishing exact tables relative to the home studies. They reported the progress their children made with the various textbooks; they obtained numerous editions of the same book, so as to enable the children to read and discuss in the classroom books familiar to all. They supplied school libraries with additional books, issued catalogues of the best books available, and distributed them for the guidance of parents in their own as well as in other localities. Their activities extended to the improvement of the pupils' entertainments and amusements. Last, but not least, they took an active interest in school luncheons and sanitation.

These activities, at first welcomed, received, with the setting in of the reactionary spirit in 1907, a decided check on the part of the school authorities, who viewed with suspicion the ever-growing influence of the parents' organizations.

With the outbreak of the revolution the parents' committees came again to their own. That the parents' cooperation in school affairs is valued highly is proved by the bill of September, 1917, which

allotted to the parents of school children a conspicuous place in the council of educators.

ABOLITION OF RESTRICTIONS.

NATIONAL AND RELIGIOUS GROUPS.

Among the new measures introduced in Russia since the revolution the most vital one is the decree abolishing all restrictions hitherto imposed upon various nationalities, denominations, and creeds. For instance, Jews were formerly admitted to secondary schools and universities only by percentage. Their admission to schools within the so-called Jewish pale—that is, roughly speaking, Poland and southwestern Russia—was limited to 10 per cent, in other provincial universities to 5 per cent, and in Petrograd and Moscow to 2 per cent of the total enrollment of students. Furthermore, the non-Russian population in Provinces like Poland, Ukrainia, Lithuania, etc., once independent States, had to submit to the Russifying policy of the former Government and for lack of facilities to send their children to schools in which the use of their own native language was forbidden.

These conditions appear to have vanished with the "Declaration of the rights of the peoples," issued by the All-Russian Soviet, first in June and then in November, 1917. The tenets of this declaration are as follows:

1. The equality and sovereignty of the peoples of Russia.
2. The right of the peoples to free self-determination even to the point of separation and establishment of independent states.
3. Abolition of all racial and religious privileges and restrictions.
4. Free development of the nations and ethnographic groups which were merged into the Russian Empire.

From a pedagogical point of view the restrictions which prevented the various nations and ethnographic groups, constituting 57 per cent of the total population of Russia, from establishing and conducting their own private schools were forthwith removed. They were permitted to institute their own schools and use their national language as a medium of instruction.

It is also significant that the State itself made provisions for the introduction of the local language into normal schools of those provinces where the non-Russian population constituted the majority.[1]

PRIVATE INSTRUCTION.

Private instruction imparted at home was formerly considered an offense under some conditions and punished accordingly. The new bill introduced by the Minister of Public Instruction and ratified

[1] Vyestnik Vremennavo Pravitelstva, 1917, No. 104.

by the Provisional Government abolished all restrictions relative to private instruction and thus paved the way for private individuals eager to assist the Government in wiping out illiteracy.

Commenting upon this bill, the Vyestnik Vremennavo Pravitelstva, 1917, No. 79, states:

> According to the laws now in force it is the duty of the educational and administrative authorities to find out by observation what individuals practice the art of teaching children in private homes, if such persons possess the necessary certificate, otherwise to prosecute them according to the law. The articles of law pertaining to private instruction have at present, with the entire change of structure of society, lost their significance, while they still retain the force of law in the civil code. For this reason the Minister of Public Instruction has introduced for the approval of the Provisional Government a bill aiming to abolish all restrictions regarding teaching in private homes.

EDUCATIONAL LADDER.

The reorganization of the entire school system, long a dream of the most progressive elements of the Russian society, was effected by a decree issued by the Provisional Government in June, 1917.

According to the Russkiya Vyedomosti, 1917, No. 144, all State schools are to run in two parallel lines, cultural and vocational. Each grade leads directly to the next higher of the same line or to a corresponding grade of the parallel line. The pupils begin with the elementary school and pass then either to a lower vocational school or continue the general course by entering a higher elementary one, corresponding to the first four classes of the present gymnasium. The gymnasium is to undergo a gradual change and be reduced to a four-class school, whereby the first four classes of the present gymnasium are to be turned into a higher elementary school. With the higher elementary school the cycle of elementary education comes to an end.

From the higher elementary school the pupil passes to the secondary trade school or to the four-class gymnasium which is to correspond to the last four classes of the present gymnasium (5th–8th classes, inclusive). This cycle completes the pupil's secondary education.

Finally, the four-class gymnasium is to pave the way to the university or to a higher technical or professional school.

This act abolishes all barriers and offers free and uniform access to all grades of education. Moreover the school schedule is to be so arranged as to enable the pupils to change the academic for a vocational course and vice versa.

A similar reform with regard to the city schools received considerable attention on the part of the late Czar's liberal Minister of Instruction, Ignatyev, whose proposals for better schools were widely commended by the exponents of educational reform.

To make this change real the Provisional Government assigned the following sum for education in 1917 to supplement the budget fixed by the old authorities:

The sum of $2,707,857 "for the opening of four-class gymnasiums and real-schools,[1] new higher elementary schools, also for the opening and upkeep of teachers' institutes and normal schools.

Out of this sum it was proposed to spend:

(*a*) $546,750 for the opening of 100 four-class gymnasiums and real-schools.

(*b*) $1,291,725 for the opening of new higher elementary schools and for various needs of these schools, as provided by law.

(*c*) $110,000 for the opening and upkeep of 5 teachers' institutes.

(*d*) $759,382 for the opening of 25 normal schools.[2]

In this connection it may be of interest to compare the statistical items as far as available. They represent the state expenditures for middle schools in 1915 and 1916.[3]

	1915	1916
Boys' state middle schools	$9,514,430	$9,536,333
Boys' state-aided middle schools	587,210	668,410
Various other expenditures (regular salary increase, teachers' lodgings, parallel classes, etc.) in boys' gymnasiums, progymnasiums, and real-schools	3,360,768	3,682,500
Girls' state middle schools	289,445	293,633
Girls' state-aided middle schools	899,764	1,024,764
Total	14,651,617	15,205,640

The increase for middle education in 1916 was $554,023; in 1917, $3,039,662.

TEACHERS' TRAINING INSTITUTIONS.[4]

The reorganization of the elementary and higher schools, by which the present gymnasium is to be divided into a higher elementary and a high school institution, led the Minister of Public Instruction, Manuilov, to issue a new program affecting the status of Teachers' Training Institutions, which comprise the normal schools (uchitelskiya seminarii) and the teachers' institutes (uchitelskiye instituty).

(*a*) *Normal schools.*—The decree of June 14, 1917, defines the status of the normal schools, the main source for supplying teachers in the primary grades, as follows:

1. The normal schools are secondary institutions and consist of four classes. They admit men, women, or both.

2. The normal schools may have one or two preparatory or parallel classes.

3. Admission to the preparatory class is afforded to graduates of a two-class elementary school, while admission to the first class of a

[1] The gymnasiums offer classical instruction, while the real-schools are nonclassical, with a technical bias.
[2] Vyestnik Vr. Pravitelstva, 1917, No. 101.
[3] Pravitelstvenny Vyestnik, 1917, No. 16.
[4] Vyestnik Vr. Pr., 1917, No. 104.

normal school requires graduation from a higher elementary school or its equivalent.

4. Candidates who pass a special entrance examination may also be accepted.

5. For practical work of the prospective teachers there is to be attached to the normal school a two-class elementary school, with a six-year course.

Further, the regulation requires all existing teachers' schools with an elementary program to be raised to the standard of normal schools. This change is to take place within two years from the date of publication of this regulation.

The teachers' schools were previously of low standard and their course differed little from the program of a two-class primary school.

(*b*) *Teachers' institutes.*—While the normal schools are intended to qualify candidates for the teaching profession in the lower elementary schools, the teachers' institutes prepare candidates to occupy positions in the higher elementary schools. The latter, as already explained, correspond in scope to the first four classes of the present gymnasium.

The following statements, issued by the Minister of Public Instruction, under date of June 14, 1917, show the new regulations, as affecting the teachers' institutes:

1. The teachers' institutes may admit men, women, or both.

2. Admission to the first class at the teachers' institute is granted to graduates of normal schools, boys' or girls' gymnasiums, real-schools with an additional class, higher commercial schools, and similar institutions. Admission is restricted to candidates who have been in the school service for not less than two years.

3. For the purpose of giving students practice in teaching there is to be attached to each institute a higher elementary school, teaching in which is required of all students.

4. The course of study in teachers' institutes covers three years and is divided into a general course—compulsory for all the students—and a special, corresponding to the group of subjects in which the candidate prefers to specialize. The special course consists of the following groups: Literary-historical, physico-mathematical, and scientific.

Students who have successfully completed a certain course in the teachers' institute receive the title of "Teacher in a Higher Elementary School" in a particular group of subjects. Admission to the examination for a license as such is afforded only to candidates who have taught school for at least two years.[1]

[1] Vyestnik Vr. Pr., 1917, No. 123.

REFORM IN SPELLING.

Closely connected with the reforms already mentioned is that in spelling. Some time ago such scientists and recognized experts on the subject as the members of the Academy Fortunatov and Shakhmatov pointed out the necessity of such a reform. Their views were based on the fact that the former orthography had no scientific foundation; that it was arbitrary, and the result of an inadequate knowledge of the Russian language on the part of the old philologists. The new spelling was adopted on May 11, 1917, by a special committee charged with the work. The Minister of Public Instruction, A. Manuilov, referring to the reform which he was instrumental in introducing into the school system, remarks:

> The reform worked out by a special committee attached to the Academy of Science and supported by the state committee of the Ministry of Public Instruction presents a system based on scientific principles which, while retaining all the elements of the former orthography, aspires to bring uniformity between the written word on the one side and its phonetic composition and etymological construction on the other.[1]

From a practical point of view the reform in spelling will undoubtedly facilitate the studies of elementary school pupils by saving for more serious studies time that was formerly consumed in learning all the minutiæ of a spelling that had no justification.

The spelling, as adopted by the school authorities, consists in the elimination from the Russian alphabet of four letters: ѣ (yat); i (i); θ (phita); and ъ, the so-called "hard sound." The pronunciation of the first three letters is identical, respectively, with e (ye); и(i), and ф (f). The hard sound, though frequently used at the end of words ending with a consonant, is not pronounced.

The new spelling was introduced into Russian schools in the lowest grades first. Students who started school with the old spelling were allowed to adhere to it, or adopt the new one. No mixed spelling was, however, to be tolerated.

NEW TEXTBOOKS AND OTHER PUBLICATIONS.

Under the old system textbooks intended for use in Russian schools had to be approved by the Scientific Committee, the chairman of which was appointed directly by the Emperor. But the new order of things demanded new standards. A committee appointed by the Minister of Public Instruction of the Provisional Government was charged to further the publications of school books compatible with the principles of a growing democracy. The Bolshevik authorities went much further. In this connection it is interesting to note a bill of December, 1917, approved by the Commissary of Public Instruction, A. Lunacharski, and apparently adopted by the general soviet.

[1] Vyestnik Vrem. Pr., 1917, No. 96.

By this bill the state may take over and enjoy the proceeds from any literary production for the period of five years, provided that at least 15 years shall have elapsed after its author's death. The work thus made the property of the state must show sufficient artistic and literary value. It is to be published in two editions, an academic edition with a full text, and a popular edition with abridged text. By this means the state authorities hope to counteract the influence of poor and vicious books and replace them with literature of a more healthy type.[1]

HIGHER EDUCATION.

The question of the reorganization of the universities, which the events in Russia have rendered urgent, received considerable attention on the part of the Provisional Government. Subsidized by the State, the Russian universities formed an integral part of the Russian Empire, or the Russian autocracy, which was free from the first so to impress its own stamp upon them as to mold them to its own aims.

The effect of this practice upon professors and students prompted the Provisional Government in June, 1917, to issue a decree which did away with all State interference and put the highest institutions of learning on a plane of autonomy never paralleled in the history of Russian schools. The university council, stripped of its power by the statute of 1884, became again an important factor in the life of the university; and the system of election of university officers, until now limited to the rector, the dean, and the secretaries of the various faculties, was extended to include also the university professors.

Election of professors.—These according to the bill of June 17, 1917, are to be elected by a unique combination of competition and recommendation. Persons desirous of securing professorships lodge application with the dean of the faculty. The members of the faculty and the university council, as well as the members of other higher educational institutions, may present their own candidates and upon invitation of the university discuss the merits of the prospective professors. The candidates are then subjected to a vote by the faculty and the election returns presented to the university council. In order to be elected the candidate polling the highest vote in the faculty must also receive the majority vote in the university council. He is then elected, subject to confirmation by the minister. In case of disapproval the latter must present his reasons to the university council within the period of two months. Failure to confirm a candidate leads to elections of a new candidate.[1]

[1] Gazeta Vr. Rab. i Kr. Pr., 1917, No. 26. [2] Vyestnik Vr. Pr., 1917, No. 91.

Requirements for candidates for university chairs.—A project which was worked out by the commission on the reorganization of higher education summoned by the assistant minister, Vernadski, in charge of higher education, states the following requirements for candidates for university chairs: (1) To become a regular ordinary or salaried professor the candidate must have had at least five years of experience as lecturer in one of the higher institutions of learning; to become an extraordinary or unsalaried professor only three years of experience. (2) Russian scientists, distinguished for their educational activities and possessing the degree of doctor of philosophy conferred by foreign universities, are also eligible to professorships.[1]

Docents.—The post of docent, instituted in 1863 and abolished in 1884, was reestablished by a ministerial circular of June 24, 1917. This reads:

In all Russian State universities the post of docent shall be reestablished as follows:

1. Docents shall receive a salary of $1,200 per annum, with two increments of $175 each after the fifth and tenth years of service.

2. The assignment of docents to the various chairs is left to the faculty subject to confirmation by the university council.

3. Persons holding doctor's or master's degrees, or those not possessing such degrees but otherwise meeting the requirements of private docents and actually having had a three years' experience in teaching, are eligible to fill vacancies.

4. The election of docents, subject to confirmation by the council, is made by the faculty from the number of candidates proposed by its members.

5. Docents have a right to participate in faculty meetings with a voice on all subjects except that pertaining to the election of professors.

Admission of students.—The admission of students to higher educational institutions, until now restricted by various laws and regulations bearing upon the students' nationality, creed, and domicile, has undergone a sweeping change since the publication of the ministerial circular of June 13, 1917. How this measure affects nonorthodox and non-Russian students has been discussed in another connection. Here it may be of interest to mention the reform with regard to the students' domicile. As already stated, Russia was divided into 15 educational districts with a university in each of 10 of these. According to measures adopted by the ministry in 1899, students living in a district possessing a university could not freely select a higher institution outside their own educational border line. The new regulation does away with this law of bondage and leaves to the student a free choice between universities existing throughout Russia at large. Of particular interest are the following clauses of the circular:

1. The university admits on equal basis persons of both sexes with no distinction as to nationality and creed, providing such persons possess diplomas or certificates of maturity or the equivalent.

[1] Vyestnik Vr. Pr., 1917, No. 161.

2. Students wishing to change the course of study and also those coming from other universities in or outside of Russia are admitted on the same basis as new students, credit for work done elsewhere being decided by the respective departments.

3. Special students, men and women, who possess a high-school education, may become regular students if they pass an examination for a certificate of maturity. In such cases credit may be granted for academic work done previously.

NEW UNIVERSITIES AND FACULTIES.

Plans to increase the number of universities and faculties, the lack of which has been keenly felt by the intelligent circles of society, came to fruition in the first year after the fall of the Empire.

The eagerness of certain cities to assist the Government in its work by offering large sums of money for the building of the proposed new universities, and the rapidity with which some of the reforms have been put into operation, prove that the time was fully ripe in Russia for measures so long delayed. But the credit for these reforms belongs not solely to the Provisional Government. Changes in university education were also planned by the prerevolutionary authorities. The March days of 1917 simply accelerated the course of events, and what under ordinary circumstances would have taken years, perhaps decades, to accomplish, was then done overnight.

The following are the most important measures: The Demidov Lyceum in Yaroslav, intended exclusively for the study of laws and organized on the same principle as the faculty of laws in a university, was transformed in July, 1917, into Yaroslav university and organically connected with the faculty of law. The medical, physico-mathematical, and historico-philological faculties were to be instituted at a later date.

Other changes created by the new authorities include the transforming of the Perm branch of the Petrograd university into an independent university institution, which opened last year with all the four faculties mentioned. In addition, the Warsaw university, which, in the early days of the German occupation of the western front in Russia, was transferred to Rostov-on-the-Don, underwent a radical change. The Warsaw university proper was abolished and in its stead was created the Don university, named after Rostov-on-the-Don, in which city it is situated. The Don university opened in July, 1917, with all the four faculties. The action of the authorities with regard to the Warsaw institution will become intelligible, if we bear in mind that the Warsaw university was intended to serve the needs of the Polish population. With the creation of the new Polish state, however, the Warsaw university in a Russian city had obviously no raison d'être and was supplanted by an institution definitely suited to its environment.

The two young Russian universities—one in Saratov and one in Tomsk—created shortly before the revolution by the then liberal

minister Ignatyev, received considerable attention on the part of the new authorities. By an early act of the Provisional Government the Saratov university was expanded to include the physico-mathematical, historico-philological, and the law faculties, while to the Tomsk university were added the physico-mathematical and historico-philological faculties.

Plans were also underway for the opening of two more universities—one in Irkutsk and one in Tashkent—both intended to supply the needs of Asiatic Russia, which at present boasts of only one higher educational institution—the Tomsk university.

Finally, the stand taken by the new authorities with regard to the question of higher education for women deserves explanation. Women students, debarred from the pursuit of studies in universities, had formerly to content themselves with so-called "Higher courses for women" instituted in many university centers. These courses, general and professional, compared favorably with the kind of education offered at universities, yet graduation from these institutions did not carry the same prestige as graduation from a Russian university. This fact led the ministry to draft a law which aims to transform the higher courses for women in Petrograd and Moscow into regular universities for women. In addition to that, women may enter any higher educational institution on the same basis as men.

Reports from Russia bring advices that are anything but favorable for the development of higher institutions. Owing to the revolutionary upheaval many university professors, known for their adherence to the old régime, were summarily dismissed from their posts; others handed in their own resignations; classrooms were deserted by students serving in the militia and various political organizations; and university buildings were utilized for the propagation of the new ideas. Add to this the need of professors felt in Russian universities long before the war; the lack of material required for the proper equipment of laboratories and clinics; the high cost of textbooks and various apparatus; and last, but not least, the general chaotic conditions of the whole country. Says the Novoye Vremya, under date of September 29, 1917:

> A series of new universities is being opened in great haste. It is difficult at present to furnish new universities with indispensable textbooks and libraries, and there is no way of securing professors. Long before the war the university chairs were only half filled.

The Provisional Government is responsible for the changes in higher education which have been mentioned. Enlightened as these measures were, they did not, however, satisfy the Bolshevik leaders, who, as can be seen from the new university statute, seem to be anxious to throw the university doors open to all, regardless of attainments. The statute was prepared by a special commission,

consisting of Profs. Steinberg, Pokrovski, Artemyev, Fedorovski, Reussner, and Magirovski.

THE NEW UNIVERSITY STATUTE.[1]

1. The universities are divided into three free associations: (*a*) The fundamental, (*b*) the educational, and (*c*) the cultural.

(*a*) The fundamental association aims to promote the theoretical work of its members in the field of learning. (*b*) The educational association is a higher school, which by means of instruction imparts an all-round education in an entire field of knowledge or one of its special branches. It consists of permanent students, instructors, and professors. To the class of permanent students belong persons who have passed the midterm examinations. The instructors are chosen by the faculty for the duration of three years on the basis of a competitive procedure. They must have an established reputation in the world of science or be known for their pedagogical activities. (*c*) The cultural association (university extension) will comprise a unit with the aim of informing the working people how to acquire knowledge in a concise and intelligible form; it will also prepare workers for the people's universities, and furnish direct assistance to all cultural and educational agencies. The higher people's schoo admit all persons above 16 years of age, with no distinction as to sex and nationality.

2. The university must not be a class institution; hence, it must be free and admit all who seek higher education.

3. The new statute excludes any possibility of turning the members of the university into a privileged class. For this reason there have been instituted temporary positions only, constant competitions for professors and instructors, compulsory lectures by professors in public auditoriums, the assignment of professors to provincial universities.

4. The number of chairs and faculties in each university is reserved to the decision of the university association.

TECHNICAL EDUCATION.

Technical education received considerable thought on the part of the prerevolutionary minister, Ignatyev, who saw in it a means "to make the world more comfortable." His attention was mainly centered on the higher technical institutions which were to provide the State with trained experts for the promotion of the industrial development of the country.

The Provisional Government, while realizing the importance of higher technical schools, was of the opinion that to attain the best

[1] Izv. Vser. Tzent. Kom. Sovietov, 1918, No. 94.

results a fundamental and radical change was imperative, and with that in view made sweeping changes in the field of elementary and secondary technical education.

To begin with, it changed the section dealing with industrial schools under the Ministry of Instruction,[1] into a department of professional education.

It further issued a decree by which all professional institutions were to be divided, according to grades, into three groups: (1) Technical institutes (tekhnicheskiya uchilishcha); (2) trade institutes (remeslennyya uchilishcha); and (3) trade schools (remeslennyya shkoly).

The technical institutes, as stated in the new regulations, should aim at providing the students with a thorough knowledge, theoretical and practical, in some special field of industry; the trade institutes were to offer to students courses in applied sciences coupled with practical work, while the trade schools had as their aim the preparation of students to perform work in some special branch of industry in an intelligent and competent manner.

The course of study in technical institutes was to cover four years, in trade institutes not less than three years, while in trade schools it was to vary according to the needs of the particular branch of industry.

Admission to technical institutes, according to the decree, depends on the completion of the course of higher elementary schools, to trade institutes of a two-class elementary school, while admission to a trade school requires only graduation from a one-class elementary school. The technical schools admit boys and girls.

Degrees.—The completion of the course of a technical institute qualifies the student for the title of technician, which carries the right to execute work designed by an engineer, while graduation from a trade institute or a trade school leads to the title of master, or assistant master, respectively. Successful practice in his specialty for the period of not less than three years entitles the technician to a degree of engineer with the right to produce original work in his field. At the same time, under similar conditions, masters may become raised to the rank of master technicians, while assistant masters may become masters. These titles may be bestowed on the aspirants by the council of education of the respective schools, from which the students were graduated.

In addition to the above-named graded schools, the Provisional Government made provision for the opening of various courses in special branches of industrial education.

[1] A number of technical schools lie outside the jurisdiction of the Minister of Instruction, but as changes in both kinds of schools do not differ materially they are treated here collectively.

Courses, permanent or temporary, for teachers who could be used in the various technical schools were also planned by the educational authorities.

By the same decree provision was also made to assign once in three years instructors of special branches to various factories and industrial plants with the view of putting them in touch with the latest developments in the industrial world.

The cost of the technical schools and courses was to be defrayed by revenues from the treasury, the zemstvos, municipal, and other bodies. A considerable amount of money for scholarships was also assigned for students desirous of pursuing technical or industrial careers. To cover the expenses entailed by the reform act in 1917, the Government assigned for technical education an extra sum of one and a half million dollars in addition to the amount named for the same purpose by the pre-revolutionary authorities.[1]

As an actual effect of the decree regarding technical schools in Russia it is interesting to note the opening in Moscow of the first technical institution of a new type with a four-year course. Commenting upon this fact, the Vyestnik Vremennavo Pravitelstva, 1917, No. 92, adds:

> With the permission of the Minister of Public Instruction, and in accordance with the new law regarding technical institutions, there has recently been opened in Moscow the first technical institution which aims to give the student a theoretical and practical education indispensable for directing the work in architectural, engineering, hydrotechnical, mechanical, or electrotechnical lines. Graduates of the technical institutions will have the same rights as engineers in any of the above-mentioned specialties who have completed a course in technical institutions in Western Europe.

In line with the reforms pertaining to technical education of the lower and intermediary grades is the progress made in 1917 in the field of higher technical education. Among the new institutions should be mentioned the establishment of two polytechnic institutes, one in Tiflis, Caucasus, and one in Nizhni-Novgorod, the former with agricultural, chemical, hydromechanical, and economic faculties, and the latter with chemical, mechanical, structural, and mining faculties.

The establishment of the polytechnic institute in Nizhni-Novgorod is the result of the transfer of the Warsaw polytechnic institute, which at the beginning of the German occupation of Poland was moved farther east to the first-named city. The same political reasons that prompted the transfer of the Warsaw university also led to the transfer of the Warsaw polytechnic institute.[2] In addition, plans were also made for the establishment of a new higher technical institution in Tzaritzyn, an important city in the lower Volga region.

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[1] Vyestnik Vr. Pr., 1917, No. 77.

[2] Both the university and the polytechnic were reopened afterwards in Warsaw.

Another proposal recommended by the new school authorities is the establishment of technical departments in connection with universities. The advocates of this measure are of opinion that this arrangement will eliminate waste in the equipment of laboratories which may be used in common by students pursuing technical and purely scientific studies, and in avoiding duplication of professors. The newly projected universities, Irkutsk and Tashkent, which the Provisional Government was planning to open, were to have technical divisions. Had this proposition been adopted Russia would have entered upon a scheme materially different from the one now in existence, by which university courses are divided into four groups—law, medicine, physico-mathematical sciences, history and philology.

ADULT EDUCATION.

Press reports from Russia show that the need of education has at no time been so poignantly felt by the masses as at present, when the old order of things has crumbled, when the whole nation has been drawn into the vortex of politics, and when the call for a new organization of life has been sounded from every street corner and public platform. The people, anxious for the printed and spoken word, crowd the auditoriums and lecture halls and demand pamphlets and books from libraries, unfortunately poorly equipped with the very kind of literature that could throw light on the burning questions of the day. The dearth of popular literature, coupled with the lack of properly organized lectures, makes the ignorant masses an easy prey of agitators, who in their zeal to convert the people to their own political views sow doctrines that bring only chaos to the already muddled head of the Russian muzhik. Soon after the revolution in March, 1917, the school authorities, fully aware of the need of training facilities for the adult population, took immediate steps toward its realization.

One of the fruits of this decision was the calling of a conference in September, 1917, with the view of devising a program for the most advantageous expenditures of the State subsidies. This conference, presided over by the assistant minister, Countess Panin, long known for her activities among the working classes in Russia, recommended, among other things, the following course of action:

The opening of primary schools (shkoly gramoty), where adults could learn to read and write, the opening of elementary schools with a general program, and the establishment of schools suited particularly to the needs of the rural population.

In addition, the conference advised the organization of courses for social workers in the various fields of adult education, as well as for the zemstvo leaders. It also emphasized the need of numerous special courses, such as agronomy, industrial and economic cooperation,

bookkeeping, etc. Finally, the conference made a strong plea for the extension of the system of the public libraries, which it recommended should be supplied with proper literature suitable for the understanding of the masses.[1]

How far these proposed measures were accepted and to what extent they were put into practice by the proper school authorities is impossible to state because of the scarcity of news that could throw light on the situation. One thing is certain, however. The provisional authorities, as well as the succeeding Lenin-Trotzky régime, emphasized the vital need of schools for adults in the general scheme of education.

A. V. Lunacharski, the People's Commissary of Public Instruction, thus pictures the situation in an address directed to the Russian people:

> Everywhere in Russia, not only among the city workingmen, but also among the peasants, there has arisen a strong desire for education. Innumerable are the workers' and soldiers' organizations of that nature. To meet the demands of the mass of the people, to uplift them, and to clear the way for them are the first duties of a revolutionary and people's government.[2]

Apart from the Provisional Government's intention to establish facilities for the education of the adults, it is interesting to note that the more intelligent circles of society tendered their help and took up the matter of providing special schools for that very purpose. So, for instance, in March, 1917, the municipality of Nizhni-Novgorod, one of the important cities of the Volga region with a large working population, assigned for a people's university the sum of $50,000, while private contributions for the same purpose amounted to $400,000. Many other cities show a similar record in adult education.

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CHAPTER IX.

EDUCATIONAL CONDITIONS IN SPAIN.

By Walter A. Montgomery,

Specialist in Foreign Educational Systems, Bureau of Education.

Contents.—I. Introduction. II. National primary education: Illiteracy—Administration of the primary schools—Present state—Private schools—Enrollment in primary schools—Cost of national primary education—Sanitation and health of schools—Minimum curriculum of national primary schools—Extra-scholastic activities—Teachers' salaries and pensions—Normal schools—Summary of projected reforms. III. Secondary education: Institutos general and colejios. IV. University education: Holiday course for foreigners. V. Extra educational agencies.

I. INTRODUCTION.

Though Spain maintained her neutrality throughout the World War, her educational, economic, and political conditions—in all countries inextricably bound up with each other—were affected nearly as much as those of the nations participating in it. In France, England, and Italy, educational reforms began early to press for recognition; and popular education came to be seen clearly as the supreme means upon whose efficient organization depended ultimately the salvation of national ideals in the perhaps even more trying period of adjustment after the war. Even Germany was constrained to seek ways of adapting the schools to such national service; and movements like the tentative *Begabtenschule* show the working of the leaven. In Spain, on the contrary, the dominant classes were plunged, almost over night, into enormous prosperity.

The Spanish Government awoke to its opportunities, as was evidenced in many official acts. With the approaching expiration of the charter of the Bank of Spain, the minister of finance appointed a commission to draft a new bill for the Cortes, setting forth a comprehensive and far-reaching program, and calling for the purchase and operation of railroads by the state, and the development and utilization of all natural resources and waterpower. The minister of public works outlined unprecedentedly bold steps for a complete economic reconstruction of the Kingdom, involving a greatly enlarged sphere of activity and intervention by the state, based on an intensified economic survey of all national resources. The Association of Spanish Civil Engineers was granted by the Government the privilege of convening a congress in Madrid in the spring of 1919 for the purpose of discussing numerous phases of national development to which this profession can contribute. Among these are elementary and higher technical instruction, the organization of labor, sanitation and hygiene, and social questions relating thereto.

The advent of this material prosperity, however, has been accompanied by results positively unfavorable to the spiritual and educational life of the nation. It was a prosperity from its very nature unevenly distributed, being confined virtually to the great mining corporations of the mountainous Provinces, and to the shipping companies of the coast cities. The cost of the necessaries of life soared beyond all proportion to the wages and incomes of the great majority of the inhabitants of the Kingdom. The 25,000 or more teachers of Spain found existence increasingly difficult as the war went on. The increasing economic pressure lent a welcome excuse to the classes who are by tradition unfavorably disposed to popular education and constitute through the press and the Cortes [1] the vocal elements of the nation; they declared all attempts to enlarge the educational system out of the question in the face of such dire national stress.

Against these well-organized forces, the schools and the teachers, uninfluential and poorly organized, could make no headway. The nation-wide desperation of the teachers began to be openly expressed in their local, communal, and provincial assemblies early in 1918, and was voiced in a corporate demand for increased salaries by the national association. Upon Don Santiago Alba's acceptance of the ministry of public instruction in March, 1918, the movement received his cordial support, genuinely interested as he was in the improvement of the schools and the welfare of the teachers. There has been no national, and very slight local and communal, increase in the salaries of teachers since 1857, when the present school system was initiated. The average salary, of men and women, has always been less than $200. Sr. Alba planned systematic increase of salaries and far-reaching reorganization of the entire educational system. He contemplated the rapid training of an immediately available supply of primary teachers by sending a larger number for study abroad at one time than ever before. A system of libraries and intensive institute courses for teachers already in active work were also planned.

Unfortunately for the success of his plans, Sr. Alba's only nucleus of aid was found in the socialists, whose very support could but discredit his cause before the nation, inasmuch as they were held responsible for the serious strikes of 1917. Sr. Alba's policies, calling for nearly five million dollars to be used for more and better schools, and especially for increasing the salary of all teachers to a minimum of $300 per annum, encountered powerful opposition from many quarters.

[1] A minority of influential individuals and progressive newspapers constituted exceptions to this general statement.

Six months of factional struggle in the Spanish Cabinet ensued, centering around the activities of Sr. Alba, and culminated in the definite refusal of the majority to assent to his reforms, and in his resignation. Count Romanones, Minister of Justice, and formerly minister of public instruction, a man of liberal views, believed to be in sympathy with Sr. Alba's main plans, and acceptable to the teachers of the Kingdom, was appointed in his stead. But the storm raised was fomented by the liberal element of the nation at large, and could not be laid by any half-way measures. The liberals continued, in every issue of a minority of influential journals, to set before the nation the elements that had compassed the downfall of the minister of public instruction. Early in November, 1918, the resignations of the entire Cabinet were called for, and Count Romanones was asked by the King to form a new ministry. It is true that other causes, international in character, were also operative in precipitating these events; but the significant fact remains that the position taken by a progressive minister of public instruction furnished the clearly marked line of cleavage leading to the resignation of a ministry originally selected for its personal strength and political experience.[1]

The pressure of the demand for increased salaries was undiminished by the change of ministers. More successful than his predecessor, Count Romanones, just before he became premier, obtained the consent of the ministry to an increase of the salaries of primary teachers ranging from a maximum of $1,000 per annum to a minimum of $300. Subject as the decree was to serious modifications in actual practice, it yet constituted a signal proof of the power of public sentiment. The teachers, too, through their associations, not only bore an active part in the agitation for increased salaries, but they pressed for urgent reform on the administrative as well as on the purely instructional side of the schools. They repeatedly submitted these reforms in recommendations to the minister, which will be discussed under their several heads.

II. NATIONAL PRIMARY EDUCATION.

ILLITERACY.

In 1916 Spain had an estimated population of twenty and a half million. The figures for illiteracy are not tabulated for that year, but it may be safely assumed that they did not fall below that of the year 1910, when nearly twelve million people of all ages, a percentage of 59.35, were reported as unable to read and write. Indeed, with the continuous closing of primary schools in all parts of rural Spain

[1] For the suggestion of some of the above lines of discussion acknowledgment is made to the very illuminating volume *La Educacion Nacional* by Don Cesar Silió y Cortés, Madrid, 1914.

through lack of funds to attract teachers, it is possible that the illiteracy for the latter year would surpass even the high figure given. The Provinces showing greatest illiteracy (estimated, 1916) are as follows: Almer a, Malaga, Jaen, Albacete, Murcia, the Canaries, Ciudad, Real, Cordoba, Catillon y Alicente, all of which range above 70 per cent. Those showing illiteracy ranging below 40 per cent are Segovia, Burgos, Palencia, Madrid, Alava y Santander. The decrease in illiteracy has been slow since 1860, when statistics were first gathered for the nation at large. In that year the percentage was 75.52; in 1877, 70.01; in 1887, 68.01; in 1900, 63.78. Spain's leaders have never been slow to recognize the extreme seriousness of this menace; but beyond a few provisions in the national budget, and those of the most advanced communes for a supplementary fund for teachers holding night schools for adults—seldom rising for the individual above $50—nothing constructive has been attempted. Sr. Alba worked upon definite ideas along this line, but his brief tenure of office precluded the realization of his schemes. In 1916 throughout Spain 12,713 separate classes were conducted for the instruction of adult men and women. At a meeting of the National Assembly of Teachers held in Madrid in February, 1918, resolutions were passed, calling upon the Government to take vigorous measures for the suppression of illiteracy. It was recommended that the Government should:

1. Not permit any man to vote who could not read or write.
2. Not issue an honorable discharge to the soldier who remained illiterate.
3. See that the law be enforced forbidding the admission of a workman into an industry without a certificate of instruction.

ADMINISTRATION OF THE PRIMARY SCHOOLS.

The legal administration of the schools of Spain is under the supreme control of the minister of public instruction, an official created in 1900, appointed by the King, and sitting as a member of the royal Cabinet. He is charged with the duty of reporting to that body periodically the state of education throughout the Kingdom, with recommendations for its encouragement and improvement. In him is vested the appointment, to be approved by the King and Cabinet, of all educational officials, administrative and instructional. Taking up first the basic division of the system of public instruction, that of primary education, next under the minister of public instruction ranks the director of primary education (created in 1911), responsible to the minister and with special charge of the administrative and inspectional sides of that branch of public instruction. Immediately subordinate to the director general are the provincial inspectors, named by the minister upon the recommendation of the former, who are charged with the periodical visitation of the local

primary schools, the assembling and instruction of the local juntas in their duties and powers, and the submission of full and regular reports to the office of the director general. For the 49 Provinces, which embrace the 24,299 national primary schools, there are 171 inspectors and subinspectors. The number is three times that of 10 years ago. They rank in nine categories, according to length of service and salary. Upon their energy and the degree of fidelity with which they discharge their duties hinges vitally the well-being of the system. Responsible to the provincial inspectors, and required by law to cooperate with them, are the local juntas (committees). These are named by the *ayuntamientos* (boards) of the respective municipalities, and consist of the alcalde (mayor) ex officio and designated members, including one or more householders who are patrons of the primary schools. In the juntas are vested the powers of frequent visitation and general oversight of the local schools, their enrollment, physical, and social conditions. The juntas have no financial duties or powers whatsoever, all such, relative to the establishment or maintenance of the schools, remaining entirely in the hands of the *ayuntamientos*. Upon the periodical visitations of the provincial inspectors the juntas are required to assist them in every way in their inspection of the primary schools and to meet in conference and to formulate with them the needs of the schools.

Despite this inspectional machinery, it is estimated that one-third of the schools of this grade go unvisited each year. Léon had 618 schools unvisited in 1917, and many Provinces have as many as 100, 200, or even 300 such schools. Some explanation may be found in the fact that for many zones the posts of inspectors have, for various reasons, been intermittently vacant. A brighter side of the picture, however, is presented in Cadiz, which leads with all the schools visited within the period of two years, in the Balearic Isles, and Valladolid, with all but a very few visited. Inspectors claim in their defense that they have been made responsible for zones besides their own, and that in many instances they can not secure reports as to location of actually existent schools. They complain of the indifference of secretaries of the *ayuntamientos* in furnishing information that schools have been closed; and that, further, despite their activity in localities where the need of new schools is most urgent, and their clear outlining of the legal terms on which such localities may, in cooperation with the State, secure the needed schools, they are unable to arouse interest on the part of the local authorities. In brief, they maintain that the law for compulsory education of June 23, 1909, is not enforced for the larger number of the municipalities, which neglect to draw up or revise the annual school registration reports.

In January, 1918, a numerous committee of the National Association of Inspectors waited upon the minister of public instruction and the director general of primary education, and presented as the composite sense of that body, for enactment into law, a number of recommendations, the salient ones of which are here given:

1. Both men and women inspectors should be required to remain not less than 8 or 10 days in the rural districts and villages of their zones, visiting and studying all the schools, and examining personally as many boys and girls as possible; upon this material they should present ample reports, to be published by the director general of primary education. In turn, the inspectors should be relieved as far as possible of clerical labor, and should be sent to provincial sections to establish personal relations with the local civil officials.

2. General questionnaires should be drawn up and sent to all teachers of primary schools, inquiring as to changes and reforms deemed most urgent for the development of the schools.

3. The Government should at once take up the construction of school buildings of modern and sanitary type, and on sites answering the legal requirements, and should at once take steps to improve the existing ones, borrowing money and issuing bonds on the national credit.

4. Every school building erected in villages of less than 1,000 inhabitants should have annexed to it a teacher's dwelling conforming to sanitary and architectural requirements.

5. Every effort should be directed by school authorities, both municipal and national, to improve the school attendance, and to awaken educational interest by the incentives of school lunches, playgrounds, libraries, school loan funds, and all extra-scholastic activities possible.

6. In agricultural and industrial communities, at least one full section of daily work in school should be required of all children over 10 years of age whose labor is usually regarded as necessary for the aid of the father in the support of the family.

7. All inspectors and local teachers should be required to take part in all activities of their respective spheres, studying and working for the development of all matters relating to education of the children, and the correction of juvenile delinquency.

8. All matters relating to the visitation of private schools should be passed upon by the body of inspectors; and, unless otherwise agreed upon, the scope of such visits will be restricted to points of hygiene and ethics.

9. In rural schools special importance should be attached to agricultural and horticultural teaching, and in those of mining and industrial centers to elementary technology and related sciences.

10. There should be established in provincial capitals special schools for adults, analogous to those projected for men, to give to women ample preparation for vocational work.

11. Inspectors should have the power of intervening in all matters affecting the rights of teachers.

12. Tenure of office for inspectors should be better safeguarded, inspectors being removable from office only by royal decree, and upon proven charges of incompetence or bad conduct.

13. In every provincial capital there should be established a well-equipped permanent pedagogical museum and school exposition.

PRESENT STATE OF THE NATIONAL PRIMARY SCHOOLS.

The national primary schools of Spain are administered according to the territorial lines of the 49 Provinces of the Kingdom. They are taught by teachers who are paid wholly or in part out of the national treasury. In 1916 they included 7,409 one-room schools for boys and 7,075 for girls; 243 graded schools for boys, 158 for girls; 8,935 mixed graded, and 479 for very young children, a total of 24,299 national primary schools in the Kingdom. In 10 years, only 250 new school buildings have been reported as erected in the entire country. In 1917, according to the statement of the late Deputy Giner de los Rios, member of the committee of the Cortes, appointed to investigate educational conditions, from 27,000 to 40,000 schools were lacking of the number contemplated even by the establishing law of 1857.[1] Sr. Alba's projected reforms included the establishment of 20,000 additional schools within eight months, with modern sanitation and equipment and the guarantee of the appointment of that number of men and women teachers within that period.

The number of schools vacant for one or more years constitutes the most serious problem the educational authorities have to face.[2] The suggestion has been made that the minister of public instruction be authorized by law to transfer from the State back to the commune all responsibility for such a school remaining vacant for three years.

In the phase of primary education, naturally most efficient, that of the graded schools located in the centers of population, dissatisfaction is expressed by Spanish educational thinkers with the infrequency with which they are visited and the continued failure to secure reports

[1] This seems an overstatement in the light of the estimate by Count Romanones, then minister of public instruction, in his memoria for 1910. He put the number at 9,579 schools.

The statement is made in La Escuela Moderna for September, 1917, that there were in that year 30,000 towns and villages in Spain without schools and without teachers; that 3,000,000 children were, at one time, not in the schools; and that 10,000 men and women were needed in addition to those already in service.

[2] Even in the Province of Navarra, which, until November, 1918, had charge of its own public school system, an attempt to require all incoming teachers to take the schools longest vacant met with but doubtful success. The maximum salary of $200 is not sufficient to attract new teachers.

on many of them. Persistent attempts have been made, both by local teachers' associations and the press, to have all the royal decrees relating to them reduced to one section of the code.

The clearest exposition of the condition and needs of the graded schools was made in the recommendations of the graded-school teachers' division of the National Association at their meeting of 1917. The reforms then urged included greater care in the matter of the appointment of graded-school directors, less regard to political and personal influence, and participation by the teaching force in such appointment, sanctioned by the inspector; enlarged responsibility for the directors in the recommendations of the members of the teaching staff for appointment, including at least one supply teacher; the formulation of programs of study, exercises, and school excursions, in cooperation with the section teachers, to be transmitted to the regional delegate in the Cortes for presentation to the educational committee of that body.

These recommendations bore fruit in the very progressive royal decree of September 19, 1918, the salient points of which are as follows:

1. In graded schools instruction shall be given in the subjects determined for national schools by present legislation now in force.

2. The local junta for the school, named according to law by the *ayuntamiento*, shall have wider latitude as to prescribing hours, division of classes, etc., and especially in organizing school outings, excursions, etc. The director shall have wider and more definite duties, especially in visiting classes, and correspondingly more thorough and frequent reports to the inspector.

3. The number of pupils enrolled in graded schools shall not exceed 50 for each section, except in cases of exigency, sparsity of population, or other valid reason agreed upon by the director and inspector.

4. The director, advised by the teachers, shall lay before the local junta the physical needs of the schools as a whole and by grades, and all necessary equipment shall be provided at the expense of the State.

5. All pupils admitted shall have completed the sixth year of their age, been vaccinated, and be suffering from no contagious disease. All corporal punishment shall be forbidden. The State and the local junta combined shall furnish books and paper free, and in girls' schools all equipment and material for household and domestic instruction free, the finished products to be the property of the school. All provisions shall be made for sanitation, light, and ventilation.

6. The directors and teachers shall take part in all extra-scholastic activities of the school and community pertaining to the improvement of school conditions. School outings and excursions of a didactic nature shall be held at proper intervals, and the children shall be required to keep diaries and records of the same, examined and graded by teachers, samples of which shall be forwarded ultimately to the director general of primary education.

7. Every graded school shall maintain a circulating library, a branch of the Mutual Loan Society, regularly organized according to law, school lunches, and facilities for dressmaking and tailoring. Anthropological measurements of each child shall be taken upon entering and leaving school. A committee of teachers shall, so far as possible, give motion pictures and lectures and hold conferences, local and district, and maintain international correspondence with teachers of other countries.

8. Special provisions shall be made by the director and teaching force for the instruction of adults by lectures and special courses in mathematics, languages, drawing, and the rudiments of science, keeping always in view the needs, predominant industries, etc., of the locality. Qualified persons in the community shall be called upon by the director to confer with him informally at least once a month upon civic matters as related to the schools, especially those touching callings and industries into which pupils are most likely to enter. The duties and powers of the director of classes for adults shall be similar to those he possesses in the day schools.

In these provisions, taken as a whole, is seen a uniform advance toward an efficient correlation of the administrative parts of the system; an enlarged social and civic activity by the teaching force, with articulation of primary education with community life; an enrichment of the content of the schools, and, inclusive of all these, a scientific attention to the physical and recreational upbuilding of the children. It is to be hoped that the financial provisions to make the decree effective will soon be made.

PRIVATE SCHOOLS.

In 1916 the total number of schools privately founded or maintained by private aid, assimilated to the national schools and subject to governmental supervision, was 6,367; the great majority are those founded, maintained, and taught by the religious orders. They enjoy almost entire freedom in courses and methods, the inspection of them required by law being usually restricted to their sanitation and training in ethics. Of private schools not under religious control, conducted wholly or in part in English, French, or German, and intended primarily for children of foreigners, there were 116. The latter are naturally grouped in commercial and diplomatic centers and are largely patronized by the children of the noble and wealthy few, especially those not in sympathy with the new social and political order in Spain.

Some of the schools founded by private benefactions and closely assimilated to the national primary schools are excellent and progressive, the salaries paid being far above the average for the Government schools and the buildings and equipment modern and sanitary. A sample of this type of school is the group entitled "La Colonia Garcia Diego," situated in the city of Cordoba. It pays teachers $270 the first year and guarantees periodical increases of $25 up to $500, with retirement at 65 years at $250 and a modern dwelling. Such teachers are also under express obligation to serve the community, being required to impart instruction to adults, men and women.

Other private schools are above the average in progressiveness and efficiency. A number distinctively secular show the influence of Ferrer's life and pedagogical teachings, which, exercised as they were in the city of Barcelona, in the 10 years preceding his execution

in 1909, could not but have their influence. Especially in their practice of coeducation as a preference, they have been imitated by the schools of republican and socialistic tinge.[1]

Most noteworthy among the schools conducted avowedly under religious influences, but not by members of an order, are those commonly called, from the name of their organizer and teacher, a former barrister and student of social problems, the "Siurot System," though their official title is "The Schools of the Sacred Heart." They are located in the town of Huelva, in the Province of Andalusia, and enroll 1,000 boys. Maintained by private and voluntary subscriptions, they are housed in buildings of the plainest character, originally a seventeenth century convent; but sanitation, fresh air, and good food are regarded as essentials. They proceed entirely upon the theory of the predominant importance of the graphic method of instruction, with its appeal to the pupils' imagination and interest. Mind and memory are cultivated and stimulated by the dramatic and skillful use of the pupils themselves as material.

The cement-floored basement is marked off into squares, each pupil having his own allotment of space on which to reproduce material both from blackboard demonstration and of original design. The application of the method to the several subjects taught is of interest. In geography the traditional start is made with the physical elements; the unique feature is the intensive and leisurely study of the large contour map of Spain, modeled in cement. Thorough familiarity with this is absolutely prerequisite to the pupil's passing on to the large line map drawn upon the wall. The next step is to fit into the setting of coast, plain, hill, and mountain the centers of population, accompanied by the exposition of reasons for original settlement, and the local productions and industries. Then comes the study of political and civic divisions, with means of intercommunication. Historical connections are always woven in, often without the pupil's realizing that he is learning anything outside of geography. The hour of examination upon the morning's instruction, so far from being a dreaded burden, becomes by the aid of games a diversion. Each boy as he takes part calls out the name of some place, person, or event connected with the country selected, or if the method of debate is adopted, the detailed facts of instruction become vitalized by the personal interest and emotions of the pupil. Spanish history connects with geography by the use of the physical geography divisions already established. Pupils representing the succession of tribal and racial groups that entered Spain take positions agreed upon after preliminary study, and depict the resultant conflicts, fusions, readjustments, and ethical, governmental, and economic

[1] The Life of Francisco Ferrer, by Wm. Archer (1911), pp. 245–8; La Escuela Moderna, by Fr. Ferrer published by the Ferrer Association (1912).

results. Similarly, period after period of Spanish, medieval, and modern history is portrayed, involving the wider study of nations affected by contact with Spain and Spanish civilization. The claim is made for this unique method of historical instruction that it results in the desire on the part of the pupil to read all that can be secured outside the school bearing on historical events. In arithmetic the graphic method begins with homely proverbs, such as *Cada oveja con su pareja* (Birds of a feather flock together), and applies the principle of likeness to the four basic processes of this subject. Thence the pupils proceed to play at being units, tens, dividends, quotients, etc., applying the same methods of visualization on through the more complex stages into geometry and algebra.

The results on the sides of morals and behavior accruing from the training in these schools are reported as being even more noteworthy than those on the mental side. Accounts of the condition of the prospective pupils at the time of the inauguration of these schools represented them as at a low stage, which, indeed, culminated in such scenes as to cause Sr. Siurot himself, then an advocate in good practice, to abandon his profession and devote himself to so vital a task as the reclamation of these future citizens of Spain.

These schools early attracted the favorable notice of the minister of public instruction, and, encouraged by English visitors, accommodations have been provided for the training of 30 teachers in this method. International educational arrangements with France and England are contemplated whereby this system may be studied and its practical features carried as "an educational evangel to other countries."

ENROLLMEMT IN PRIMARY SCHOOLS.

The total enrollment in the national primary schools for 1916 was estimated at 1,712,261, and the average attendance at approximately 1,133,557, a percentage of 67. This enrollment of less than one and three-fourths millions on an estimated general population of twenty millions is disproportionately low. The absence of a provision in the school law definitely fixing the compulsory school age renders any treatment of this subject unsatisfactory. The total enrollment in the private primary schools of all kinds is estimated at 300,000. No figures are available for attendance, but it is fair to assume that the percentage is higher than for the national schools, because of the greater interest of their patrons, as evidenced, among other things, by willingness to pay fees for instruction.

The discrepancy between the enrollment and the attendance figures in the national primary schools may, in some degree, be explained for the capital cities of the most populous Provinces by the existence of the private schools above mentioned. The city of

Barcelona may perhaps be taken as a fair example of this situation. In this city a unique legal arrangement exists whereby private schools are subsidized by the *ayuntamientos* but not counted as belonging to the public-school system. On the city's estimated school population of 82,000, only 16,000 children are enrolled in the national schools of all kinds. The attendance on private schools of all kinds was estimated at 50,000. This leaves 16,000 children of school age still unaccounted for, and in the most progressive city of the Kingdom. Speaking for the Kingdom at large, it is estimated that a total of from two to three million children of school age receive no instruction whatsoever.

Nonattendance, or poor attendance, of children enrolled in the rural primary schools is assumed by all the educational writers of Spain.[1] Teachers complain of the unwarrantable extension by the school administrators of the radii of school districts. Others emphasize the almost insuperable difficulties country children have in reaching schools and the disastrous physical effects upon them of the lack of school lunches and facilities for drying clothes and shoes. They blame the rotation of farm work for the recurrent periods of absence and indifference and the call of the industrial centers for children workers from the tenderest years.

The local *ayuntamientos*, also, with whom rests all financial responsibility for the schools, are blamed by teachers and inspectors for neglect of manifest duties as regards both the selection of school sites and the upkeep of the schools after they are established.

COST OF NATIONAL PRIMARY EDUCATION.

The total amount expended by the Government upon national primary education in 1917 was $6,894,235, a slight decrease from that for 1916 but an increase of 33⅓ per cent since 1902. On the basis of a population estimated in 1917 at 20,875,844, this was an expenditure of 34 cents per capita, or for each child of school age, $4.28.[2]

By the law of 1902 local *ayuntamientos* were empowered to appropriate annually from local taxes additional funds for the maintenance of necessary assistant teachers and for the upkeep of the schools, the same to be applied for by the juntas and approved by the provincial inspectors. Statistics are not available as to the extent to which the *ayuntamientos* have availed themselves of this law.

[1] Silió y Cortés, in the chapter *La Escuela Pública.*

[2] It should be borne in mind, however, that this calculation takes account only of the few more than one and one-half million children enrolled, and not of the even larger number who, it is claimed, should be enrolled but are not.

SANITATION AND HEALTH OF SCHOOLS.

In all Provinces schools of insanitary conditions are reported. Those of the Balearic Isles make the best showing; those of Barcelona, both city and Province, the worst, with more than 640 reported in bad condition. In the city of Madrid there are 59 municipal schools combining conditions both unhygienic and unpedagogical, and the Province of Madrid has 256 such schools. It is difficult to fix responsibility for the physical condition of school buildings, because comparatively few of the latter are owned by the State. In 10 Provinces no school buildings are reported as owned by the State, and most Provinces report only very few. Accurate statistics are not available. The estimate is based upon informal reports of teachers that at least 15,000 schools in Spain constitute a menace to the health and life of the children attending them.

There is scarcely a Province in which the children of all of the schools are vaccinated. The record is unsatisfactory throughout the Kingdom. Even the city of Madrid has five schools in which few, if any, of the children have been vaccinated. There are, however, legal and municipal regulations requiring vaccination.

By royal decree of December 21, 1917, school medical inspection was established in Madrid and Barcelona, and an institute of school hygiene was founded at Madrid. This is to be directed by a council of which the director general of primary education shall be chairman. It is composed of the inspector general of the medico-scholastic division, of the secretary of the institute, and of members chosen from teachers of upper normal schools, the faculties of medicine and pharmacy, the Academies of Medicine and Natural Sciences, and the Higher School of Architecture. Upon the publication of the decree, the institute was required to organize the following courses: Paedology; care of children; school hygiene; anthropology and physiology of the abnormal; digestive system of children. Only 30 attendants upon each course were to be accepted. If there should be more applicants the preference would be given physicians and principals of schools. Reports from the individual instructors were to be required; and these, collected by the director general for a number of years, were to constitute a valuable aid to hygienic progress in Spain. This composite report is to be transmitted every year to the minister of public instruction. The institute is to cooperate in every way with teachers and municipalities. The institute will also be further charged with the organizing of meetings and conferences of a scientific and popular character, in order to diffuse a knowledge of the fundamental principles of hygiene among the general public.

The law of September, 1913, requiring the competitive selection of medical and dental officers for inspection of national schools in

Madrid had ceased to be executed. It was revived by the public-spirited physicians of Madrid, who in September, 1917, waited upon the minister of public instruction with the request that he enforce it. The apparent partiality shown Madrid, however, aroused the executive committee of the National Association of Teachers to protest against the spending of considerable sums in inspection which had much better be used in preventing diseases by providing fit school sites and buildings of a hygienic and pedagogical character, and paying teachers salaries enabling them to live in comfort and self-respect.

The seventh annual award of prizes was announced in 1917 by the executive committee of the Spanish association for the protection of infancy and the suppression of mendicancy, for the best work along the following lines:

Five prizes of 280 pesetas each to rural physicians distinguished for work in behalf of mothers and children; ten of 200 pesetas each for teachers of rural schools or private teachers distinguished for social and protective work; five of 200 pesetas each and a certificate for the author of the best unpublished monograph on the popularization of schools; a prize of 500 pesetas for the author of 12 drawings in color best illustrating a historical anecdote or short narrative, in prose or in poetry, for the instruction or recreation of children.

MINIMUM CURRICULUM OF NATIONAL PRIMARY SCHOOLS.

The minimum curriculum prescribed by law for the national primary schools is as follows:

1. Christian doctrine and sacred history.
2. Spanish, reading, writing, composition, and grammar.
3. Arithmetic, geometry, and drawing.
4. Geography, history of Spain, elements of national law.
5. Elements of physical and natural sciences, physiology, hygiene, agriculture.

In the schools of Madrid, Barcelona, Santiago, and Malaga, singing, manual arts, and physical training are also compulsory.

These subjects are divided into two grades, elementary and higher, of three and five years, respectively.

There is, of course, wide diversity in the methods and the extent to which the five nationally prescribed subjects are taught. In some Provinces, and in districts of certain Provinces, the law is indifferently executed. According to the report for 1916–17 of the director general of primary education, 35 Provinces have no religious instruction maintained at the expense of the State. On the contrary, Navarra has 46 teachers of religion, Barcelona 14, and Madrid 22, paid in whole or in part from the national treasury.

EXTRA-SCHOLASTIC ACTIVITIES.

As has been seen, a provision of one of the royal decrees of 1918 prescribed periodical outings or school excursions for every national school in the Kingdom, requiring that they be conducted under the supervision of the teacher, or, in the case of a graded school, of the director, and that each pupil prepare a diary or formal account of the same, to be submitted to the teacher, and, if of merit, to be forwarded to the inspector, and by him to the director general of primary education. Akin is the revival of the decree of the Queen Regent (1892) establishing "La Fiesta de la Raza," the celebration by the schools of October 12, the anniversary of Columbus's discovery of the New World under Spanish auspices, observed by many of the Spanish American countries, whose purpose is to keep alive the remembrance of racial and filial ties. Latitude is also given the individual teacher and director to hold local holidays of a religious and patriotic nature.

A decided movement for the establishment of open-air schools in many of the centers has been perceptible. Madrid has several of these, encouraged by the educational and civic authorities, though as yet in the experimental stage. One is noteworthy as embracing six grades, enrolling 216 pupils, and providing midday lunches, gymnastics, and playground facilities.

The school lunch room has been instituted in a few of the larger cities[1] and in scattering Provinces. Branches of the society as established by law are annexed to the schools of most of the cities and the more progressive Provinces.

The system of circulating libraries under the director general of primary education was established in 1912 by royal decree, intended primarily for teachers and pupils of the primary schools. Fifty libraries, 48 in the Provinces and 2 in Madrid, compose the system. Each consignment of books coming to the schools of a Province in succession is under the direct management of the primary teacher in charge of the school.

In September, 1918, was held at Monrisa perhaps the first exhibition of school work in Spain done by individual teachers and groups of pupils of the national primary schools of the Province. It consisted of designs and executions of manual arts, free-hand drawings, maps, geometric designs, weaving, and embroidery. It was visited by large numbers of people of all classes, and evoked enthusiastic interest.

[1] The first system of school lunches in Spain was initiated in Madrid in 1902, with two in operation furnishing 9,000 meals for the school year; in 1906, six furnished 150,000 meals; in 1911, eleven furnished 160,000 meals.

TEACHERS, SALARIES, AND PENSIONS.

In 1916 the national primary schools of Spain were taught by 13,034 men and 11,755 women, showing a larger number of men than women engaged in primary teaching. In the non-national primary schools, of a private and voluntary nature, a total of 8,124 men and women were teachers.

In any serious study of the teachers of a system, next in importance to the consideration of qualifications comes that of salaries. This has been touched upon in the introduction. The inequalities of the present scale of salaries are shown by the fact that less than 600 teachers receive from $700 to $2,300; 6,700 teachers receive from $220 to $300; 14,423 teachers receive $220 and less.

An agreement was reached in October, 1918, by the ministry headed by Count Romanones, which fixed the maximum salary for teachers in primary education at $1,000, and the minimum at $300. The important exception, however, was made that nearly half the salaries of primary teachers should be left at $250, inasmuch as this class is limited in their rights to promotion by the organic law of public instruction. Even this is encouraging when it is recalled that the great majority of this class have hitherto received only about $125. The new salary scale applies to men and women without discrimination, and is as follows:

50 teachers receive $1,000.
100 teachers receive $900.
150 teachers receive $800.
300 teachers receive $700.
600 teachers receive $600.
1,500 teachers receive $500.
3,000 teachers receive $400.
9,000 teachers receive $300.

The remaining teachers, approximately 10,000 in number, receive $250. Provisions are appended by which many teachers secure additional fees by extra teaching in adult classes, and still others may obtain admission to the $300 class by passing examinations for promotion.

Akin to the matter of salaries is, of course, that of retirement age and pension. The activities of local branches of the National Teachers' Association and Sr. Alba's progressive labors bore fruit in the royal decree of May 2, 1918, by which the retiring age of Spanish teachers was fixed at 70 years; the pension fund was nationalized; the assessment on each teacher's salary for the national fund was reduced from 10 to 6 per cent per annum. From January 1, 1919, retired teachers are to enjoy a pension equivalent to two-thirds of the maximum salary received for two consecutive years; widows and

minor orphans are to receive two-thirds of what the deceased relative would have received.

In the matter of the professional training of primary teachers, Spain has made creditable progress within the past few years, thanks to the activities of the normal schools. As related to them, the subject will be resumed later. Taking into account the many obstacles confronting it, the primary school system of Spain shows gratifyingly few teachers without professional training of some kind. True, in the case of the older teachers who antedate the present normal schools, this training is very slight, and no claim is made that it is abreast of modern demands; but the fact remains that decidedly less than a thousand teachers at present wholly lack professional training. The Province of Leon with 160 untrained teachers has most; eight Provinces show fewer than 30 each. In eight others all teachers receiving salaries out of the national treasury are trained and hold certificates.

NORMAL SCHOOLS.

The royal decree of 1902 reorganized the normal school system, putting it under the control of the minister of public instruction and the director general of primary education, and outlining the following types: (*a*) Two central normal schools in Madrid, one for each sex, requiring for entrance, that the student shall have reached the age of 18 years and have passed satisfactory examinations upon the subjects embraced in the courses required in the provincial normal schools. The aim of these central normals is to prepare teachers for normal schools and for directors of graded schools. A normal academic course of a year as provided includes religious instruction, ethics, church history, anthropology, and elements of pedagogy, social economy and school legislation, Spanish literature, English, or German. The regular course covers two years and embraces the following subjects: Spanish and universal literature, religion and ethics, sacred, Spanish, and universal history, advanced geography, Spanish and general, physics, chemistry, physiology and hygiene, elements of general law, school legislation, French or English, penmanship, manual arts, gymnastics, drawing, and singing. For women, household arts and expression are substituted for manual arts. Observation of methods of teaching in the annexed practice schools is required every year, and intensive study and practice of teaching the last year.

(*b*) District higher normal schools, one in each university district, requiring students, if men, to have reached the age of 18 years, if women, that of 17 years, and to have passed satisfactory examinations upon the subjects required in the courses of the elementary normal schools. The aim of these district normal schools is the same as that for the central normal schools. The course covers three years,

and includes the following subjects: Elements of the physico-natural sciences, mathematics, geography, history, Spanish, pedagogy, French, ethics, religious instruction, manual arts, singing, and drawing. In the normal schools for women, music and household economy are added.

(*c*) Elementary normal schools, numbering at least one for each sex in each Province, requiring for entrance that the student shall have completed the sixteenth year of his age, or be exempted by the director of the normal, completed the subjects offered in the schools of primary education, and passed the following examinations:

1. The preparation of a paper or document upon a subject assigned by the examining board; an exercise in writing from dictation; the solution of a problem in arithmetic.

2. The reading aloud of a selection of prose or poetry, giving a summary of the sense.

3. Correctly answering questions upon Christian doctrine, sacred history, Spanish grammar, and arithmetic.

The aim of the provincial elementary normal schools is to prepare teachers for schools of primary education, one-room, graded, and mixed. The subjects are embraced in a two or three years' course, and are as follows: Christian doctrine and sacred history, penmanship, physics and chemistry, natural history, and manual arts, physiology, hygiene and gymnastics (for women, domestic arts), pedagogy and practice teaching, with rudiments of school law. In view of the urgent demand for teachers in primary education, these courses are so arranged as to allow some students to complete certain of them in January and others in June; and some to enter in February and others in September. The 43 elementary normal schools for men enrolled in 1916 a total of 8,158, of whom nearly 2,000 were admitted to teach; the 49 for women enrolled 10,531, of whom about the same number as for men were admitted to teach.

The efficiency of the normal school in Spain is higher than that of any other division of the educational system. For this, credit belongs largely to former Minister Bergamin, to whose changes and reforms in 1915 the present form is due. In spite of the criticism launched at his policies at the time, especially on the score of making religious instruction compulsory, giving the naming of teachers of religion to the bishop of the respective diocese, and separating the sexes, the normal structure of Sr. Bergamin has commended itself in actual practice. His ideas marked an advance in giving solid content to the training of teachers, in continuity of studies, in fostering scientific study, and in contributing to the molding of teachers who should in their turn mold in the primary schools religious and patriotic citizens.

Dissatisfaction has, however, long been felt by the progressive teachers and press of Spain with the normal schools; and this found expression in recommendations drawn up by the Association of Teachers of Normal Schools, at their meeting in Madrid in July, 1918, and presented for the consideration of the minister of public education. Their salient points were as follows:

1. The establishment in elementary normal schools of a five-year course, the first four years of which are to be of a general and cultural nature, and the fifth devoted to practical training in pedagogy.

2. The establishment of technical and middle schools with three grades for both sexes in order that pupils at the age of about 12 years may, on emerging from the primary schools, have the way plain to them to continue until the age suitable for entering normals or vocational and professional preparatory schools. Such schools already exist in Spain in preparation for schools of arts, trades, industries, and business; none have been provided for normal preparation.

3. The establishment of annexed practice schools, consisting of eight grades, six for regular primary work, one for review work, and the last for special training of retarded and abnormal children.

4. Thorough scientific training of teacher-pupils by means of practical exercise in teaching.

5. The establishment of more and better paying scholarships, and subvention of traveling scholarships.

6. The fixing of a new scale of salaries for teachers in normal schools, both men and women, with an increase of $100 every year for 5 years, the initial salary to be fixed at $500.

7. The taking over by the State of the buildings and equipment of all normal schools.

8. As the cardinal administrative reform, the designation of the director of each normal school by vote of its teachers, the submission of his name for the approval of the minister, and his confirmation for a term not longer than four years.

In accordance with these recommendations, a royal decree empowered the minister of public instruction to issue questionnaires to the faculty of every normal school in Spain, calling for answers to queries upon the following points, each department of related studies to deal with the questions concerning it: The number of normals necessary as based on the number, general training, educational preparation, and attitude of pupils toward the profession of teaching; size, number, condition, etc., of grounds and buildings; school equipment, scientific and pedagogical; library facilities; pedagogical exhibits and museums; relation of the individual normal school to others, to centers of education, and to provincial inspectors; annexed practice school; entrance requirements; plan of studies, how far

realized and pupils' attitude toward it; length of course; schedule and hour scheme; school dormitories and residences for teachers; good or bad results to the system from the instruction of pupils not pledged to teach.

By royal decree of 1918 there was founded at Madrid an Institution of Secondary Teaching, under the direction and inspection of the Commission for the Advancement of Studies and Scientific Research. By its provisions, lodging will be supplied all pupils. Conditions of entrance are to be set by the minister of public instruction. The course shall cover not less than six years, when fully developed, and shall have a preparatory department. The subjects studied shall be at least those embraced in the programs of secondary instruction. To be admitted to the school as a candidate for post as teacher, the student must be a Spaniard, be over 17 years of age, and have pursued, or be pursuing, university courses. The training of students shall combine three main lines of training: (1) University studies, (2) practical teaching in primary schools, (3) reading, criticism, personal and experimental work in the pedagogical seminary, studies and practice in foreign educational centers.

The suggestion is probably drawn from South America, where it was worked out first in Chile, and then in Argentina.

The establishment of supplementary courses for teachers in Oviedo, by royal decree of June, 1918, is also to be noted as the first of its type in Spain. The junta of the pedagogical conference at Oviedo had petitioned for this, and the rector's council of the university had favorably reported upon it. It was to be under the director general of primary education, and for men and women teachers of national schools, and to embrace fundamental training in educational problems, reading of pedagogical books, methodology and school organization, conferences on all phases of education, elements of physical and natural sciences, agriculture and industry, social problems and excursions. It was to be held in October and to last 15 days. One man and one woman were to be selected from each judicial district of the Province by the inspector of the district. Living and traveling expenses were to be paid.

SUMMARY: PROJECTED REFORMS.

Spain's patriotic educational leaders sincerely deprecate the popular idea that a panacea is to be found in expecting the State to initiate the necessary reforms. In marked contrast, for example, are the Scandinavian countries and England, where, as shown in the history of the Fisher bill, all desire of reform and all effective initiative is born of localized units of government and communal life, and associations of diverse kinds, private societies, etc. In all those countries

the State only gathers up the movement already initiated, fosters it, and diffuses it. As has been seen, a marked and powerful industrial revival has shown itself in Spain within the past four years. Friends of popular education unite in urging that advantage be taken of this by every agency to further education of all kinds. The perplexing problems of training in apprenticeship, and those of the technical and vocational education of the masses, should at once be taken up by local agencies and pressed upon the Government, without waiting for the latter to move.

Among the summaries of the urgent need of educational reform, and the deplorable results to Spain's national life from her indifference to hygiene in particular, perhaps the most forceful was uttered by Don Alejandro Rossello in the Cortes in May, 1918. Speaking to the report of the Commission on Education, he said:

The steady impoverishment of Spain is due in great part to the total lack of attention to hygiene. Two hundred thousand lives are lost annually that could have been saved, representing on a conservative estimate 300,000,000 pesetas ($60,000,000). Sickness and loss of time from work represent 200,000,000 pesetas in addition. Educational authorities may no longer close their eyes to this frightful drain on the national resources, for on it hinges ultimately the welfare, even the existence, of the nation. The smaller nations are already in great danger; if the minister of public instruction has the power to protect existing industries and encourage others, surely he has the right, a priori, to encourage and safeguard health, the matter of the most vital importance. The number of recruits rejected by the army because of deficiency in weight and height, as reported by medical officers, and the mortality among the civil population, are appalling. To provide more and better food, and radically improved sanitation, is the plain duty of the Government; and to the Government's chief agent, the minister of public instruction, the nation looks for immediate and vigorous action. What could be more tragically absurd than that the Government should have the power to take over the nutrition and education of the youth while under arms, and yet take no heed whatsoever of it during the formative years and conditions preceding military age?

This leads inevitably to the entire question of physical education, of which there is total lack in many lines of instruction. Most important of these are the manual arts. These constitute the basis of all apprenticeship schools, of all arts and trades schools, of all polytechnic schools. * * * The aim of such schools should not be confined to the development of mere manual dexterity. The development of the brain is in close relation with that of the hand. There is furthermore a fundamentally ethical meaning, inasmuch as a just emphasis put upon labor does away with artificial social categories. * * * Spain has before this had gleams of her duty. Twenty-five years ago she sent investigators to the far-famed school of manual arts in Naas, in Sweden; they returned, arrangements were made for the systematic instruction of Spanish teachers for national schools and normals, but the movement was allowed to die, and nothing came of it. The same was true of the sending of pupil teachers to the well-known Italian school at Ripatranssone. * * *

So with school and national games. Spain does not know how to play. School games, school grounds fostered by the nation, do not exist. Even the word is becoming unknown, the good old Spanish word *horuelo*. The playground of a generation ago should be restored; old national ones should be restored, and new ones should be introduced from other countries. This is of interest primarily to the working class, first because health is their capital, economically speaking, and secondly, as part

of the nation they have the duty and right to share in a complete and well-rounded education.

The development of primary schools immediately needed is that which enhances manual dexterity as an educational element, viz, the schools for apprentices. In Spain these are as yet only on paper; but they must at once be organized, as must the schools of arts, industries, and trades, and all kindred schools. The practical work of the shop must be stressed. And yet the teacher must not be merely a mechanic. Spaniards may never again, for historical reasons, be a world-governing race like the English; but they can for the self-same reasons, be a directing race in matters of the mind. France, even in time of war, set herself to the making over of her apprentice schools; and England is discussing them as one of the chief features of her pending education bill.[1]

But it is still by means of the primary schools that the minister of public instruction must touch and mold the people. The Crown is already alive to the imperative necessity of constructing none but hygienic schools. If a start can be made here, it will be some offset to the appalling mortality from tuberculosis. The location of the school building is of supreme importance. A start should be made in the towns and villages which are to build schoolhouses by the appointment of a local provisional council to select fitting sites at fair prices, and to dedicate them to the school and to playgrounds and plats for garden and agricultural experiments by the pupils. Primary instruction must be radically overhauled and changed, and so of course must the form of teaching back of and beneath it, namely, the training of the teachers of the primary schools. We run the risk, more than all other countries, of useful men being attracted from teaching into the trades and better paid employments. The teachers' salary must be increased until it is fair, and will bear comparison with the pay of other skilled men and women. * * * The teachers should, if possible, have university training, or at least a part of it. They should be encouraged to go to the universities, and the universities should be required to institute a faculty of pedagogy as leaven to the lump; all teachers should attend such courses, especially those aspiring to be professors in institutes or in normal schools of four grades, inspectors, and principals of normals. The normal schools should specialize in preparing technically all pupil teachers by constant and unceasing practice in teaching from the first to the last day of their training.

III. SECONDARY EDUCATION.

INSTITUTOS GENERAL AND COLEJIOS.

Secondary education in Spain is organized along the territorial lines of the 11 university districts. The local administrative side is controlled by a rector for each university district, who is appointed by the Crown on the recommendation of the minister of public instruction, and is generally the rector of the university of that district. Cooperating with the rector is the provincial junta, of which he is a member, together with the civil governor of the Province, an ecclesiastic delegated by the diocesan bishop, a member of the normal provincial commission, a member of the *ayuntamiento* of the provincial capital, a judge of the provincial courts, the inspector of primary education, the director of the provincial instituto, and three patrons of the provincial instituto named by the minister. (Law of 1875.) Three inspectors general are required to visit periodically all institutos and to present reports to the minister for

[1] This speech was delivered before the passage of the education act, August, 1918.

transmission to the cabinet. In accordance with the legal requirement, there is in each Province at least one instituto of secondary education for boys which confers the bachelor's degree. Of these there are 58, including both general, that is, traditionally classical, and technical.

To be admitted to the studies of the instituto the student must be at least 9 years of age, and pass the prescribed examination, both theoretical and practical, in all subjects included in the course of the national primary education, before the examining board appointed by the minister. Examinations on the theoretical side must be individual; those on the practical side may be by groups, each student being required to write at dictation a simple grammatical paragraph, and to solve in writing simple problems illustrating the four fundamental rules of arithmetic.

The subjects taught in the cultural institutos cover a six-years course, and are as follows: Spanish, grammar, rhetoric, and literature; Latin and Greek; French and English or German; history, general and Spanish; geography, physical and political; cosmography, mathematics, natural history, physiology and hygiene.

The technical and commercial institutos omit Latin and Greek, and require physical sciences, accounting and bookkeeping, commercial geography, and two modern languages in their place.

By royal decree there must be for each instituto at least the following teachers: Five for the section of languages and literature; four for the section of sciences; three for the section of religious instruction, drawing, and gymnastics; and two assistants for each full section. Salaries are, of course, higher than in primary education; but no statistics on this point are available. Students completing the full six years' course of the classical instituto receive the bachelor's degree, and upon examination are admitted at not earlier than 15 years of age to the universities.

Preparatory to the cultural institutos are the annexed schools called the *colegios*, of which there are 253. In 1916 a total of 48,311 students, of whom 1,936 were girls, were admitted to both these types of secondary schools. For 1916 the cost of maintenance of the system of secondary education was a little over $1,100,000, an increase of 48 per cent since 1902.

At a meeting of the teachers of institutos held in June, 1918, reform in the subjects taught was urged, in order that the traditional course might not be merely instructional, but educative as well. A clear division of the courses into the cultural and the scientific was also urged, with the creation of additional institutos in the populous centers. Enlargement of the teaching staff was advocated, with teachers specially trained for their subjects. Lengthening of the traditional six-year course to eight years was also advocated, by

means of the development of the courses in Spanish, science, and modern languages, and the addition of others in civic and sociological fields, in order to keep the pupil in school until greater maturity, and for the attainment of a riper and more solid culture, essential to the ability to determine special vocation and to the formation of character and personality. A 50 per cent decrease of expense for students in secondary education was also urged, and an increase of scholarship funds for residence of students in provincial capitals.

Of the special institutos (enseñanza técnica) dependent upon the ministry of public instruction, the following are most noteworthy:

1. Schools of veterinary surgery, at Madrid, Cordoba, Leon, Santiago, and Zaragoza, enrolling (1916) 2,234 students.
2. Nineteen business schools, located in coast cities and centers of population, enrolling (1916) more than 5,000 students.
3. Twelve nautical schools, enrolling (1916) 963 students.
4. Central School for Industrial Engineers; School of Industrial Engineers of Barcelona; Higher Architectural School of Madrid and Barcelona; Royal Conservatory of Music and Declamation (Madrid), enrolling (1916) 3,042 men and women.
5. School of Higher Pedagogical Studies, enrolling (1916) 470 men and women; Woman's Domestic and Professional School, Central School of Languages.
6. Thirty-one establishments for the instruction of deaf-mutes and blind, enrolling (1916) 939 deaf-mutes and 658 blind. Many are aided by religious and municipal subventions.[1]

Under the head of schools of arts and industries are grouped:

Seven schools of arts and trades sustained by the State, enrolling (1916) 1,145 students.

Five schools of arts and trades with artistic and industrial apprenticeship, enrolling (1916) 6,758 students.

Thirteen industrial schools, enrolling (1916) 11,908 students.

Akin to the above group are five schools maintained by deputations and *ayuntamientos*, enrolling (1916) 4,093 students; and seven maintained by State and local authorities, enrolling (1916) 6,425 students.

The total appropriation of funds for the last three types of secondary schools was, in 1916, nearly $700,000, or an increase of 161 per cent since 1902.

To these should be added the special schools dependent on the ministry of public works and grouped as follows:

1. Special school for road engineers, canals, and harbors, 25 enrolled.
2. School of assistants in public works, in existence only one year, 19 enrolled.
3. School of mining engineers (1916–17), 49 enrolled.
4. Schools for mine superintendents and foremen, located in seven mining centers, enrollment 55.
5. Special school of agronomy (1915–16), 29 students finished course.

[1] By royal decree of Aug. 25, 1917, there was organized within the ministry of public instruction a threefold national foundation for the study and encouragement of the education of deaf-mutes, the blind, and the mentally abnormal.

The committee of the Cortes appointed in 1917 on the survey of educational conditions recommended that all the above extraeducational institutions, as well as the institutions established abroad, such as the Spanish College of Bologna and the Academy of Fine Arts at Rome, should be transferred from the control of the minister of public works to that of the minister of public instruction.

IV. UNIVERSITY EDUCATION.

University education in Spain, like secondary education, is administered along the territorial lines of the 11 university districts. In the rector of each university, named by the minister, is vested entire local control on the disciplinary and scholastic sides. Associated with him in an advisory capacity is the junta of full professors. The rector is responsible immediately to a designated one of the three inspectors general, to whom he must render periodical reports of the condition of the university under his charge. Likewise, the inspectors general are by law required to inspect the universities, and to render reports of their visits to the ministry for transmission to the Cabinet. Each of the universities is possessed of its own property holdings in law, donated or bequeathed to it; but the expenditure of such funds is subject to the consent of the State, and the State maintains the university by the subvention necessary each year. As has been seen, the administrative connection of the universities with the cultural instituto is very close, the same territorial lines and system of inspection prevailing for both. Preparation for the universities is the almost exclusive aim of the institutos. For entrance into the university, the student must have completed the full six years' course of the institutos, have received the bachelor's degee, and have passed satisfactory examinations upon the subjects studied in the institutos. In 1916 the 11 universities enrolled 21,300 students in all schools, cultural and professional, with slightly more than half pursuing official or prescribed courses. For that year, the appropriation for university education was $1,316,062, nearly twice the amount for 1909.

Recommendations have been made advocating the suppression of the weaker universities, and the diversion of funds toward the strengthening of the others; their closer articulation with the general educational system, and the abolition of the exclusive connection with the institutos; the modernizing and broadening of the courses offered so as to touch the lives and careers of the youths of poor and middle-class families, and the throwing open of the universities to the people of Spain; the adoption of more rigorous disciplinary and administrative measures, with stringent requirements as to conduct and residence of students; the abolition of the present overemphasis upon formal examinations; the establishment of free election of courses; greater care in selection of professors and in attention to

their qualifications and activities; encouragement of foundation of private institutions of university rank; and university extension carried to all the agricultural and industrial points, no matter how remote.

University extension work in the Province of Oviedo, the pioneer for Spain, has continued its remarkably useful career. Free popular classes have been conducted by teachers of the normal school and the university in law, civic instruction, history of civilization, general geography, Spanish grammar and literature, elements of natural science, physics and chemistry, and practical arithmetic.

HOLIDAY COURSE FOR FOREIGNERS.

The sixth session of the vacation course for foreigners was offered during the summer of 1918 in Madrid. It is under the auspices of the minister of education, and designed primarily to offer to foreign teachers of Spanish, or to foreigners interested in Spain and the Spanish language and literature, the opportunity of continuing their studies through practical work in classes conducted by teachers in the central normal schools and professors in the University of Madrid, authorities in their respective lines. Short courses and lectures were also given on the history, arts, and social life of Spain. Excursions to museums and places of historic and literary interest were announced.

V. EXTRA EDUCATIONAL AGENCIES.

In conclusion, certain agencies not organically related to the educational system of Spain but making for intellectual progress in cooperation with it, deserve mention. Of these, undoubtedly the most active is *La Junta para Ampliación de Estudios e Investigaciones Científicas* (Commission for Enlargement of Studies and Scientific Investigations). It is composed of eminent educational and scientific experts, chosen with due regard to the diversity of intellectual and religious tendencies in the country. It supports Spanish students in foreign countries, encourages new types of educational institutions in Spain itself, diffuses knowledge of scientific progress in other countries, and encourages by subvention research along scientific and sociological lines.

As an intellectual movement, which, while it does not reach the body of the people, yet affects the rising generation in the capital city, and ultimately the administrative side of popular education, may be mentioned the Association for Woman's Education, founded in 1870. It conducts in Madrid a system of schools, primary, preparatory, secondary, and commercial, besides offering special classes in language, drawing, painting, manual and domestic arts. The business courses are this year recognized as equivalent to national schools, and pupils certificated from them are admitted to employment by the Government.

CHAPTER X.

SCHOOLS OF SCANDINAVIA, FINLAND, AND HOLLAND.

By Peter H. Pearson,

Division of Foreign Educational Systems, Bureau of Education.

Contents.—The war in its effects on the schools of Scandinavia—Norway: General characteristics of the school system; School gardens; School welfare activities; Speech forms in the schools; Teachers' pensions; War conditions and the schools; Present trend in educational thought and school legislation—Sweden: General view of the educational system; Care of the pupils' health; Religious instruction in the elementary schools; Studies of the home locality; Development of the communal middle school; Obligatory continuation school; Educational activities apart from the schools—Denmark: General survey of the educational system; National Polytechnic Institute; the people's high school; school excursions; Teachers' training, salaries, and status; Articulation between primary and secondary schools—Holland—The schools of Finland—Education in Iceland, by Holmfridur Armadottir.

THE WAR IN ITS EFFECTS ON THE SCHOOLS OF SCANDINAVIA.

Though the Scandinavian countries have been spared the ravages of war, there has not been a day during the struggle when the danger of being drawn into it was not imminent. Similarity of geographical location with their full independence similarly endangered has brought about a degree of unity among these countries which would not have been effected readily under other circumstances. Scandinavian working men, leaders of industry, exhibitors, and educators have come together. To them the new outlook created by the events of the autumn of 1918 will bring enlarged opportunities. The accumulated energy of these peoples will be set free to issue in achievements in undisturbed accord with their racial characteristics. The sense of union and enlargement, as one of the results, is particularly significant for the schools. As the world events are reaching a consummation in a just and, it is to be hoped, enduring peace, the educators and other leaders of the North are anticipating the part their own countries will be called upon to take both in respect to their individual growth and in rising to a new plane of international ideals.

Their close proximity to the belligerent countries and their active trade relations with these brought on events that upset the economic conditions in Scandinavia, with consequent hardships to the people. Although traffic to foreign ports was made precarious, the tempting prices offered by foreign buyers caused an export of commodities on an unprecedented scale. Before restrictive commercial regulations could be put into effect there was an alarming depletion of food resources. The inevitable result was the immediate rise in the prices of foodstuffs and household necessaries.

To help ward off the threatened hardships, teachers and pupils at once offered their personal labor in various productive capacities. Though the measures taken in different countries were generally similar, they assumed in Norway an organized and practical directness worthy of note. In many cities of this country the pupils were organized into classified working groups. Under the leadership of their teachers they held themselves in readiness to respond to calls

for help on the farms. Again, the school gardens and every other available plat of ground were handed over to their management and tilled under the direction of experts, who applied the most efficient methods of intensive farming.

Careful accounts were kept of the expense for seed, the labor, and the yield. Usually each pupil's share of the proceeds was the crop his labor had produced. In order to help in this way, some redistribution of the vacation period was found necessary, which seems to have been made without serious encroachment on the time for the school work.

In a similar way the system of school kitchens was fully utilized for the productive labor of the girl pupils, who were directed in the most efficient management of household economics.

Besides specific lines of work in the immediate charge of the teachers, the pupils' labor was made generally available to employers in the cities. In former years child labor was permitted to an extent that to us would seem to endanger the welfare of the pupils. But it now appears that the authorities are permitting it only under strict registration of the pupils' age, hours, health, and conditions of the work. In Gothenborg, Sweden, there is an effort made to have the teachers of the city cooperate with the employment bureau in placing the labor of pupils. One man teacher and one woman teacher, selected for their interest in the pupils, assist the regular city officials.

Again, with the present needs before them, it was observed that some of the subjects of the curricula were more helpful in the present crisis than others. One effect of the distinctions thus noted was the effort to find more room for the practical kinds of subjects; another was to try to lay greater emphasis on the utilitarian character of others. Teach hygiene, it was urged, not as an academic subject, but as one that promotes health and sanitary living. If the textbook in use does not lead to these ends, choose a book that does.

In connection with these departures from educational traditions a valuable pedagogical principle has been emphasized. Educators are seeking instruction material outside of books and classrooms to an extent that was not practiced before; and they find more of it in direct life and living than was ever before considered in connection with school purposes. In Sweden and Denmark emphasis is laid on making, handling, observing, and producing things; school trips preceded by mapping the route and followed by putting the notes of the trip into organized form; researches and studies in the home locality and its resources and industrial possibilities.

Measures are taken to make permanent use of the experiences that have come with the new departures. New activities found to have value will be adjusted to the school régime where possible—new in-

struction material, new uses of the old, direct efforts of pupils in industrial and productive lines. The school men see also a coming industrial competition for which it is their duty to prepare the future business man, scientist, and technical worker. The Polytechnic Institute of Copenhagen is increasing its already excellent facilities and adding to its large number of practical courses in order the more successfully to prepare for the competition.

There is a new conception of the teacher's usefulness, which is not likely to be lost sight of after the present economic stringency. The teacher's duty no longer ends when he has taught his pupils something. It rests with him in a large measure to see to it that the teaching results in a sound and hearty form of living, the fundamental prerequisite of which is a strong and robust physique. In order to be of the greatest use here he must enlist the cooperation of the parents. This conception has been embodied in the regulations of December 31, 1917, applying to the secondary schools of Denmark.

These regulations provide that parents' meetings are to be held once a year. Those eligible to participate in the proceedings and to vote on matters that come up for adoption are all who have children at the schools or who are the guardians of children attending. The teachers of the schools have the privilege of attending and taking part in the discussion. To prepare topics for discussion a committee is appointed consisting of the superintendent as chairman, two teachers selected by the school board and four members from among the parents and guardians. The topics are to consist of the health-promoting conditions of the school (buildings, scheduled hours, study periods, home work, etc.) and other matters such as delinquency of pupils, conduct, promotions, appointment of teachers. A report is to be submitted to the Minister of Education covering the meetings in the district during the year.

A strong democratic feeling has long existed in the hearts of the Scandinavian people, a feeling now struggling to express itself in intellectual forms and institutions. Under the pressure of local political, economic, and geographic conditions it emerges in visible forms with marked differences in each country.

In Denmark this feeling has resulted in the creation of a type of schools that appeals for patronage to the farmers and middle classes, with the purpose of educating and returning them to their own class with such efficiency and prestige as education alone can confer.

Certain changes in the school statutes of Sweden, made in accordance with educational movements in that country, point to a trend toward greater local control of the schools. In 1913 measures were taken for the creation of a People's School Council, to be an advisory body, to criticize the general work of the schools, and to take the initiative toward improvements. In this capacity it will assume

some of the most important duties formerly exercised by the State Supervisory Board. In other respects, too, a degree of school control formerly vested in boards and committees of the clergy has been handed over to similar bodies of laymen. In a number of leading cities, details of the local educational institutions, formerly managed by the parish vestry meetings, have been put into the hands of the city councils. In the Report on the Schools of Sweden, issued by the Ecclesiastical Department for 1914–15,[1] is given a series of propositions which, according to the suggestions of the board, should be dealt with by subordinate authorities and acted upon without the formality of Royal approval.

As the character of the public elementary schools is the most direct expression of the people's views and wishes, it has been long regarded as desirable that the work of the secondary schools should be a direct continuation of these. When the real-skola (modern school) in Sweden, therefore, attracts pupils at the end of the third year, it causes them to make a departure from the original trend. To obviate this the communal middle schools grew up to fit the people's own children for government positions without necessitating a change in their modes of life. These schools are, moreover, community institutions with schedules and working conditions less rigid than those of the State schools.

The people's voice, too, is strongly heard in its insistence on alteration in the form and method of the religious instruction in the elementary schools. Religious instruction should be brought before the children, not in confessional formulas, nor in maxims of conduct, but in life pictures taken from the Bible and from the history of the church. The earnest consideration given these demands by churchmen and educators will eventually lead to changes in the method of instruction in Christianity.

That the Government of Norway has responded to the desires of Norway's people is in part evidenced by the liberal appropriations made to the farmers and farming. A special session of the Storting was called to encourage a greater agricultural output for 1919. An allowance of 3,000,000 crowns was made for general agricultural purposes and 5,000,000 crowns for the cultivation of new land. The Association of Norway's Young Men and Women has urged the erection of gymnasia for the country youth. Arrangements are also under way to establish an advanced secondary school without the middle school, evidently to effect as close a relation as possible between the preparatory work of the folk school and the secondary institutions.

Closely associated with the trend toward democracy is that toward internationalism, which in recent years has brought teachers and others of these countries together for cooperation. At its meeting in Stock-

[1] The latest at hand

holm in 1910, the Teachers' Association of the North, an all-Scandinavian organization, celebrated its thirtieth anniversary. The work of this body, though not primarly directed towards international ends, has really moved in this direction in dealing with the problems which the members as teachers have in common. The annual meetings at one or other of three capitals brought teachers together as guests and hosts, creating opportunities for an understanding of each other's views. The questions that came up for consideration at the regular sessions gave rise to a number of school activities in which all were called upon to participate. It paved the way for an interchange of pupils' visits among these countries, leading to a better acquaintance among the pupils, and, as a consequence, among their parents. From 1907 on, such school visits have frequently been exchanged between Danish and Swedish pupils. In 1908 [1] about 75 pupils at one time visited Denmark, being entertained by Danish families and in return entertaining their hosts by music and songs from their own country. By contribution the members of the Teachers' Association raised money for the erection of a statue of a prominent educator, unveiled during the session of 1916 in connection with a special program. The girl pupils are publishing a Scandinavian students' magazine, "Bog og Naal," (Book and Needle), edited by a staff on which the three nations are represented.

These occasions of mutuality have deepened the sense of regard that the schools of one country have for the work and ideals of the other. Quite spontaneously the work has been so ordered in the respective schools as to minimize any feeling of antagonism that might exist in the pupils on account of the wars which their ancestors fought with each other. While the schools of the three countries were the first to get together, there have always been other similar movements such as the Workingmen's Association, which in the same way have conferred on their common interests. Although a distinct form of pressure was the moving cause in the recent meeting of the three governments in the persons of their kings, the preceding sessions of the people made this meeting more easily possible. At any rate this group of limited monarchies, essentially democratic, has discovered the road to the larger internationalism to which the world events of November, 1918, invite. A signal instance of their preparedness for these ideals was recently afforded in Norway, when the Peace Association of the country, in 1918, petitioned the Storting to establish at the University of Christiania a professorship in the science of international peace.

[1] The only detailed account at hand of these visits, which since that date have become more general.

NORWAY.

GENERAL CHARACTERISTICS OF THE SCHOOL SYSTEM.

Obligatory attendance is formally fixed at 7 to 14 years of age, but the enforcement is such that the period of attendance depends upon the pupil's actual advancement rather than upon his age. The work of both teacher and school management is guided by an official handbook, which specifies the subjects, courses, hours, entrance conditions, holidays, vacations, and the weeks of the school year, which may be as high as 40, depending on local requirements.

The schools are maintained by taxes levied on the State, county, and municipality. Each county receives State aid in paying the rural teachers, to the amount of forty-four one-hundredths of the salary. In a county where it is found difficult to meet the expenses falling to its share, 15 per cent in addition to the above amount may be paid to it from the State funds. The expense of heating, lighting, and keeping the school property in order falls on the municipality. In the cities the State pays one-third of the teachers' salaries and two-thirds of certain service increments, all State contributions being limited by a fixed maximum.

The elementary schools.—Though the elementary school comprises seven years, pupils who expect to pursue studies beyond this course may enter the middle school from the fifth class. An effort was made some years ago to require the entire seven years as preparation for the middle school; it was hoped thereby to give education a more democratic character and to eliminate the feeling of social divergence and rank in the schools. Apart from these aspects of the proposed plan, educators did not find it practicable, for it would push the elementary school beyond its legitimate scope and endanger its work. Again it would postpone by two years the time when the pupil would naturally pass over to a continuation school.

The appended table based upon the official plan shows what subjects are studied in the seven years of the elementary schools and the time apportioned to each:

Subjects.	Years.							
	I.	II	III	IV	V	VI	VII	Total.
Religion	7	7	5	6	6	6	6	43
Norwegian	10	8	8	8	8	6	6	54
Mathematics	6	5	4	6	4	6	6	37
Geography	.....	.....	2	2	3	3	3	13
History	.....	.....	2	2	3	3	3	13
Nature study	2	3	1	2	2	2	2	14
Writing	5	5	4	4	2	2	2	24
Drawing	.....	.....	1	2	2	2	2	9
Vocal music	.....	2	1	2	2	2	2	11
Manual training	.....	.....	2	2	4	6	6	20
Gymnastics	.....	.....	.....	2	2	2	2	8
Total	30	30	30	38	38	40	40	246

The middle schools.—The course of the middle school covers the next four years. Pupils are admitted upon examination. Here more time is given to Norwegian, including special study of the vernacular prevailing in the province in which the school is located. The instruction in religion includes reading of the Bible and study of the main events in church history.

Two foreign languages are taken up, English and German, three hours per week in the former and four in the latter. According to the present trend of opinion more time is to be given to English, which will receive five hours from the second class on. The aim of the foreign-language study is to be able to make extempore translations of easy foreign texts; but the pupils are also expected to be able to use the language in the course of ordinary easy conversation.

In nature study the aims are to attain knowledge of those animals and plants that are most closely connected with later practical callings. Hygiene and the principles of sanitation are here brought before the pupils, the study of the human body and the functioning of its organs, the effects of strong drink, and, in general, the laws seen in such natural phenomena as may readily be brought to the child's attention.

In mathematics practical considerations take precedence over theoretical ones. The child is led to deal with problems that enter into the every-day transactions in business, simple bookkeeping, and applied geometry. Courses in history lay special stress on modern times and events, and, in particular, on the history of Norway and its civil organization.

Geography takes up the natural features, topography, soil, climate, and industries of Norway. The work in writing now shows great improvement in class-room methods. The teacher leads the pupil to see and to know, then to arrange the material, and finally to put it in his own individual literary form.

Drawing takes an altogether practical direction, and aims to prepare the pupil not only for the later trade schools but for the advanced technical schools in which Norway occupies a foremost place. In sloyd and manual training the number of hours per week has recently been considerably increased.

The gymnasium.—The gymnasium follows with a three-year course. It divides into three branches: (1) The modern branch; (2) the history and language branch; and (3) the history-language branch with Latin. Accordingly, the pupil, when this stage is reached, has before him electives by groups. As the pupils who elect the Latin branch become acquainted with this subject rather late, the aim of instruction is acquaintance with about 150 pages of Caesar, Cicero, and Livy, and the ability to read an easy text extempore. The requirements in the mother tongue are familiarity

with a comprehensive selection from Norway's authors, a survey of the language in its origin and historical relations. In translations, Greek and Roman authors, Homer and Plato, Shakespeare, Milton, and Goethe are taken up. The further studies in German, English, and French are calculated to impart a knowledge of the development of these peoples respectively. In history and geography the aims are identical in kind but naturally higher than at the earlier stages; physics, physiology, and sanitation are dealt with more comprehensively than in earlier nature studies; mathematics admits of the theoretical phases; drawing takes up advanced problems in technique.

Other institutions.—Norway's school system is, in its articulation of courses and schools, admirably adapted to give consistency and completeness to each pupil's education, no matter at what stage choice or necessity compels him to discontinue. Ample provision is made for advanced study. Public and private schools for girls are found in many towns and cities, and these aim to impart an education, different in some particulars from that of boys, but equivalent in advancement. There are 22 schools for navigation, 19 for agriculture, 16 for gardening, 6 for dairy farming, 1 agricultural high school, and 6 schools for engineering. In 1917, 45 schools gave instruction in metal and textile work and in the common trades of the country. The report for the same year lists 11 schools in domestic science. The Institute of Technology at Trondhjem takes rank among the foremost of its kind in any country; so also the Royal Art Institute at Christiania and the School of Mechanic Art at Bergen. Ten normal training schools prepare teachers for the work in the elementary classes. The Department of Education at the university trains teachers for positions in the secondary schools. The Royal Frederick University at Christiania makes constant research in the sciences, enriching these by contributions from its specialists.

Affiliated with the university are clinical facilities, collections of great value, and a library of 350,000 volumes. There is a botanical garden, an astronomical observatory, and a meteorological institute. Learned societies, long established and with historic prestige, are connected with the university as a central headquarters.

In Norway the continuation schools[1] stand on the border line between class room and shop. Recitations are held during hours in which the pupils are free from their daily duties, usually 6 to 8 or 7 to 9 in the evening. On account of the full measure of work the pupils have in their employment, it is necessary to limit, so far as possible, the school tasks to the recitation hours. Most pupils are employed in trade, office, shop, factory, or household. At present

[1] As these schools continue the subjects with a view of practical application in courses given mainly of evenings, some other term than "continuation" would probably be better.

they are receiving higher wages than formerly with constant inducements to do extra work in the evening—conditions that make the school work very difficult. The report from the continuation schools at Christiania shows a large attendance in the commercial courses, and a fair attendance in the courses instructing in the trades. Courses especially for girls impart instruction in dressmaking, housekeeping, the care of children, and hygiene. On account of the large number of applicants it has been found necessary to divide the district into three divisions with one school in each.[1]

At Stavanger the same kind of institution gives commercial courses during the winter where those who have left the elementary school can get special training. English is taught here, as it is elsewhere, in the commercial cities of Norway; Norwegian is a chief subject; bookkeeping is accorded a prominent place. At Stavanger another evening school, partially supported by private means, gives free instruction to boys in shoemaking, blacksmith work, and carpentry. Other courses give girls instruction in sewing and cooking. A special technical school supported by the State and city together, gives day and night courses in drafting and mechanics, which teach young men how to handle electrical apparatus and do engineering work necessary in ships and factories.[2]

SCHOOL GARDENS.

When gardens for productive purposes first came to exist in connection with schools they were left to be cultivated by children whose parents were poor. Since the outbreak of the war they have attained a much greater significance. Experts are instructing the teachers, who in turn direct the pupils how to make the most of the ground allotted to them. Among the children's gardens is the teacher's own, supposed to be a model for the others, and expected to show how much a little plat of ground can produce.

The people of Norway have a procedure called "inter-cultivation" by means of which several crops are raised simultaneously on the same lot. Between the potato rows they plant a species of beans which thrives without interfering with the potatoes. Among the strawberries they plant certain kinds of kale. Under the fruit trees and in other shaded places certain other kinds of the cabbage variety will grow. To get an early crop of potatoes they are told to start them in boxes where they may form long shoots by the time the season permits of planting them in the open ground. Seeds and plants are furnished the children free of charge; for their labor and care they get the crops they raise. It has been found that the interest displayed by the children reacts upon the parents so that these come to see the significance of the school gardens.

[1] Beretning om Kristiania's Fortsaettelsesskole.
[2] From material submitted by Consul Dunlap.

Norway's School Garden Association issued the following appeal in the interest of the work to begin in the spring of 1918: [1]

No hands that can do anything must be idle during the coming spring and summer. We have in mind many who for the approaching vacation have not as yet found opportunities for service in the direct production of foodstuffs. For that reason we are now appealing to teachers everywhere in country and city, to teachers of athletic clubs, to young peoples' associations, temperance organizations, welfare associations, and all kinds and groups of persons with or without political connections. Place yourselves at the head, each in his own circle, and try to effect a cooperation of willing and active forces, of both men and women, to the end that we may all get started to work for an increase of the foodstuffs our people shall need to maintain themselves the coming winter. Obviously it is of particular importance to use the spring months in the best way, but it is of no less importance to use the winter months to organize the work. We urge teachers to secure the support of the school authority and the agricultural committee with the view of starting at once to prepare the classes to take hold of the work of planting potatoes, cabbage, kale, beets, carrots, and other kinds of vegetables to be used in the kitchen. The chairman or leader of a society should organize the members into suitable work groups, say of 6 to 12 in each, and secure the ground, the seeds, and the necessary tools, so that everything is ready when spring comes. It should be possible to procure the money from patrons in the villages, from the banks, and from rich people who may be interested. A part may be raised through extra school exhibitions and entertainments during the course of the winter.

SCHOOL WELFARE ACTIVITIES.

The system of appointments and eventual pensions provides inducements for teachers to become permanent members of the community, thereby making it possible for their advice and help to extend outside the school and beyond the courses. Large and carefully selected libraries for children have been organized mainly by the teachers. Despite their limitations remote rural districts have accomplished much in this line. Within their resources they are following the example set by the cities. Every school attempts to have at least the beginning of a library. In Christiania at the Central Library are attractive reading rooms for children, and over 340,000 volumes selected to serve their needs. For the year 1915–16, 37,974 volumes were loaned.

To teach the children thoughtful and purposeful thrift almost all the schools of Christiania have conducted banking activities to take care of the pupils' deposits. During 1915–16 there was a falling off in the number of depositors as well as in the sum total of deposits, but the following year showed a recovery in the totals, so that the year's accounts amounted to 144,000 crowns. Much of this is drawn when the pupils finish their courses or leave the city. It is often used for clothes to wear at commencement and graduation exercises. In these connections the teachers never fail earnestly to impress their pupils with the importance of continuing to save. The work is supported and handled by the Savings Bank of Christiania.

[1] Skolebladet, Mar. 9, 1918.

The health supervision has been hampered by the limited number of physicians who could be assigned to the work, and also by insufficient means to provide an adequate number of nurses and caretakers to follow up and apply the physicians' directions. Though the report indicates that the work has been slow, it points to exceptional thoroughness. It is the aim of the authorities cooperating with the medical inspectors that no child in Norway shall suffer in health or development on account of defects or diseases than can be remedied. There appears to be gratifying promptness in the application of the remedial measures prescribed in each case—whether for eyes, teeth, nose, adenoids, or tonsils. School physicians are directed to proceed at once to treat curvature of the spine, usually by massage when appropriate, and aenemic conditions by ordering better nourishment, fresh air, and rest. Where the parents are unable to provide the means, the municipality takes care of the case. A record is kept of each child's physical condition, with a fullness that to a layman would seem unnecessary.

In the schools of Christiania are ample facilities for pupils' baths, and each child is instructed to take at suitable intervals a shower or plunge bath of a temperature carefully regulated. The school records show to what extent each pupil has availed himself of these facilities. Instruction in swimming is a regular part of the school work, and the reports for 1915–16 showed that 636 boys and 480 girls learned to swim during the year. Formal athletic exercises with the use of simple apparatus are encouraged and regularly conducted. The pupils of this country need no special inducements to take part in whatever develops bodily strength and prowess, and, as would be expected, they are especially enthusiastic in their national sports of skating and skiing.

Lunch rooms have long been connected with the schools in some form or other. Formerly the janitor had a supply of buns, rolls, coffee, milk, etc., which were furnished the children at a small cost. Now many cities supply the primary children with one meal a day during the winter months. To poorer children this is free; to others it is sold at small cost. A central cooking department in Christiania supplies the elementary school children with daily portions of the best food served hot under the direction of a matron. A committee of teachers decides what children shall be served, upon application by the parents.

In the city of Stavanger municipal welfare measures for school children have assumed still more comprehensive scope. The district comprises about 150,000 people, of whom about one-third live in the city. The children are supplied not only with free books and writing material, free medical and dental care, medicine, and, when needed, free shoes and stockings, but also free midday meals. Three times a

week a regular dinner is served. The meals are served in three different localities, a steam bakery supplying the food. It is hoped that the food may eventually be prepared in a community kitchen, as in Copenhagen. Many mothers with young children work in the factories. These women often do not have sufficient time to see that their children are properly fed, and a diet of bread, butter, and coffee is likely to be the rule; hence the importance of the wholesome and nutritious meal the school furnishes. A committee decides each case before the children are admitted to the school tables.

SPEECH FORMS IN THE SCHOOLS.

The necessity of sanctioning the use of two language forms—the book language and the vernacular—has handicapped and often embarrassed the teachers of Norway. One of these speech forms is always tending to supplant the other, with the consequent danger of provoking controversy, as teachers and school boards take sides in behalf of one or the other. At school meetings and in the educational journals they have become perplexing problems.

In recent years the vernacular has made headway and gained adherents to such an extent that in the west, according to a member of the Storting, Mr. Fretheim, two-thirds of the districts have elected it as the preferred speech form; in the south about one-third, and in the north about one-tenth. As schoolbooks are printed in both forms, and as pupils sometimes show greater readiness in the one and sometimes in the other, and, again, as the vernacular has not yet attained complete fixedness in orthography and grammar, the teachers and boards are constantly confronted with the necessity of making difficult selections and adjustments. In order to avoid clashes Government regulations were adopted with the view of permitting teachers and pupils to make the adjustment on an elective basis with a minimum requirement.

In their final examinations pupils, according to the law of 1907, were required to write one essay in the vernacular, and explain a selection from Old Norse literature from the vernacular and also from the book language. Two compositions are required to be written in either the book language or the provincial tongue. Candidates who present both of these in the same language are required to write an additional easy theme in the other language.

These regulations were amended by a law passed during the year 1918, and now read:

1. In the oral instruction the pupils are to use their own speech form and the teacher will, so far as possible, adapt his own natural speech form in accordance therewith.

2. The school board will decide for each district, class, or division (*a*) whether the written work of the pupils is to be done in the vernacular or in the book language; and (*b*) what kind of primer is to be used.

In regard to textbooks the pupils may use either those printed in the vernacular or those in the book language in accordance with the choice of parents or guardians.

In a district where parallel classes have been organized, parents who wish their children taught in the speech form which is not the predominant one at the school, may make a demand to this effect provided there are enough children to constitute an entire class, and, provided further, that it can be done without materially increasing the expenses of the school. Children for whom a speech form has thus been chosen may not without the consent of the board pass over into classes with a different speech form.

TEACHERS' PENSIONS IN NORWAY.

The pension enactment of the Storting of 1918 places the teachers on a par with government officials. It is provided that the retirement of a teacher may be requested by the school board by the time he is within 3 years of the pension age; if not, he may retain his position 5 years beyond this limit. When he comes within 10 years of the teaching limit of 70, he has the privilege of applying for retirement and pension provided the sum of his years of service and of his age is as much as 80 years. At the age of 60 with 30 years of service to his credit he receives full pension. At 60 with 20 years of service he may be permitted to retire, but he receives then only two-thirds of the full pension.

The total amount of the teachers' salary compensation forms the basis for computing the pension: Fixed salary, bonus, compensation for free home, light, fuel, and whatever else the regulations acknowledge as salary, such as pay as choir leader, secretary of the school board, etc. The pension is computed on the sum total of these salary units.

Full old-age pension presupposes at least 30 years of service, and comprises 66 per cent of the remuneration if it does not exceed 3,000 crowns. If the salary in the aggregate is larger, the pension is decreased by 0.004 crown for every additional crown up to 7,000. Upon voluntary withdrawal with less than 30 years of service the pension is diminished by one-thirtieth for each year; yet it must make an aggregate of at least 30 per cent of the full pension.

A teacher receives a disability pension when his physical or mental powers are impaired to such an extent that he must leave his position. In such cases the years of service are disregarded and the pension

made equal to that for retirement at the age limit. In other cases of invalidity the pension is diminished in the ratio of the old-age pension, yet not so as to be less than three-fourths of this. Partial inability to earn salary is the cause for a corresponding decrease in the pension. A widow's pension is 30 per cent of the salary or the pension of the deceased teacher, yet never less than 200 crowns and not more than 1,500. It is not paid in cases where a teacher marries after his sixtieth year or after his retirement. It ceases upon remarriage. Orphans under 18 receive each 25 per cent of the widow's pension, yet the total amount received by the children must not be more than 100 per cent of this. If both parents are dead, the pension of the children is doubled." [1]

WAR CONDITIONS AND THE SCHOOLS.

During the entire war Norway's industries and commerce suffered more than those of any other neutral country. She sustained enormous losses by the destruction of a great part of her merchant fleet. Traffic from the first was insecure and, as a consequence, marine insurance was high. Raw material was difficult to procure and the finished products of shops and factories difficult to bring to the consumer.

While the war did not result in commandeering school buildings and the labor of teacher and pupil as in the belligerent countries, it virtually did this in an indirect way. The high cost of everything necessary to sustain life compelled all available forms of labor to become productive.

The pupils of many schools were requested to organize themselves into groups and, together with their teachers, to be ready to respond to calls for help on the farms. The shops and factories frequently experienced a shortage of labor and tried to recruit it from the same sources.

For these reasons pupils individually and in groups were virtually compelled to leave their class work to take up something more urgent. More or less confusion in the year's work was one of the immediate effects of this. Another was to emphasize a distinction, as never before, between book learning and training leading to productiveness.

The time was opportune for an inquiry into the aims and intentions of almost every subject in the course. What was its purpose? Where did it lead to? And what would it help to produce? As a consequence there arose a tendency to give preference to subjects that in these respects measured up to the demands of the times. There appeared also an inclination to stress the more practical phases of subjects already established in the courses. Educators began to

[1] Schweizerische Lehrerzeitung.

point out that geometry, for instance, dealing with lines and angles, squares and cubes, could be brought into closer coordination with the art of making things—carpentry, cabinet making, building—where the lines and curves were embodied. Zoology might deal with domestic animals, their ways, and values, as well as with zebras and lions.

The importance of daily work and labor, and the duty of bringing it into the class room and teaching it as a recognized subject was discussed in the teachers' journals and meetings. It was one of the chief points adopted by the Pedagogical Folk Meeting in Christiania on August 25, 1918. But the teachers of Norway went further. They were not content with simply giving labor a place in the curriculum; they demanded conditions that should obliterate social distinctions between work with the hand and work mainly with the intellect—they insisted on the prestige of labor. With this in view the educators of Norway have formally asked that labor should be brought into schools hitherto considered exclusive, and there given a place of distinction.

On the purely economic side the war affected teachers severely. During normal times a teacher in Norway has a fair salary. The pension of which he is eventually assured permits him to look forward to the future without anxiety and hence to do his work with a full collection of his powers. Yet his remuneration is so carefully adjusted to his actual expense that a sudden increase in the cost of living creates distress.

Hence the war brought hard times to the teacher as well as to others. His salary was not commensurate with the added outlay. The authorities were willing to provide relief, but to adjust salaries by enactments of the Storting proved to be slow. Through their journals and such other means of publicity as they could command, the teachers brought their economic difficulties before the people. At its meeting in Trondhjem the Teachers' Association virtually resolved itself into an organization to campaign for relief. The parliamentary response came, first in the form of war bonuses and high expense bonuses, and, finally, with a plan for a direct general increase of salaries commensurate with the present times.

A communication from the president of the National Teachers' Association of Norway, Mr. A. Kirkhusmo, dated November 20, 1918, shows that while the bill providing an increase in salaries was pending before the Storting, the people throughout the country generally took independent action and very materially increased the salaries in their respective communities.

Economic pressure, too, caused a shortage of teachers that greatly handicapped the work of instruction in certain parts of Norway. Other lines of employment with more satisfactory pay attracted many teachers. A report came to the department of education at Christiania that in 1917 several hundred positions had remained vacant and that during the same year a still greater number of positions had to be filled by persons without professional training. In some parts of the country the weeks of the term of some schools were arranged so that the teacher could serve two schools.

The moral effect of the war on the pupils was forced upon the attention of the teachers. Familiarity with the accounts from the front, with details of bloodshed and violence, tends to disturb the psychic balance of a pupil in his impressionable years. Reports from the warring nations state that moral confusion sets in among school children to the extent of causing an alarming increase in juvenile offenses. The teachers of Norway are attempting to prevent the damage that threatens the children from exposure to notions of war and violence. They seek to lead the attention of the pupils away from these foreign interests to the interests and the affairs of their native land. In the scenes of Norway, in their fields and fjords, in their commerce and their industries, the teachers have found counter-attractions more favorable to the moral and psychic health of the pupils.

The war has emphasized another duty that falls on the teacher. The clergymen of the peace association of Norway have addressed themselves to the General Peace Association requesting the latter to formulate plans to enlist the teachers actively in the cause of peace. It had been assumed at the Peace Conference at Bern, in 1915, that the clergy could accomplish the most in the interest of peace. But later it became obvious that the field was too large, and that considerations of a purely pyschological character added to the difficulty, owing to the popular misconception that the church and the school were two independent institutions. The public comments touching this question of the work for peace has brought the teachers' share in it into a clear light. No other class has an opportunity like the teacher for instilling and confirming humane and cultural sentiments of peace in the hearts of the young.

PRESENT TREND IN EDUCATIONAL THOUGHT AND SCHOOL LEGISLATION.

The present efforts to give the schools a more organic continuity from the primary years to the years of secondary advancement have their origin in the same general causes in all the countries of northern Europe. In reports prepared under the direction of the Ecclesiastical and Education Department of Norway, comprising a consensus of

opinions among the school men of that country, the movements there are traced and set forth in full. The several official publications issued under the auspices of that body, the latest bearing the date of March 2, 1917, indicate the issues that are uppermost. Supplementary accounts in the educational journals of Norway make it possible to follow the movements up to the end of 1918.

The committee entrusted with the preparation of the report maintains that not only educational, but, in a measure, social purposes come into play in adapting the schools of that country to the needs of the people. The unrest noted with the consequent demand for altered adaptations arises from the present democratic insistence that the purely social aim be eliminated and that the child's bent and endowments alone determine the stage where its divergence into a selected educational course may be permitted. With past school traditions in mind the committee maintains that in a community where a child's position in life is determined by its birth it is comparatively easy to plan a school well adapted to impart a fitting measure of information and training; a steadily ascending course of development leading directly toward the goal could then be planned, making it unnecessary for the learner to stray into by-paths or to be distracted by minor aims, but leading him to concentrate all his attention and bend all his energies toward reaching the goal clearly in sight from the beginning.

From the first the courses would, under these conditions, take different directions in accordance with various aims, soon creating a marked distance between the routes by their constant divergence. For this reason it would be difficult, if not impossible, to pass over from one route to the other, which might become desirable where one should discover during his progress that he had been mistaken in his destination or his endowments, and hence wished his aim changed.

In the latter part of the last century the movement toward unification began, when the preparatory classes of the middle schools were, to a great extent, taken over by the folk school. With the same general aim the law of 1896 provided a further lengthening of the folk school by two years.

After that date interest in reforms toward this end became more general, at least among teachers and patrons of schools. In consequence further changes were discussed in 1909 in connection with the debate on the budget for secondary schools. In this discussion it became clear that the articulation between the folk school and the middle school was unsatisfactory, and that it might be well to consider whether an adjustment in subjects and courses could not be effected requiring pupils to complete the seven classes instead of five of the folk school as entrance condition to the middle school.

The opposition contended that the present law did not place any obstacles in the way of such articulation, but that carrying it into general effect would necessitate extensive revisions of instruction plans and textbooks and that in the few places where it had been tried the result had not been satisfactory; even a three-year middle school had had great difficulties in bringing its pupils to a point of advancement where they could pass the examination. An alternative course of growth was suggested, by pointing out that the common school itself was capable of a development to the extent of preparing its own pupils for an examination virtually equal to that of the middle school. A nucleus of subject matter in the instruction could be provided and required of all; parallel with this could be elective subjects for those who had the middle school examination in view.

On November 7, 1911, a committee of seven persons was appointed to prepare a report on the question of how to effect a closer union between the folk school and the secondary school. As points of departure for their work the laws defining the aims of the two schools, respectively, were cited:

> The folk school should help to give children a Christian bringing up and such general training as should be common to all members of society; the middle school continuing from the folk school should give the pupils a finished and advanced general training adapted to the receptivity of the children's years.

In May, 1915, the committee made a report in which the trend of opinion among Norway's schoolmen was clearly exhibited.

Among the difficulties set forth in the committee's published statement was that the contemplated reorganization would involve transition stages requiring special adjustment in courses and management. About 70 per cent of the municipal middle schools without gymnasium had only a total enrollment of from 40 to 150 pupils. If these schools lose their two lower classes, as some of the proposed plans would require, the attendance would be cut down to such an extent that they could not well be continued as independent schools. They would be merged with the folk school, and there would, in consequence, be one head for both institutions. This adjustment would have to be left to the administrative boards. Many middle schools are so large that even if they should lose the two lower classes they would continue to exist as independent institutions with respect to buildings, faculties, and management. As many of them are located in the larger cities, they would, when reorganized as an undivided institution, according to the plan under consideration, come to have a number of parallel classes. In those schools that offer full, or part, gymnasuim work, it would be most natural to let the proposed two-year middle school merge with the gymnasium and be under the superintendence of its rector.

In adopting an order of this kind, various difficulties would be met, and not least in regard to the difference in the present training and duties of the teachers in the two classes of schools. The committee pointed out that the reorganization of the present middle schools into schools of two-year scope will have the immediate effect of making superfluous a number of teachers now holding positions without any provision for their employment in either the folk school or the reconstituted middle schools, even though these and parallel classes connected with them should increase in number.

At this stage of the progress the matter was again taken up by the Storting in 1916 and a sum of 3,000 crowns was appropriated to enable the committee, to continue its investigations. The plans of the committee, which were in the meantime fully discussed by schoolmen throughout the country, and eventually submitted to the Storting were in substance as follows:

1. An outline for the apportionment of hours and plan for instruction in a two-year middle school continued from a seven-year folk school. In order to show the articulation best adapted to effect the desired coalescence, the plan includes a time scheme covering years six and seven of the folk school and two years of the middle school. It also defined the aim to be attained in each subject in the concluding year of the folk school—the degree of advancement, in fact, that would have to be reached in religion, Norwegian history, science, etc. In a similar way the outline set forth the aim of the middle school. Specific remarks on the outline were then added touching on such details of subjects, hours, and adjustments as would be likely to come up in the reorganization. In the subsequent discussion of this outline, considerable opposition was met on the ground that it necessitated a serious disturbance of the plans followed by the folk school without any real and obvious gain.

2. The second proposition was a combination of a three-year middle school continued from the seventh class of the folk school. In the event this plan should be considered for adoption it was suggested that it might be well to follow the lead of a number of cities that had already put it into effect, and that a typical normal plan be adopted for these schools. Several suggestions regarding subjects were also made by the committee.

3. In view of the anticipated objections to plans 1 and 2 the committee drafted a third plan: A six-year folk school followed by advanced courses of instruction, one of which comprised a three-year middle school. There would then be two divisions of the six-year period, namely, an infant school of two years, and an elementary school of four. A schedule for these divisions covering subjects and hours was appended by the committee, though they did not find it

necessary to enter into all details of the instruction under this plan. The advantages gained by it would be: (a) The middle school examination would be reached after nine years; (b) the course of the middle school would comprise three years; (c) the folk school would at no point in its work be disturbed by adjustments necessary to the plan of the middle school.

4. In its further work the committee dealt with a plan for a practical continuation course in the middle school and found that there were no serious difficulties in the way of shaping a course of this kind, so that it would lead to the middle-school examination requiring equal advancement. The gain in this arrangement would be that the impression of a subordinate rank would be removed from the practical instruction which up to this time had been connected with the folk schools. There would, in every case, be the positive gain that such a course would lead to a goal which prevailing views associated with a certain respect and prestige.

The new arrangements thus outlined involved considerable departure from the present plan and organization of the schools, and in some cases, necessitated a regrettable disturbance of the present order. The Ecclesiastical and Education Department found that the views embodied in the report should be given thorough consideration, but as none of the propositions had a sufficiently general approval to be recommended for embodiment in the statutes to govern future school organizations, the department recomended to the budget committee of 1917 that 10,000 crowns be appropriated for the use of a new committee to push the work on this important and difficult problem to completion. Such further expenditure and delay did not meet with favor either among schoolmen or laymen.

Moreover, the general discussion aroused by the committee's report created a feeling among all ranks that the views of the people of the nation on these matters should be given official expression. During the spring and summer of 1918 this opinion gained support at a number of meetings held by various teachers' associations. The proposition received such general approval that a call was issued through the educational journals for a general teachers' and citizens' school meeting to be held at the University of Christiania in August, 1918.

In this way there came about what has been regarded as an epoch-making educational mass meeting; certainly this was one of the most notable school events in Scandinavia of 1918. Laymen and educators assembled at the University of Christiania on August 25, and outlined the demands that the Norwegian people should make on the schools. In formal resolutions categorically adopted they asserted that—

1. "Bringing-up and character forming are more important for the elementary and secondary schools than intellectual training."

Insistence was laid on fewer examinations, more personal responsibility of the teacher, more efficient supervision, and greater freedom for the initiative of the individual. In discussing the point last mentioned those present deprecated the pressure that influences or compels a teacher to move only in the direction pointed out by a political or educational majority, and that laws, regulating plans, and examinations circumscribe the work.

3. Training for actual work must be made more prominent in all schools as well as in the middle schools and the continuation schools. The teachers' professional preparation should have regard to this. In this connection it was urged that the new middle schools should not be made more popular, but that every-day work should be elevated and given its place and prestige in the middle schools now regarded as exclusive.

4. "The Government should, as soon as possible, appoint a committee to prepare a unified plan for continuation schools, work schools, and other classes of schools to enter into a legally fixed continuity for an educational training based on the elementary schools. This committee should include members from all classes of city and rural schools, from the primary to the university."

5. "It will improve the peoples' bringing-up if each kind of school has its own council and that all of Norway has a central council of control, a national board representing all kinds of schools from the primary to the university. But it should be provided that each class of institutions shall act with full independence under the regulations of its own board."

There would, accordingly, be established a board for secondary schools, one each for agricultural schools, technical, normal, and engineering schools; and each board should work with complete independence of the others. At the same time it was felt that they have so much in common as to require a central supervising board representing them all and consisting of the superintendents of the individual boards, the rectors of the high schools, and the rector of the university.

6. "The State should establish a teachers' high school, either independent or as a part of the university. Whatever is fundamental in daily work should here receive the place and rank that corresponds to the basic elements in the people's life." "And it was added that real, every-day work should have a place in recognized courses of manual work for men and women, household, natural history, etc., yet in such a way that the aim of moral stability and the forming of character should give direction to it all."

That the work done by the school committee should lead to such a referendum was perhaps not anticipated, but though the complications resulting make an early enactment by the Storting impossible, they will eventually lead to a fuller embodiment of the people's views in the school system.

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SWEDEN.

GENERAL VIEW OF THE EDUCATIONAL SYSTEM.

Public education in Sweden is administered through the Ecclesiastical and Education Department and its various bureaus. A local school board, consisting of four members chosen by the parish assembly, has charge of details touching the schools of each parish. The pastor, who formerly was an ex officio member of the board, is no longer so, according to a recent ruling, but must be elected like the others in order to become a member. Another change in the local school administration has resulted in the transfer of the management in many cities from a separate board to the city council.

Changes are also contemplated in the organization of the diocesan boards, which exercise supervision over the local administration. These boards, it is generally conceded, are not as at present constituted adapted for the satisfactory superintendence of instruction.[1]

But in regard to the change that would be expedient to make them more capable, opinions do not concur. In the propositions prepared by a special committee and dealt with by the Riksdag, the alternative appeared to be either to reconstitute the diocesan boards so as to guarantee that they would deal with school matters with greater regard to the interests of the folk school and the demands of educational science or else that their functions as educational boards should cease altogether. Thus far the Riksdag has taken no other action than to refer the consideration of this question back to the committee. With the same purpose of perfecting the administration of the schools successive enactments from 1904 to 1914 resulted in the creation of a general supervisory board for the control of secondary education and of a special board independent of the other to exercise supervision over the folk schools and normal schools.

[1] Folkskolekalender, Stockholm, 1916.

The character of the school inspection has also received much attention. The inspectors are appointed by the State; they visit the schools, confer with the school authorities; assist and advise these officials, examine petitions and appeals, and investigate and report on requests for State aid and for enlarging the activities of schools. How these important duties shall be attended to with the best results has also been the subject of investigation by a committee of the Riksdag. This body reached the conclusion that the work of the inspectors was that of specialists and that they should be appointed and directed by regulations with this character of their duties in view. Accordingly, the entire country was organized into new districts of inspection; a new code of instruction was provided, and new inspectors to the number of 34 were appointed.

Education in Sweden has been compulsory since 1842, the ages of required attendance being 7 to 14. If a child has not made satisfactory advance at the end of the fourteenth year, further attendance is required. These measures have had the effect of reducing illiteracy to a fraction of 1 per cent.

The common school period covers six years, divided into a primary course of two years and an elementary course proper of four. The pupil may then enter either a continuation school of two or three years or an intermediate secondary school, the latter continuing his schooling to the age of about 16.

As early as the third year of the elementary course the pupil's further studies may begin to assume a particular direction, if such has been determined. If advanced studies are contemplated, the pupil will enter the modern secondary school, which after six years opens to him either the modern gymnasium or the classical gymnasium, both concluding with a final examination (student-examen) preparatory for the university.

From the continuation school and the communal middle school the way leads to various trades and practical activities, business schools, household schools, agricultural schools, technical schools, and engineering.

The school year averages 35 weeks, 210 days, with a maximum of 35 hours per week. This normal duration of the year is varied to some extent by local conditions. If the degree of advancement attained at the completion of a certain stage be measured by the number of years from the pupil's entrance in the primary class, the following view of it will appear: (a) The elementary school completed after six years; (b) a continuation school, usually after eight years; (c) the real skola (modern school) after nine: (d) the communal middle school after 10; (e) the gymnasium after 12. (It is continued from the fifth class of the modern school.)

Schedules apportioning the time and specifying the subjects are drawn up for each school on the basis of a compendium furnished by the State. The school plans are not all uniform, for the intention is to leave such freedom to the local districts as may be required by conditions that prevail there. In the elementary school Bible stories and Luther's Smaller Catechism give the fundamentals in religious instruction. The Swedish language, history, arithmetic, geography, and natural history are taken up first. Swedish and religion are continued throughout; bookkeeping, psychology, civics, drawing, gymnastics, singing, domestic-science practice, and a foreign language (generally English) are added in the course of the last two or three years. Subjects pertaining to health, such as the hygiene of the teeth, are made obligatory. Training in swimming has of late received such attention that it is likely to be taken up as a regular subject.

Sweden has 77 advanced secondary schools, 39 with the six-year plan and 38 both real-skola and gymnasium, or the nine-year plan, and also 20 private institutions with gymnasium rank.

The fact that advanced schools for girls did not exist in any great number till toward the close of the nineteenth century is due to traditions that did not recognize education as necessary to a girl's advancement in life; now there are more than 80 institutions of this kind having a total enrollment of about 18,600 pupils. The courses include three years primary and eight years advanced instruction. The work in the upper classes has a gymnasium character, and leads to a final examination conferring a standing equal to that of the gymnasia for boys. In comparing the curricula of the upper classes with the corresponding ones in the gymnasia for boys we find, as would be expected, several new subjects, including domestic science and needlework. In the modern languages there is also a wider range of choice.

In the spring of 1918 there were 49 peoples' high schools in Sweden. Here they are similar in aims and methods to those of Denmark, where they had their origin, but unlike those of Denmark they have never been connected with any special folk movements in religion or civil life. They provide short practical courses for grown people whose schooling has been interrupted, say at 12 or 14 years, but who later wish further training. They receive their pupils mainly from the farms and they educate them back to the farms. They are founded by private or community endeavor; they receive state subsidy—in 1917 it amounted to 476,000 crowns—but they are, in the main, independent of state boards of control. The semesters are so divided that men receive instruction in the winter and women in the summer. There are no examinations, either entrance or final. The 30 or

more agricultural schools throughout the country are conducted in close connection with them.[1]

Trade schools are found in all the principal cities. In Stockholm nine of these were established between 1912–1915. They comprise a machine workers' school, carpenters' school, blacksmiths' school, electric motor school, school for tinsmiths and coppersmiths, plumbers' school, milliners' school, dressmakers' school, school in household work, bakers' school, and a bricklayers' school. Each school is under state supervision having, however, its own board. With few exceptions they are "one-day" schools; that is, pupils attend one day a week and work as apprentices the remaining five. Their immediate object is to secure for the pupils suitable work in the shops and factories. The superintendent is in close cooperation with factories and their foremen, the latter often being instructors at the schools.

They give progressive courses of three years. The entrance conditions are to have attained 14 years, passed through 6 years elementary school, and, finally, to have secured employment in a shop of the kind in which the school gives instruction. Obligatory studies are reading, writing, social economy, bookkeeping such as applies to the trade, hygiene, and gymnastics. Though attendance is voluntary, studies may here be taken up to fulfill the requirements of the law of 1918, which makes attendance at a continuation school obligatory upon all pupils after having completed the elementary period.

Among institutions where advanced technical instruction is given are the following: The Technical School at Stockholm with five departments: 1. Technical Evening School; 2. Technical School for Women Pupils; 3. Higher Industrial Art School; 4. Building and Trade School; 5. Mechanical School, which has 80 teachers and about 2,000 pupils.

The Technical School at Eskilstuna has a department for the finer kinds of forging and metal working with instruction in freehand drawing with styles of art, modeling, carving, engraving, metal casting, chasing, metal hammering, etching, galvanizing, forging, filing, and turning. Other technical colleges are located at Malmö, Borås, Örebro, Norrköping, and Härnösand.

The Royal Technical High School at Stockholm gives advanced instruction in the mechanical arts and sciences. It is open only to those who have passed the final examination at the gymnasium. The course of study is four years and comprises: (1) Machine construction; (2) electrical engineering; (3) chemical technology; (4) mining science; (5) road construction and hydraulic engineering; (6) architecture; and (7) shipbuilding. There is also a department called the Material Testing Institute. The teaching staff comprises 24 professors, 2 lecturers, 24 special teachers, and a number of assistants.

[1] Den svenska folkhögskolan. By Theodor Holmberg.

The past few years have been marked by a number of reforms and improvements in the facilities for preparing and training teachers. The salaries of the teaching staff at teachers' colleges have in general been liberally increased; so have also the allowances and stipends of students at these institutions. Nine training colleges for men, six for women, two private colleges for women—one at Gothenborg and one at Stockholm—prepare teachers for positions in secondary schools. They admit pupils between the ages of 18 and 26, the academic condition for entrance being the satisfactory completion of the elementary course.

The courses comprise four years, much of the time of the last two years being devoted to practice teaching. There are 34 other training schools for teachers of the primary grades. These give shorter courses, the total time of attendance amounting to from 8 to 16 months. There are three schools for teachers of defectives, 6 for sloyd, and 5 for domestic economy. Special institutions also train teachers in drawing, music, gymnastics, and games. In 1908 a professorship in education was established at the University of Upsala, and in 1911 a professorship in psychology and education was instituted at the University of Lund.

In order to provide for the continuous improvement of teachers, a number of courses, more or less permanently established, have come into existence. For this purpose there has been a lecture course in Stockholm since 1890. Academic vacation courses are given during successive years at Upsala, Stockholm, Lund, and Gothenborg. Special instruction in agriculture and horticulture is furnished through organized effort in Nääs and Jönköping. Various teachers' travel funds have been provided. A State grant makes an annual sum of 12,000 crowns available for this purpose. Lund, Malmö, Gothenborg, and Stockholm have municipal travel funds of from a few hundred crowns to several thousands annually.

CARE OF THE PUPILS' HEALTH.

The school authorities require an examination of the pupils' sight and hearing at stated times and have provisions for applying remedies and correctives for abnormal conditions. A statement from a physician is made out prescribing the treatment adapted to promote normal health and growth. If the parents are without sufficient means to have the child treated by oculist, dentist, or masseur, the cost is provided by the community. In most of the cities and larger towns the schools arrange for baths and swimming for both boys and girls at suitable places in the open, and in the winter plunge baths and shower baths are provided indoors. The use of the baths is voluntary in most cases; their importance is so fully brought

before pupils and parents that most children avail themselves of them regularly.

In the summer children who are sick or in delicate health are taken into the country on some farm where they remain for a time under the supervision of teachers and matrons. The place for these "vacation colonies," as they call them, is selected with the view of securing fresh air, sea breezes, and nourishing food for the children. There is usually a remarkable improvement in the health and vigor of the children when they return from these outings. In 1914 Stockholm managed 73 such colonies taking care of 2,439 children. Private persons have contributed liberally for this kind of welfare work, and in Stockholm the annual interest on half a million crowns is available for these purposes. Gothenborg, Malmö, Halmstad, Hälsingborg, and other cities send out thousands of children to farms and forest camps to recuperate in this way.

Again, upon the initiative of the National Teachers' Association many communities have instituted travel clubs for school children. These provide funds and plan trips to the large centers and other places affording enjoyment and instruction. The Tourist Association, under whose auspices the trips are often made, usually secure reduced railroad fare for the children.

As unsuitable and insufficient nourishment make it impossible for children to learn and develop at their best, many schools have taken this matter in hand by supplying free meals from the school kitchens, and, incidentally, furnishing the girls instruction in cooking. In some cases, too, they supply shoes and clothing to destitute pupils.

In connection with many schools are workrooms to provide occupation for children in the afternoon and thereby keep them from idling on the streets. Here they are taught to mend their own clothes and shoes and, in general, to occupy themselves with sloyd, weaving, crocheting, knitting, carpentry, metal fashioning, and basket work. Teachers are always present to direct the work. The expenses are provided by allowances from the municipality, donations, annual fees, private contributions, and the sale of the childrens' products. More than 75 such workrooms have been equipped in the villages and cities.

The General Teachers' Association, of Sweden, organized in 1860, has now a membership of about 12,000. Its subdivisions and committees, some of them with considerable funds at their disposal, pursue assigned activities in the interests of schools and teachers. The literature committee attends to the publication of matters of educational value. There are committees on syllabus and compendium for teachers, courses in drawing, school museum at Stockholm, traveling libraries, life insurance, and a Saga committee to publish

suitable literature for the young. There is also a bureau of information to assist teachers in economic and legal matters.

In 1906, a Women's Teachers' Association was organized. Its aim, as announced, is "to work for unity and cooperation among Sweden's women teachers and to further educational and economic interests." The association has its own school journals that work for these interests.

RELIGIOUS INSTRUCTION IN THE ELEMENTARY SCHOOLS.

One of the most vital problems before the schools of Sweden at present is the proposed alteration in form and method of the religious instruction in the elementary schools. The present attempts to prepare new books as the basis for this subject are made in response to successive notions in the Riksdag appearing as early as 1903 and taken up again in almost every session from 1908 until the present. In 1911 a committee was appointed to prepare a textbook as a guide for the religious and moral (Sedeläran) instruction. Difficulties, partly anticipated and partly unexpected, arose, so that the committee could not complete its work as early as intended. In 1916 two editions were submitted, one for the elementary schools and one for the confirmation classes. The discussion that followed seemed to make still further alterations advisable; and the work is again in the hands of the board.

The attempts thus made to alter the form of Luther's Smaller Catechism cut deep into the religious traditions of the Swedish people, to whom this book has been the means of imparting the rudiments of religious instruction for centuries. The criticism of the new version came from two opposite directions: (1) The conservatives in the State Church who find in it an unacceptable departure from the church traditions; and (2) the radical Socialists, who want neither the old catechism nor anything like it. Much earnest consideration has, however, been given to this problem by Sweden's prominent churchmen and educators with the result that the new demands emerge in a clear light. "Religious truths," they hold, "should be brought before the children, not in religious formulas nor in maxims of conduct, but in concrete life pictures taken from the Bible and from the history of the church. This mode of teaching does not exclude a general survey of the truths deduced and an ordering of these in synthetic statements."

STUDIES OF THE HOME LOCALITY.

In the United States landmarks of historic interest, identified with the westward advance of the early settlers, are found from Cape Cod to San Diego. There are the vestiges of the settlers' trails, the log cabin era, and the ruins of the temporary structures that were needed

for maintenance and defense in those early times. When some one of sufficient enterprise collects material of this kind and proclaims the fact in print or by lectures there is usually a gratifying local response and appreciation of the effort, often resulting in endeavors to record or otherwise preserve whatever may enhance the prestige of the place.

In Sweden this conception has taken the form of summer courses, mainly for teachers, given under the auspices of local organizations, and generally designated as studies in the home locality. In accordance with the underlying idea they set up as their aim, not primarily intellectual training of an academic character, but rather the purpose of rousing devotion to the home region, its interests and traditions. From the very first, then, the course included a study of early history and legends and whatever the place had to offer of antiquarian interest; later they came to include such features of the region as were significant for natural beauty and for this reason adapted to enhance its prestige; at a still later stage the resources and industrial possibilities of the locality were brought within the scope of the lectures.

Three distinct characteristics, due to the origin, have marked the work from the first: (1) The lectures are given during the summer, when nature is at her best; (2) they are held at central points in the locality to be studied; (3) they are conducted by teachers who have been brought up in the locality to be studied and who in consequence take a personal pride in their work.

Their origin dates back a year or two prior to 1907, when at least eight Provinces in Sweden carried out programs of this kind. The work extended rapidly the following years until in 1917 it came to have a prominent place in vacation studies in all parts of the country, particularly in the south, where love of home surroundings is especially strong.

A typical instance of how these home locality courses start and develop is contained in an account of a meeting held in the city park at Simrishamn, on June 18, 1909, published in Vor Ungdom (September, 1917). On this occasion 300 persons effected a permanent organization for the study of the home locality, each member enrolled paying a fee of 5 crowns. A six-weeks' session was held. Says Vor Ungdom:

> The forenoons were as a rule given up to lectures and the afternoons to excursions. Historic events of local import as well as prehistoric associations were discussed, in connection with an exhibition of relics from the Bronze Age. There was a lecture about the neighboring church, one about the history of the city, and another about life in a near-by city, Inglestad, during ancient times. One excursion was connected with talks on the local flora, another about the shale and lime formations, and one about the floral studies and the trips made by Linaeus in the vicinity; others dealt with the industries, among which fishing on the east coast of Skåne received special attention. But in the entire series nothing made such an appeal as did the folk traditions and the folk songs.

The course made use of the material contained in the city museums. A large and varied exhibition was provided showing ancient customs and equipments; and about one hundred volumes dealing with the locality were brought together.

A report from the course in the Home Locality at Engelholm, in 1912, shows that similar lines were followed. But here were no fewer than three exhibitions: (1) A gallery of paintings comprising 91 numbers; (2) an exhibition showing the history of the place in its development; and (3) another in the articles of sloyd produced in this vicinity, in connection with which prizes were awarded. The formal lectures treated antiquarian and historical topics—the history of the city and country. The series included reminiscences of noted men connected with the place, also the substance of old sagas and traditions. The State geologist gave a survey of geological conditions thereabouts, followed by talks dealing with forestry, agricultural and industrial resources. The series was concluded by a festival in which a conspicuous part was taken by a parade of knights in historic garb. Three counties were included; local banks provided a part of the expense; the Central Bureau for Popular Lectures contributed several hundred crowns. There were 222 participating members, 30 of them being teachers.

Some of these courses have departed both in scope and direction from the original aims. In 1916 the programs of those given under the auspices of the National Teachers' Association, while retaining the original feature of work in local interests, assumed the character of teachers' institutes. Another class has enlarged its scope so as to include not only matters of local prestige but also natural history, lectures on languages, civil history, methods, and class-room practice.

The organization that has brought these courses to their present advancement is Norrland's Society for Locality Study, founded in 1909. Its purpose is to gather funds for research in local history, to exploit this scientifically through library and school activities, and to disseminate knowledge about the province with the view of fostering love for home and country. The society has departments for archeological study, research in natural history, the study of provincial dialects, folk music (registering songs and melodies), library matters, and finally education. In a few years it has been able to collect specimens for a considerable museum, the expansion of an older collection—the numbers amounting to 9,000. In addition the members have an open-air museum comprising about 60 acres, from which is a magnificent view of the city, the surrounding country, and the sea. Here they have brought the buildings of a farmstead from Ångermanland, a cattle shelter from Norway's peculiar pasture highlands, and a Russian tower of wood construction, with belfry. Then, too, they have completed a natural museum with a collection per-

taining to history, zoology, and geography, and a library about Norrland. In 1913 this library numbered 12,000 volumes.

The educational means here provided have developed from the idea that the local parish school should bear, and be fitted to impart, a clearer impress of the locality. Teachers coming from the training schools have not received anything there calculated to help toward such impression. With the view of ordering the work toward these ends, four groups of subjects were instituted:

1. The natural history group: Geology and geography, to which later have been added surveying and map drawing, botany, zoology and meteorology.

2. The philosophy group: Swedish language with paleography; the study of provincial dialects; anthropology.

3. The historic group: The study of antiquity; Swedish history and sociology; statistics of history; local history.

4. The pedagogical group: Psychology; the history and theory of education; technique of studies in the home locality.

The plan of this work comprises lectures and exercises connected with excursions, all with the purpose not only of imparting information but of spurring the members on to independent study and research. Hence whoever wishes may apply for examination both in what he has formally gone through and what he has done independently. The total time of the course is four months, divided between two summer vacations. Four or five lectures, together with the exercises, constitute approximately the day's work. It is expected that all the members will be teachers from the provinces. To carry into practical effect the plan thus outlined, it was found that more money was required than was at the disposal of the association, a difficulty temporarily overcome by receiving permission to use part of the funds for the advanced training of teachers.

In this way the home locality course at Härnösand was started in June, 1914. The outbreak of the World War caused the work to be interrupted, so that a part of the plan had to be deferred until the following summer. But from that time until the present the work as begun has been maintained in steady activity. The number of those enrolled has grown until it includes not only people from Norrland but also from other parts of the country. The regulations for admission require that the candidate shall have served as a teacher at least two years and that he be below the age of 45.

The State aid which each member receives is somewhat less than in similar organizations in Denmark; there each one received 125 crowns in 1915. Those who take part are paid one-half of the traveling expenses where they have more than 60 miles to come. On the other hand, the instructors receive higher pay in Sweden than in

Denmark—15 crowns for each lecture and 15 crowns for each double hour of laboratory work. Over and above this, instructors living at a distance from the district receive traveling expenses in full. The teachers who have participated are preparing outlines of all lectures and publishing them as handbooks for the work in its entirety. These are published by Norrland's Association for Locality Study, and are of value for other forms of instruction besides those here discussed.[1]

This mode of school activity has occupied so conspicuous a place among Swedish school conceptions that educators have contemplated making it the central unit in the projected university for summer work. But the consideration came up that the very nature of the work requires that it be done in specific places and not at a central point remote from such localities. Hence the courses are coming to be established at community centers and to depend on these for expenses. The work they do for teachers is not primarily intended to remedy defects or inadequacies in training, but to supply an element of local inspiration and interest that teachers' training schools have not yet attempted.

THE DEVELOPMENT OF THE COMMUNAL MIDDLE SCHOOL.

The modern (real) school created by the enactment of 1904 and providing a six-year course for children within the ages 9 to 15 has not, according to the opinion of school men in Sweden, altogether fulfilled its purpose of giving advanced instruction suited to positions in general civil life. It was accessible only to pupils who lived in or near a larger city; it did not sustain any organic relation to the folk school except in so far as its first three classes could serve as preparation for entrance. Its real purpose was taken over and filled by private schools for boys and girls or by coeducational institutions which, upon meeting specified stipulations, received State aid.

In Sweden, as in Norway and Denmark, there has long been a movement in the direction of requiring the folk school to furnish the basic instruction needed for admission to secondary schools. This movement assumed legislative form in the Riksdag of 1908 in a proposition for State aid to communal middle schools. As this step was taken late in the session it did not come up for formal consideration till 1910, when State subvention was granted to this type of schools. One significant effect of the act was to enable smaller cities and even villages to establish a class of schools that would bring their pupils to a point of advancement equal to that of the modern school. Between the years 1910 and 1916 the number of

[1] Teachers' and students' handbooks, indicating the scope of this work with plan for presenting its subject matter, have already appeared, such as, "Handledning vid Undervisningen i Hembygdskunskap," Parts I and II, by L. G. Sjöblom, Norstedt & Sons, Publishers, Stockholm.

institutions of this class doubled, increasing from 15 to 31. In consequence of their rapid growth the State appropriation was, during the same period, increased from 10,000 to 100,000 crowns.

Such schools are generally established by the reorganization of a former private coeducational school or a higher elementary school. As described in the order granting State aid—

> The communal middle school is an educational institution founded and maintained by the community, aiming to impart such education for citizenship as the modern school emphasizes: it continues as a superstructure to the elementary school, and, with respect to entrance requirements, presupposes the advancement attained in the highest class of a fully equipped elementary school. It is to comprise four one-year classes above the elementary grades, each school year to consist of 38 weeks.

At first thought it would seem as if its parallelism with the modern school would result in a wasteful duplication of types. When, however, pupils who are expected to pursue advanced studies leave the public school, they are thought of as making a departure from the line of public-school continuity. They come under the charge of teachers who have had longer training; they are required to pay tuition fees; their associates come, in most cases, from homes a little better off economically, and they can hardly avoid the feeling of social differences. The communal middle school will furnish them the advanced instruction without any departure of this kind.

In the communal middle school the schedule is more flexible, adapting itself more easily to local demands. The appended schedule comprises the two types, the four upper classes of the modern school with the four classes of the communal middle, giving the average hours in the latter.

Subjects.	Modern school.					Communal middle school.[1]				
	III.	IV.	V.	VI.	Total.	I.	II.	III.	IV.	Total.
Christianity	3	2	2	2	9	1.7	1.8	1.9	2.0	7.4
Mother tongue	6	4	3	3	16	5.5	4.1	3.2	3.1	15.9
German	6	4	4	3	17	7.3	5.3	4.5	3.8	20.9
English	.....	5	5	4	14	.....	4.3	5.0	4.2	13.5
History	3	3	3	4	13	3.0	2.5	2.8	3.5	12.2
Geography	2	2	2	2	8	2.1	2.1	2.0	2.0	8.2
Mathematics	5	5	4	5	19	5.0	4.9	4.3	5.0	19.2
Biology	2	1	2	2	7	2.2	1.5	1.9	1.8	7.5
Physics	.....	2	1	2	5	.5	1.8	1.2	1.9	5.4
Chemistry	.....	.....	2	1	3	.....	.3	1.8	1.1	3.2
	27	28	28	28	111	27.3	29.0	28.6	28.5	113.4
Penmanship	1	.....	.....	.....	1	.7	.....	.....	.....	.7
Drawing	2	2	2	2	8	1.8	1.8	1.7	1.7	7.0

[1] Lack of uniformity in the schedules of this type makes it necessary to reach an average in computing the hours, hence the fractions.

Though the communal middle schools are under the control of the State supervisory board, which appoints their superintendents and inspectors, they are in other respects dependent only on the communities. The training of the teachers and their eligibility for

appointment have elicited much discussion but have finally been embodied in regulations as follows: To be appointed as permanent teacher in any subject the applicant—

(*a*) Shall meet the requirements for appointment as assistant or subject teacher of a State school, but that the time of service required for such appointment may be substituted by service in a folk school.

(*b*) Shall have passed through a normal school and continued at a communal middle school, higher folk school, or a similar institution.

(*c*) Shall have studied the middle-school branches at the university and received good grades or passed the teachers' examination with good grades or in some other way acquired educational efficiency.

These regulations are to be in force until the question about the further development of the folk school shall have received a satisfactory solution. The communal middle schools may be organized either for one sex or as coeducational.

Their influence on the school system as a whole is already apparent; they have made it possible for the folk school to move on more directly toward educational aims in this country associated with scholarly prestige; they have made the connection between the elementary and the modern school closer, with the possible result that in the near future many of the six-year modern schools will be reorganized in accordance with their plan.

THE OBLIGATORY CONTINUATION SCHOOL.

A movement parallel with the foregoing has also been in progress for years and has finally resulted in the enactment of a law creating an obligatory continuation school. On May 8, 1918, the Riksdag passed a bill providing for such extension of the scope of the folk school as would bring Swedish youth to a further stage of educational advancement; the courses of instruction to be devised with special view to the needs of present social and economic life. The far-reaching changes and modifications involved in putting into effect the details of this law are to be carried out so as to be in full effect by the end of 1924. The State Supervisory Board has issued a compendium for teachers and school authorities, instructing them in the operation of the law and in the manner of effecting the changes contemplated.

The aim of the statute is the organization of a superstructure to the folk school to give young men and women vocational and civic instruction. It is a part of the aim already set up by teachers and philanthropic organizations; namely, to make use of the trades and occupations to keep the young in law-abiding and moral walks of life. The young man who acquires a trade or other vocational fitness has

not only thereby gained security for the future but he will also gain inducements toward correct living.

Touching the continuation school two principles are kept in mind as basic: To furnish training that will lead to the mastery of a trade, and to advance the folk school subjects to fuller completion. The higher folk school also comprised in the provisions of the statute will be a parallel type, with the advantage of a longer period of instruction and more comprehensive courses. It will be adapted for children who, after finishing the folk school, have the opportunity of giving some further time to their schooling. Like the other kind, this will also be organized as of two types: One with a trade in view, the other for general training. In accordance with special local needs and conditions it will comprise one, two, three, or four years, with 36 weeks a year.

The continuation school comprising a two-year period will be obligatory for all pupils who complete the elementary school without taking up studies in a school of some other kind. It is to have, as a rule, 180 instruction hours a year. The State appropriates the full amount of salaries for the teachers, but the community furnishes buildings and instruction material. The courses lead to the trade schools, also comprising two years, with 6 to 12 hours' instruction a week. The departments which the trade schools are to embrace will be of four classes: A school for industry, a school for trades and artisans, a school for commerce, a school for household work. The law recognizes the need of subordinate branches under each class and leaves the greatest freedom for such specialization as each calling or each locality may require. So far as the household work is concerned, it is for the first time placed on a level with other trades in respect to credits. It is made accessible to all girls who are not employed in some trade, industry, or business, or who are not receiving instruction of a kind equivalent to the trade school.

While these schools are made obligatory for the pupils, they are not for the communities for the reason that many of the latter are unable to bear the expense that the founding of such schools would entail. As the trade school will be attended by pupils above the elementary school years, many of them will be employed in the trades during the period of attendance. For this reason, their employers are required to release them from their duties for periods sufficient to participate in the instruction. The State contributes two-thirds of the teachers' salaries and from one-half to two-thirds of the expense of maintenance, while the community provides the buildings and the rest of the expense for maintenance.

In order to prepare the teachers and specialists needed to take charge of the work, advanced technical training schools and gymnasia are to be established. For the early instruction, business schools

will be started, connecting in their advanced courses with the commercial gymnasia already existing. The nature of the work is such that teachers who have both educational and technical training will be required.

There are already many continuation schools in Sweden, some private, others public, that have practical instruction in the trades as their aim. Many of these are excellently equipped through the munificence of private donors. The law just passed will, however, extend vocational instruction to all the children of the community. Its full effects will appear in added facilities for the work in reconstruction in which each community will have a share after the war.

Further reforms in prospect.—Though the provisions for new educational facilities created by the laws of 1908 and 1918 were timely, the educational press of Sweden is discussing still further reforms. Several problems rise immediately out of the relations the communal middle schools and the obligatory continuation schools are to sustain to existing school types. As early as 1913 and 1915 there were intimations in the Riksdag that State aid for schools duplicating each other's work could not be expected. The question, moreover, as to how the modern school subserves its purposes has become prominent. It is pointed out that its final examination comes so early in the life of the pupils that they are not mature enough for the promotions and positions for which this examination is intended to be the qualifying test—admission to schools specializing in agriculture, technology, postal and telegraph training, positions in the railway and banking service. Again, the schools for the education of girls need reforms with the view of reducing the expenses of attendance and making it possible for the teachers to become better prepared, and in general for transferring the instruction from the private schools to those of the State.

Further development in the system must, in consequence, have regard to the relation among the various types; it must secure a better ordering of the education of girls; it must reconsider propositions earlier laid before the Riksdag about additional main lines of study in the gymnasium as well as of the articulation between this type of school and the preparatory schools from which it continues.

The advocates of these reforms have in mind, evidently, the basic principles of the uniform school (Enhetsskolan), which requires organic and direct continuity between institutions of different degrees of advancement with the folk school as their common basis and preparation. They emphasize the further principle that the work in the secondary schools should be grouped in courses such that only those best endowed are induced to select work leading to the advanced high schools and the university. With the same purpose of selecting the best gifted for higher studies, admission to the

gymnasium should be made dependent on natural endowments, whereby an undesirable increase in those immatriculating in the advanced institutions would be counteracted. The practical reforms already carried out in the communal middle schools and the obligatory continuation schools will assist in the further reforms here mentioned, which are mainly the theoretical completion of the former.

EDUCATIONAL ACTIVITIES APART FROM THE SCHOOLS.

Much educational work is conducted by teachers' associations and other groups outside of the scheduled work of the schools. These organizations are generally well established, and are usually supported by funds from the State or by the income from endowments. Their activity is not at all limited to the occasions of their periodical sessions or to the business that rises immediately from these, but they are organized with permanent offices, with the view of attending at any time to such matters as come within their scope. A few of these organizations in Sweden are the following:

The Society for Physical Training. Founded in 1913, and in 1914 united with the Swedish Society for Open Air Games and Health Education. It receives a State subvention of 1,000 crowns a year. Its purpose is to work for rational physical training. Address, Stockholm.

The Society for School Gardening. Endeavors to secure such further reorganization for gardening in connection with elementary schools as this work obviously deserves. Address, Nyqvarn.

The Central Society for Social Work. Disseminates information on social questions with the purpose of helping to solve important social problems. It organizes lecture courses among all classes of society. State subvention, 2,000 crowns. Address, Stockholm.

The Society for Folk Instruction. Maintains a lecture bureau for popular lectures on scientific subjects; arranges for the purchase of libraries for schools and societies; supports traveling and permanent libraries. It receives State and community aid to the amount of 34,000 crowns. Address, Stockholm.

The Society for Temperance and Education. Teaches temperance and morality on the basis of a Christian outlook on life. Its work is accomplished by literature and lectures, programs and entertainments, traveling libraries and traveling school kitchens. Resources, several hundred thousand crowns. Address, Vasagatan 9, Stockholm.

The Society for the Promotion of Folk Instruction. Publishes books and pamphlets of an educational character and discusses methods and means of improving the work of the schools. It maintains a girls' school with a three years' course, the last year devoted to practical instruction in occupations for women. Resources, 110,000 crowns. Office at Stockholm.

Teachers' Association for Folk High Schools. Encourages advanced instruction in branches taught in the folk high schools and the agricultural schools.

Teachers' Association of the Communal Middle Schools. The interests of this class of schools and their teachers are included in its aim.

The Society of Public School Inspectors. Address, Malmö.

Society of City School Inspectors. Address, Linköping.

Women Teachers' Mission Society. Its purpose is to train teacher missionaries. Address, Gothenborg.

The Association of Women Teachers. Promotes the educational and economic interests of women teachers throughout Sweden. Address, Lidingö.

The Congress of City Teachers. Founded in 1906. Cooperates in matters pertaining to the interests of education in the cities. Office at Gothenborg.

The Friends of the Swedish Folk School. Its aim is announced as follows: "Moved by the sincere conviction that education is inseparably united with a Christian life, the society will work for educational ends in accordance with this principle, so that Christianity in the folk school may be maintained in its Biblical fullness and permeate all instruction and, hence, become the life of school, home, and society." Address, Stockholm.

The National Teachers' Association of Sweden. Comprehensive in its scope and activity. Some of the foremost educators are on its directing board. It has a membership of about 14,000 and funds to the amount of about 70,000 crowns. In the course of its work, the association has developed so that it is now divided into a number of permanent bureaus and committees, each made up of specialists within the field assigned to it: (*a*) The literature bureau, with a membership of about 650, attends to the editing and publishing of educational publications. (*b*) The editorial committee prepares handbooks for teachers. (*c*) A special committee plans and directs courses in drawing. (*d*) A committee plans and manages courses in singing. (*e*) A special committee has charge of the school museum at Stockholm. (*f*) A Saga committee cooperates with a publishing house in Stockholm in collecting and publishing suitable literature for children and the young. (*g*) A committee has charge of the disposition and use of the traveling libraries. (*h*) A committee on school excursions plans and manages visits of pupils and teachers to other schools and other countries. (*i*) A board of economics has charge of the finances of the association. (*j*) The information committee confers with, advises, and helps teachers in economical and legal matters. (*k*) A life insurance committee advises teachers and looks after their life insurance interests. (*l*) The correspondence committee has the duty of bringing about suitable cooperation with teachers' associations of other countries.

Through these several branches the association takes the initiative in educational endeavors, conducts discussions, issues reports, and formulates educational measures for the consideration of the State supervisory board. In this way it has, for instance, done efficient work in the interest of the higher folk schools and in securing the enactment for obligatory attendance at a continuation school. The 15,000 crowns allowed by the Riksdag for teachers' continuation courses is due to the efforts of the association. By means of this sum the association has established teachers' libraries, teachers' courses in drawing, singing, and courses in practical labor. Besides instituting lecture series in studies in the home locality in several centers, the association is cooperating with the State supervisory board in efforts to secure a normal plan for locality study.

During 1913 the association conducted an investigation on the condition of the pupils' health. It found that certain steps toward ameliorating the conditions should at once be taken, and immediately submitted requests to the school committee on the care of the pupils' teeth. In its official organ it has combated the use of tobacco among pupils; it has caused the privileges of the pupils' health colonies to be more generally extended to children in poor health.

The association has accomplished much for its members and for the schools in general in campaigning for adequate salary increase in view of the high prices of recent years, and also in encouraging teachers to remain at their posts of duty instead of accepting tempting offers of more remunerative employment.

DENMARK.

GENERAL SURVEY OF THE EDUCATIONAL SYSTEM.

Administrative boards representing both the church and the state exercise control and supervision over the schools of Denmark. The State adopts the regulations governing programs and courses, the length of the school year, and the distribution of the vacations; it provides the facilities for the training of teachers, passes on petitions for grants and subventions, and attends to the general management of all the economic matters of the schools.

In the several communes, local school matters are dealt with by parish commissions. In the cities the commission consists of the pastor, the mayor, and two or three lay members; in the rural districts it is made up of the pastor and one or two lay members. Through these authorities the communes exercise a degree of supervision and inspection that in other countries is usually vested in officials of the State. Immediately above the parish boards stands the county council with its school direction, whose chief function is to appoint teachers from lists supplied by the parish and to have charge of the apportionment of teachers' remuneration and pensions.

Through the ex officio position of pastors and bishops the school stands in close relation to the church. In each diocese the bishop visits the schools and informs himself directly concerning their educational needs, how teachers and school boards are attending to their duties, etc.

The status of religious instruction is a subject of recurrent discussion in the journals of education. The law as it reads now permits exemption from instruction in the case of children whose parents do not belong to the state church, on the condition, however, that they in some other way receive equivalent knowledge of general moral and religious truths.[1] In order to give the teacher freedom in conducting the recitation, no formal examinations are required in this subject and no grades are issued.

In former years it was held as self-evident that the schools should teach religion as the foundation for training in moral stability of character. But later views insist that pupils should be left independent of the problems of religion and that the subject should be taught as a part of general history, leaving purely religious instruction to the church and the home. The majority of teachers, however, hold that instruction as hitherto conducted should be maintained, even though many of them would gladly be independent of the ecclesiastical supervision now exercised over their work.

[1] Handbog i lovgivningen om den danske folkeskole, 1917.

The first compulsory school law was passed in 1814. As modified by later enactments now in effect, it requires children to attend from 7 to 14 years of age, the period comprised in the elementary school. In the event of privation or sickness prevailing in the home, a pupil may be excused from attendance at school. A formal release from attendance may also be granted before the expiration of the required school period. The responsibility for granting such excuses for nonattendance rests solely with the school commission.

These regulations have been so strictly enforced that there is virtually no illiteracy. A careful record of absences is kept and reported, and when they are not accounted for in a satisfactory way fines are collected. For the year 1914 the sum of 15,000 crowns [1] was thus collected in Copenhagen. In other cities and in rural communities the sum thus brought in amounted to 79,000 crowns.

The length of the school year is 41 to 46 weeks, about 246 days. The local board determines the proportion of whole and half days per week in the district, often making it four whole days and two half days in winter, and three whole days and three half days in summer. The number of hours required per week is a minimum of 21, not counting gymnastics, drawing, manual training, sloyd, and household work for women. The regulations also fix the maximum number of pupils in a class as 37 for schools in the country and 35 in the city.

At the age of 11 the pupil may enter on a four-year course in the intermediate school (Mellemskole) with one year extra for those who desire to prepare for the modern school (realskole) examination, which admits the pupils to the gymnasium. The gymnasium offers courses along three lines: The classical, the modern language, and the mathematical-scientific. School reforms now under consideration propose to reduce these lines by the omission of the classical, including its subjects under one of the two remaining ones. The same trend in the secondary schools moves in the direction of giving more time to the study of English and German by omitting Latin. How the status of German will be affected by the war is not clear nor can it readily be forecast from the reports that are at hand.

There are 48 gymnasia, of which 8 offer all three lines, 29 offer 2, and 11 only 1. The total number of secondary schools in 1912—commercial, private, and State—was 218, of which 146 were coeducational, while 32 were exclusively for boys and 40 for girls. Tuition in the intermediate school is 120 crowns per year; in the gymnasium it is 150 crowns.

[1] A crown is equal to 26 cents.

In response to the demand for practical training for those who have completed the elementary course, a number of trade schools, continuation schools, and evening schools have sprung up. As the pupils of these are generally wage-earners, many trade schools have the schedule of hours so arranged that a pupil may take up selected studies without discontinuing his regular employment in the factory or the shop. The attempt has therefore been made to extend the schedule so as to make use of the evening hours, giving rise to a considerable number of evening schools. For 1912 there were 798 throughout the country. But as the teachers of these schools and the pupils that attend them are employed during the day, it has been felt that other forms of continuation schools offer better working conditions. Again, the evening schools, by stressing almost exclusively the remunerative side of the occupation in which the pupil is engaged, do not respond to the need for more cultural activity, which asserts itself, even in these practical associations.

The objections against permitting the pupils to give a part of their time to remunerative work have not been overlooked. In 1908 an investigation by Denmark's Statistical Bureau showed that of a total of 370,440 children 45,512 worked certain hours a day for parents and guardians and that 65,397 had employment with others, hence less than one-third of the pupils had to perform labor not connected with school assignments. In so far as the investigation was completed, it did not substantiate the supposition that pupils employed under the child-labor regulations were thereby handicapped in health, development, or progress.

One class of institutions in Denmark has attracted the attention of the whole world, namely, the peoples' high schools, which, together with the agricultural schools, have greatly advanced the farming classes in prosperity and prestige. In Copenhagen is a veterinary school of high rank. There are professional schools for medicine, dentistry, and pharmacy; also noted technological and navigation schools. The Academy of Fine Arts and the Conservatory of Music rank high among institutions of their kind.

The University of Copenhagen comprises the faculties of theology, law, medicine, philosophy, science, and mathematics. The number of students, including those regularly matriculated and others, is upwards of 3,000. Its courses run through periods of 5 to 6 years. It is a center of research and scientific activity, which already numbers many scientists who have made momentous contributions in their several fields. In the United States these names are well known: Meyer in medicine, Lorenz in physics, Thomsen in chemistry, Höffding in philosophy and psychology, and Brandes in literature and criticism.

THE NATIONAL POLYTECHNIC INSTITUTE.

This institution, ranking with the university in scope and advancement, has given direction to much of the scientifically constructive work in the northern countries. In 1918 it had a faculty of 46 professors, 39 instructors and 25 assistants, with a number of laboratory and machine shop assistants and attendants. Broadly speaking, the instruction embraces four departments with groups of courses in factory engineering, mechanical engineering, architectural engineering, and electrical engineering. To complete the work in any one of these lines, requires four and one-half years. The subjects taught include all those connected with theoretical and applied science. Counting the courses taught by lectures, the series of experiments and laboratory exercises, the number of subject units offered during 1918 amounted to about 600. A few of them are: Architecture and iron and steel construction; ship building; road building; house building; electrotechnics; heating and ventilation; municipal hygiene engineering; technical chemistry; machine testing; testing of materials; planning factory plants; theory of dynamic motion; theory of experimentation, in which the most common methods of making experiments in physics are explained; courses for workers and specialists in machine construction and factory engineering; chemistry for specialists in mineralogy and geology; technical chemistry applied in the study of fertilizers; glass composition and characteristics, melting and decoration; reducing ores and the extraction of chief products and by-products; distillation of peat deposits; purification and manufacture into gases and oils; and agricultural bacteriology; nitrogen-producing bacteria. These are only a few of the remarkably comprehensive list of courses.

Anyone who can give satisfactory evidence of being prepared to profit by the work is admitted. To register for examination, however, certain specified preparatory subjects are required. The cost of instruction, including laboratory facilities, is 50 crowns per semester for those registering for examination. The fee for a course of one lecture per week is usually three crowns per semester; for a greater number of lectures and laboratory hours the charges are at proportionate rates.

Recently a new degree has been instituted, that of Doctor of Technics, conferred on those who successfully pass the final examination and whose written theses are accepted. Foreign students, who present sufficient evidence of having completed the prerequisite studies and of being engaged in scientific researches approved by the authorities, may enroll for this degree.

Any one holding the degree of Doctor of Technics has the right to offer courses of lectures at the Polytechnic Institute after application in accordance with the rules of the institution.

A number of funds have been provided for the purpose of encouraging students to enter this institution. The American-Scandinavian Foundation of New York has liberal funds available for persons taking up studies in this or any other institution in the Scandinavian countries.

THE PEOPLE'S HIGH SCHOOL.

These institutions have long had the attention of educators from many countries. They have been regarded as one of the chief agencies that helped Denmark to recover from the disastrous wars of 1864–1866. To them, in a large measure, is due the achievement of making the meager soil of the country so productive as to raise the farming population from privation to a fair degree of comfort. The model farms, the dairying and packing-house industries, which have become the pattern for other countries, have been set down to their credit. Educators of the war-stricken countries will find in these institutions not only efficiency in the usual sense, but some of the basic elements that make for recovery and reconstruction.

The system of schools.—Though something may be credited to the system, as will be pointed out, the obvious achievements of the schools are mainly due to other causes. They have no class-room procedures that can be considered superior to the other schools of this country. Their teachers are not better trained; their experimental and laboratory facilities are not more ample. The agricultural schools are just as practical, and they do many things better. The vocational and trade schools are more direct in the insistence on the productive application of what is learned. The well-equipped technological institutions of Denmark supply better training in more advanced courses.

But the system establishes a relation between the pupil and the instruction that in itself promotes achievement. At the age of 14, or earlier, the pupil leaves the elementary school, usually to take a position as an apprentice in one of the trades or as an employee on a farm. During several years of the adolescent period he is employed in manual work, attaining development of body and also some definiteness of purpose. Most of all his experiences, often under a severe taskmaster, create in him a desire to lift himself above the restrictions in which he toils. Then at the age of 18, or later, he may enter the Peoples' High School to improve his opportunities, and he then readily meets the one entrance condition the institution imposes, namely, a desire to learn.

Where he sees an opening for useful work, he does not feel hampered by degrees or ends to be attained in the final examination. Older people may come to the high school to get information pertaining to some line of work they have in hand, and stay during the

days or weeks necessary to obtain the full aid of the school. This adaptable character makes it possible to take cognizance not only of the special needs of a group of farmers or fishermen, but of such particular conditions as govern the industries of any locality.

The spirit of the schools.—It is claimed that they have discovered the way to educate the young men back to the farms, and, if this be true, it is worth while to note how they do it. Some main causes are principal and some are contributory. In the first place, all their courses and experiments are associated with the sense of the dignity of labor. They teach, not caste, nor self-conscious pride that looks for contrasts and distinctions, but a simple love for the farm, the forest, and the sea—the dignity of the farmer's occupation, let other occupations be what they may.

The schools begin their recitations with songs, thereby investing the work with a zest that could not easily be obtained in any other way. This practice perhaps furnishes a psychological stimulus to the students and aids cooperative effort. Poetry and singing, in fact, lie close to all they do in the classroom as well as in the evening voluntaries. The students take their poets earnestly, seriously, while we, too often, only tolerate them. But poetry prepares the way for the Danish high school teacher to impress his pupils with a sense of individual moral responsibility, which is the only real basis on which cooperative work can be accomplished. People must trust each other and be able to turn aside from their own advantage and manifest an interest in others and the cause, if banking or marketing cooperation is to be successful. It is not some one's technical skill or grasp that makes such an enterprise possible but rather the spirit that pervades it.

We are accustomed to treat our school subjects strictly according to their character. Whatever is matter-of-fact is dealt with as such without any attempts to idealize it. We relegate sentiment to what is held to be its own proper place. But in the Danish schools geography, sociology, poetry, and love of country come into very human relations during the school hour. These schools are able consistently to deal with the main subject in its proper character without losing sight of its points of human connection.

As the principal facts about these institutions are readily available,[1] it may suffice merely to mention that there are about 80 such schools in Denmark, about 45 in Sweden, and 24 in Norway. They are started by public-spirited members of a community, who call a mass meeting, and raise the necessary funds by subscription. Afterwards the schools are accredited by the State and receive State aid. They

[1] A School for Grown-ups. By Philander Priestly Claxton. In Conference for Education for the South. Proceedings, 1909, pp. 198–203.
The Educational System of Rural Denmark. By Harold W. Foght. U. S. Bureau of Education, 1914.

give a six months' course in the winter for young men, and a five months' course in the summer for young women. In some of these institutions the courses cover two years; in others, one year. Worthy students receive State aid. An inspector visits them and reports on the work. The Government, however, does not interfere with the arrangement of subjects, courses, or hours, but satisfies itself with knowing that there are devoted teachers and authorities and permits them to go on without interference.

SCHOOL EXCURSIONS.

School journeys have become a part of the year's program in most schools. They are the realization of a principle which is gaining the general approval of educators in this country. Teachers and pupils, it is held, find some of their best opportunities for training and instruction in material lying outside of books and classrooms.

Every autumn, toward the middle of September, there is an excursion of two days for the boys of from 10 to 12 years, accompanied by a few of the larger boys, who make it as a final trip. These instruct the younger ones in the details of the journey, help in the discipline of the party, and encourage their younger companions in endurance while on the march, so that the latter may be trained to take part in the grand excursion coming later. If a pupil should show himself much fatigued by the trip, he is not permitted to take part in the later excursions. One of these comes in the spring and lasts seven days; another during the summer vacation and lasts from three to four weeks.

Usually there are about 30 or 40 pupils in the party and three or four teachers, the number taking part in the shorter trips being, however, considerably greater. As preparation, the pupils are instructed in the route with the map before them and otherwise helped to be benefited by what they are likely to see. They prepare a guide pamphlet of their own, with maps, descriptions, and also regulations to be observed while en route. Each pupil is required to keep a day-book, both for purposes of gaining clearer impressions and for acquiring a souvenir of the trip. A fine is imposed on those who do not observe the regulations and a prize awarded to the one who furnishes the best description. Each pupil carries a knapsack with his equipment and also provisions for a week, if the trip is to last that long. A day's march is often 37 kilometers (23 miles)—sufficiently long, as it would seem. Every two or three hours they rest an hour by some spring or stream, lunch, bathe, or, at least, take a foot bath. Toward 6 o'clock the party halts at a hotel and takes dinner or supper, usually a frugal meal. At 9 o'clock everybody is expected to be in his room, where he may not talk so as to disturb others, though he may converse quietly, and write letters or write the day's account

in his diary. The program indicates the hour for breakfast, and it rests with each one to get up and appear in time, for the members of the party are often lodged at different hotels.

For a trip of two days the expense of each pupil is 4 or 5 crowns a day; for the longer summer journeys, it is about 5 crowns a day. The journeys are not limited to Denmark, but include railway and steamship trips to Norway, Sweden, Vienna, Berlin, Milan, etc. Everything is carefully planned in advance, so as to reduce the expense.

The places included in the itinerary are those that afford an interest from the point of view of history or nature, so that the teachers may connect them with what the pupils do at school. In foreign countries practice in speaking the vernacular is eagerly sought. Visits are made to industrial establishments and operations and processes are explained. Notes are kept on the places visited, history, life of the people, natural resources, markets, etc., which are afterwards worked up into papers and essays. Teachers find that on a trip pupils show much greater interest than while on the benches of the classroom. On their part, too, pupils learn to know and to appreciate their teachers better.

Of a similar order are children's vacation journeys, originally intended to give poor children of the cities the advantage of a few weeks in the country. Every year about 25,000 boys and girls from the schools of Copenhagen, Frederiksborg, and Aarhus obtain free transportation by railroad or steamboat to the country to pass four or five weeks with families who extend hospitality to them. Usually the parents of the children make arrangements with some family willing to receive them during vacation, but a great many are furnished accommodations and entertainment through the efforts of the schools. At a certain time of the year the children inform the principal of their wish to spend some time in the country, of the place they desire to visit, and possibly the family with whom they would like to stay. The principal takes these suggestions into consideration, and with the assistance of the other school authorities prepares a list of the names to be submitted to the railroad or steamship companies with a request for the necessary tickets. These tickets are sent to the schools. The companies run special vacation trains carrying the children to their summer destinations. In order to reciprocate, the people of Copenhagen have formed a "Society for Entertaining Children from the Provinces." This society has met with great success. In recent years 163 village schools with more than 8,000 pupils have been benefited by its work. The transportation companies have been accommodating and generous. The stay in Copenhagen is at the expense of the society, which receives a subvention of 4,000 crowns from the city of Copenhagen and lesser sums from other cities.

TEACHERS' TRAINING, SALARIES, AND STATUS.

Teachers of the elementary schools are trained in the normal schools, of which there are 4 public and 15 private, offering three-year courses. Tuition at the private normal schools is 150 crowns a year. To be admitted the applicant must be at least 18 years of age. The teachers in the State secondary schools are educated at the university. Examination in specified academic subjects are required; then follows the special pedagogical training with practice teaching in some school approved by the university.

As new subjects have been added to the curricula and new types of schools developed, there has come to be an insistent demand for better training of teachers. It is not complete enough, the critics say; it includes no instruction in a foreign language, and, in general, it is too limited in view of the rapidly expanding field of education, both in practical and theoretical directions. Again, the teachers' colleges have too decidedly an academic character. The discussion of inadequacies of this kind have thus far led only to the regulation of 1913 requiring a strict entrance examination for admission to these institutions. By means of special courses in methods and practices the teachers have, through their individual efforts, tried to keep abreast of the progress made in their profession.

While the teachers' compensation, here as elsewhere, has been inadequate during the recent years of high prices, requiring special enactments for an emergency increase, the laws provide a fair competence during normal years. Here as in other Scandinavian countries the salaries and the eventual pensions are so regulated that a position means a certain salary, with periodical increases and, upon attaining the age limit, a retiring allowance. As a prerequisite for an appointment that places him in line for this remuneration, the applicant must have passed the teacher's examination and served successfully as a teacher during four years.

The prospect of a periodical increase in salary and a final retiring competence induces the teacher to look upon his calling, not as a stepping stone to something more desirable, but as a life work. He is also relieved, in a measure, of the petty annoyances of having to negotiate with local boards from time to time. Successive enactments have had the effect of placing the salaries on the basis of the needs and comforts which a person in the position of a teacher may reasonably expect. In a general way the remuneration is higher in Sweden, counting the successive increments for years of service. In all the Scandinavian countries there are, over and above the yearly pay, free home, garden, and fuel or the money equivalents of these. An interesting and significant part of the salary laws is the consideration given for length of service.

Through the courtesy of Supt. Holger Begtrup, of the People's High School at Frederiksborg, Denmark, the salary regulations now in effect, together with special enactments for 1919, are at hand. The fixed annual salary has for a number of years past been as follows:

For a rural teacher in the first salary class 900 to 1,500 crowns plus the teacher's home, garden plot, and fuel, with successive increments, which in the course of 20 years raise the salary to 1,900–2,500 crowns. For a rural teacher in the second salary class, 700–900, plus home, garden, and fuel, increasing in the course of 20 years to 1,700–1,900 crowns. Women teachers in primary grades (in rural districts), 500–700 crowns. Teachers in the cities of the provinces receive a basic salary of 1,600 crowns, increasing in 20 years to 3,000. Women teachers in the cities of the provinces, basic salary 1,500 crowns, increasing in 20 years to 2,000. A teacher in Copenhagen receives 1,800 crowns, gradually increasing to 3,600.

Besides the municipal "high-expense bonus," which, in places where it is granted, amounts to 100–200 crowns annually, the State, has during the same years also granted a high-expense bonus. It is paid to teachers under the civil-service enactment of 1917 and amounts to the following sums for 1918: Six hundred crowns for a married teacher and 400 for a single teacher, in no case, however, to exceed 60 per cent of the current salary. This addition to the teacher's salary has been further increased by recent enactments adding 120 crowns to a married teacher's salary for 1919.

This law then fixes the remuneration of a teacher in the cities for 1919 at the current annual salary increased by 25 per cent, plus 720 crowns for a married teacher (500 for unmarried teachers). To illustrate: A married teacher in the lowest salary class in the cities will receive for 1919, 1,600 crowns plus 400 plus 720, hence a total of 2,720 crowns. A married teacher in the highest salary class in the cities will receive for 1919, 3,000 crowns plus 750 crowns plus 720, hence a total of 4,470.

For 1919 a special addition will be made to the pensions of teachers, widows, or orphans entitled to annual stipends or pensions. According to paragraph 9, the bonus to be paid will be 25 per cent of the pension, provided this amounts to 2,000 crowns or more; 30 per cent in case the pension is 1,000 to 2,000; 35 if it is between 700 and 1,000, and 40 per cent if it is below 700; yet the bonus must in no case be less than 240 crowns. Again, the pension and the bonus together in any of these cases must not be less than that to which a person with lower pension may be entitled.

In attempting to follow the work of the elementary teacher closely enough to see what particular phases of it he emphasizes, the following facts will be noted:

1. Wherever possible the elementary teacher leads his pupils to a point of physical connection with what has been intellectually acquired. Excellent instruction material, he believes, is found in the physical properties of earth and air, plants and animals, local resources, traffic, and commercial relations. The pupils have a keen desire to see things, a characteristic to which the teacher can appeal, causing them, for instance, to watch the growth of a sprouting plant, by starting—it may be on a very modest scale—an aquarium or a herbarium. By bringing a bit of nature into the school, new impulses will be imparted to the children.

2. The Danish teacher stresses the unity and organized form of the subject matter. In the advanced elementary class the topic, for instance, may be Holland and her transformation from a stretch of coastal marshes to a region of fields, downs, and pasture lands. Following this in its development the struggle of the people will come into view, their means of subsistence and the causes that started the industries of the country and gave it its very appearance at the present day. In close association come topics about life in various parts of the country. In brief, Holland as a unit, an individuality, is presented with various aspects of life and development in causal relations, and all without attempts at speculative conclusions.

3. The Danish teacher insists on the cooperation of the parents. He endeavors to bridge the chasm between the school and the home by informing the parents by direct and honest statements just how their children are getting along. The reports of the standing of the pupils in the school, issued at fixed intervals, tell the story of the children's progress only in part. They do not come so closely home to the parents as the full explanations which are also furnished at fixed periods. The following are typical examples of the latter taken from Vor Ungdom:

In English X has shown diligence and interest; he has acquired a more correct pronunciation and better expression in his reading. But his progress is not as yet satisfactory. He is yet unskilled in English phonetics and in English spelling. He lacks readiness in the use of language, but he is fairly sure in grasping the correct grammatical construction of an English sentence, and he has fair ability to render it in Danish. By continued diligence he will overcome the difficulties the subject presents.

The progress made by Y in the German language is not very satisfactory; he lacks the power of combining expressions. (He translates the words by rote in the German word order.) His imagination is hampered so that in a connection where he knows all the words but one and the meaning of this one is fully clear from the context, he can not translate it. His eye does not sharply catch the words of the text, hence he constantly confuses *w* and *v*, *ei* and *ie*. He has difficulty in retaining what he has once learned, both words and grammar forms. He deserves praise for the interest and diligence he has shown, but he should be impressed with the need of working with greater concentration. In some respects he has made fair progress; his vocabulary has increased; and his knowledge of grammar and his pronunciation have improved. While his general advance must be stated as hardly satisfactory, the fact must not be forgotten that he has studied German only one year.

The general supervision and inspection exercised over the teacher's work have been the subjects of considerable criticism. In his recent book, "The History of the Danish Public Schools" (1918), Joakim Larsen speaks of the "school supervision as virtually the same as that found antiquated 100 years ago, notwithstanding the fact that both teachers and schools have become entirely different." Many teachers hold that the independence of the schools requires that the supervision should be exercised by men from their own midst. Both as regards the administration and the supervision, teachers as well as clergymen are of the opinion that they lack the immediate authority found in most other countries. The Government commission of 1909 recommended that a supervisor should be appointed for each district and that he should take the place of the rector on the local board. The recommendation was not acted upon lest it should restrict the independence of the municipal board; again, some of the clergy saw in the proposed reform the beginning of the separation of the school from the church.

ARTICULATION BETWEEN PRIMARY AND SECONDARY SCHOOLS.

Among the questions at present much discussed in school circles is how to effect a satisfactory continuity between the public elementary and the four-year intermediate school. There should be, it is felt, a more compact organic unity among schools of these different types; a division point should be provided so that a pupil at the age of 14 may discontinue, if he desires, courses reaching completion at that stage. The articulation should be so adjusted that pupils from homes of different social planes may be induced to attend the same school through the elementary period.

The present system of public-school education comprises several types of schools related in the following order of continuity and articulation:

I. The Folk School: (a) A common-school period for all children between 7 and 10. (b) Advanced division of the common school for pupils between 11 and 14, the end of the required period.

II. The intermediate school with a four-year course for pupils from 11 to 15.

III. A modern school division of one year for pupils having completed the intermediate school, leading to real-skole (modern school) examination. For pupils from 15 to 16.

IV. A three-year gymnasium for pupils from 15 to 18.

The law of 1903 was passed with the general purpose of effecting a closer union among these types and with the special purpose of making the folk school the groundwork of the entire system. As the same law provided for additional aid to the intermediate schools, one result was the creation of a large number of schools of this kind,

supplanting thereby a proportionate number of the private schools, which up to this time had prepared pupils for the modern school examination. The vogue they gained was not altogether welcomed by the teachers and authorities of the Danish folk school. These regarded the law as framed and passed mainly in the interest of the secondary schools. Political and social conditions rather than pedagogical, it was held,[1] had been the causes of the general expansion of the intermediate school. But its dual character of a preparatory school for the gymnasium and of a modern school had left it with a lack of organic unity that has been felt as a defect in its work. Moreover, the period of 11–15 is not satisfactory, because it fixes a division not at all in accordance with the changes that take place in the psychic life of the pupils at these years. The teachers of the folk school complain, further, that they lose a number of their best pupils who avail themselves of the opportunity to pass into the intermediate school at the end of the fourth year, thereby reducing the upper classes of the folk school to a form of subordination, both in number and prestige. Many of these enter the intermediate school without intending to complete its courses, the consequence being that they derive but little benefit from its instruction, and, in a measure, hamper the progress of others.

To remedy this defect, a regulation was issued requiring parents and guardians to sign an agreement upon the admission of their charges to the intermediate school to have them continue to completion. But protests and appeals against this requirement reached the supervisory board, with the result that the department in its letter of March 4, 1914, modified the order. While the creation of the intermediate school has had undoubted influence for the advancement of secondary education, its relation to the lower schools, particularly with respect to its connection with the latter, has not been satisfactory.

Discussions looking toward desirable changes were begun several years ago and are still continuing. In drafting propositions for alterations, the schoolmen have had to struggle not only with the usual principles of giving the period covered a rational and natural beginning, rounded completeness in itself, and adaptation for continuance, but also local demands urged by special provinces and, in particular, differences between cities and rural communities. In consequence, the plans could not be too rigid or inelastic in fixing, for instance, the number of weeks in the school year. The economic side, too, had to be considered, so that the plan would not entail too great expense by parent or community. Further, any abrupt departure from established school traditions would be sure to be opposed.

[1] Joakim Larsen, den Danske Folkskoles Historie.

Social distinctions, which, especially in Copenhagen, have kept children from different social ranks in separate schools, have been connected with notions of restriction in the scope and character of the work to be done by this or that type of school.

In order to show the trend of development in the organic relations among the schools, several plans for proposed changes (one of them submitted in legislative form) will be briefly noticed.

One of the earliest suggestions came from Prof. Tuxen, the inspector of the Danish folk school, and may, therefore, be taken to represent views held by this class of educators. He would extend the period of compulsory attendance by one year, hence to the fifteenth instead of the fourteenth year, making the common-school period cover eight years. In this way he would have the three lower classes of the intermediate school merged with the folk school. He would take up one foreign language in this period and abolish the present final examination in the intermediate school. One year should be added to the gymnasium, admission to which should require an entrance examination. As an alteration of this scope would meet opposition in the Rigsdag, he believed a temporary regulation should be made, permitting the communities that so desired to put it into effect by extending the period of required attendance one year. In his opinion, the vital element is to avoid regulating the instruction with reference to the gymnasium, but to make it complete in itself, and not preparatory.

In March, 1917, the views held by the representatives of the modern (real) school were formulated by A. Christensen-Dalsgaard. He refers to a previous expression by the Modern School Association of Denmark, in which the members had unanimously agreed to work for changes in the common-school law, in accordance with the following general lines: 1. The instruction in the modern school should be concluded at the age of 16, with an examination in all branches meeting the requirements for entrance to the gymnasium. 2. A concluding division point in the instruction should be provided at approximately the fourteenth year. 3. The instruction concluded at the fourteenth year should be of an elementary character, with two languages and mathematics. 4. The association expressed the belief that a school reorganization to this extent could be made without materially affecting the modern school or detracting from its independence.

Outside of the teaching profession it is held—and most teachers are in accord with the proposition—that the folk school should be so ordered that it can, by continuation classes, impart instruction up to the sixteenth year without making it necessary for the pupil to leave home. It should be so conducted that the pupil does not become estranged from practical work, and unaccustomed to it, and so that

the expense does not become materially greater than at present. Regard should be had to social and economic arrangements, so that it does not cause vexatious innovations. The lengthened school period must not be extended to a point where schools and instruction become uninteresting and fatiguing, very common occurrences in the intermediate school.

Changes in accordance with these views are advocated by schoolmen in western Denmark. A superintendent from this part of the country, Karl S. Svanum, outlines a plan based on these principles, supporting his plan by details from schools where it has already been put into practice.

How the commission, appointed by the Department of Education to draft a revision of the existing law, has understood and embodied the present trend can be seen in the draft of a law prepared for the consideration of the Rigsdag. In its preliminary remarks the commission sums up the objections to the present law and states briefly what will be gained by adapting the proposed alterations. The law now in effect, the commission maintains, determines the articulation from above downwards, with the view of preserving the age of 18 as the year when the gymnasium course is to be completed, requiring the intermediate school as the preparatory, to conclude at 15. The immediate difficulty of these time limits is that they leave no point of conclusion at 14, the end of the compulsory period, but expect that the period would be advanced to 15 years, a change that at present does not seem likely. By concluding the intermediate school at 14, in accordance with the drafted plan, this difficulty will disappear. Another effect will be that the graduates from the intermediate school may continue either in the gymnasium or the modern school, the period covered by the latter being increased so as to comprise two years. The same change will also permit the pupils to continue together the first two years, when those who do not wish to go through the gymnasium may finish with a suitable examination, leaving the last two years for concentration on subjects best suited to the maturity of those who continue.

The drafted proposition thus defines each type of school and fixes the years it covers:

1. Proceeding from the instruction imparted by the folk school up to the years 10 or 11, advanced instruction is to be given, first in the intermediate school, then in the modern (real) school or the gymnasium.

2. The intermediate school comprises four one-year classes, imparting instruction of an advanced character and adapted to pupils of 10–14.

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3. The modern school continues from the intermediate with two one-year classes of advanced instruction leading to a suitable examination.

4. The gymnasium continues from the intermediate school through four one-year classes with advanced instruction, adapted as a preparation for continued studies.

The instruction in the gymnasium divides along two chief lines according to the studies included in each and are to be known respectively as the *linguistic-historical* and the *mathematic-scientific.*

Besides fixing the course limits and interrelation among the types, the law as drawn up has in other paragraphs a number of provisions of vital importance in the system. The three classes of schools—intermediate, modern, and gymnasium—may be organized to give instruction separately to boys and girls, or they may be made coeducational. Where they are coeducational, certain phases of the work may be managed as separate for either sex.

Touching instruction in religion, pupils who do not belong to the State Church may, upon request from parents or guardians, be relieved from taking up the subject.

The commission points out that the proposed arrangement will be to the advantage of the common school in that its first three years will constitute a distinct unit covering the first stage, at the end of which a reclassification of the pupils and a change of teachers takes place. As this will leave the four upper classes of the folk school running parallel with those of the intermediate, it will be possible to group the subjects in such a way that the same plan can be followed by both schools. The plan will also lead to a simplification at a stage further along. The four-year gymnasium will comprise two halves, each a unit in itself. The parallelism of the first unit of two years with the modern school of the same period will make the two examinations coincide so that the status conferred by the one will be equivalent to that of the other.

As the revised plan reduces the lines of the gymnasium instruction by leaving out the classical line, and grouping its subjects under the linguistic-historical, the commission points out the advantages it believes will result therefrom. The omitted line had been followed mainly by students expecting to enter the ministry; but the scope of many gymnasia had not been comprehensive enough to include it, hence prospective theological students at these institutions had to submit to a special examination in the classical languages upon entering the university. Under the revised plan it will be possible to take up these subjects as a part of the linguistic-historical line where occasion demands without any rearrangement of the curriculum. Though the plan omits the classical line, it has in reality strengthened

the classical studies by giving these an increased number of hours in the two concluding years, the years of greatest maturity.

While the present discussion of the proposed plan has met with only such criticism as would be expected upon suggesting a departure from a long established order, it has in general been commended for the completion of school periods at points coinciding with other school requirements and customs, for bringing the subjects of the gymnasium into a more consistent grouping and for simplifying the articulation among the schools so that they give a more compact unity to the system.

HOLLAND.

The analogy which the school and school systems of Holland bear to those of other European countries is not close enough to preclude distinct national traits. These are not so obvious in the distinct types of schools and content of courses offered as in the national spirit and temperament which pervades and controls them. The school enactments that were adopted early as guides for subsequent development have proved to be a sufficiently safe basis for expansion to make unnecessary later enactments of a purely corrective character.

In the statutes regulating the schools of Holland can be traced an unwillingness on the part of the legislators to introduce radical innovations or to impose unnecessary restraints on either parents, teachers, or local authorities. Hence every movement that has eventually resulted in a radical departure from the established order or has given rise to a new type of school, such as the up-to-date technical and agricultural schools, originated in private initiative, gained local support, and expanded through State subventions, marking at every stage a steady methodical growth. The lawmakers have assumed that the people understood how intimately their interests were bound up with the efficiency of the schools and that the people would ungrudgingly bear the expense of their maintenance and growth, and also that local enterprise and intelligence could be counted on to aid in their management.

The disinclination to regulate where regulation can be dispensed with is seen in the attitude of the State toward the earliest training of the child. Whatever educational efforts should be made during infant years have been thought of as devolving entirely upon the parents both as a duty and as a prerogative, hence the State does not maintain infant schools nor institutions to provide them with teachers. The same objection against unnecessary lawmaking accounts for the State's reluctance and delay in passing a compulsory attendance law. Parents saw to it that their children attended the elementary schools

with regularity. In the attainments of her people in the rudiments of education, Holland has ranked favorably with the other European countries. In 1900 such a law was, however, passed, but with a majority of only one; it fixed the ages 6 to 12 as the period of obligatory attendance.

In matters of vital concern to children, particularly the care of the youngest pupils, Holland has been by no means slow in passing the necessary regulations. The strictest form of inspection has long been exercised in supervising the health and care of the young. Official reports from every district and school community have been required involving a fullness of detail touching the ventilation, heating, kind and position of school desks, lighting, cleanliness, the source and nature of the water, the playground and instruction in games. The regulations also covered the form of the earliest instruction, providing that this should not be based on books but should be given in connection with the handling of objects and with such recreation and activity as might be provided in the school garden.

In determining the amount and character of work a child ought to be permitted to do outside of school hours, the controlling authorities have evidently avoided attempting to cover it by a legal formula, but have left it in such shape that an adjustment may be made by inspectors on the merits of individual cases. To that end the local inspector

> may [art. 3] grant a temporary exemption from attendance at school for work in agriculture, gardening, tending cattle, etc., to children who in the last six months preceding the application, have regularly attended school, for not more than six weeks annually, not reckoning the vacations.[1]

This article meets a condition common to all farming districts. At certain seasons of the year there is urgent need for the help that pupils of school age may be able to render with due regard to their years and health. If this demand is sufficiently general in a community, the school may, of course, be closed during the busy weeks, but, if this be done, there is the danger that some pupils thereby dismissed would have to waste their time in idleness. The application for excuse is left to an inspector after having heard the reasons, and specified regularity in attendance may be demanded as a prerequisite for granting it.

The law of 1900 and the later one of 1911 were found to be sound in principle, as proved by the embodiment of their main features in the law that superseded them in 1917, a child-protecting law prepared by the minister of education. This measure is not a substitution for these but rather a development of what was potentially inherent in them. The new enactment supplies a number of practical details and also extends its general application to urban as well as to rural life. In the first place, it distinguishes between wage-earning children employed by outsiders and one's own children employed at individual

[1] British Special Reports on Educational Subjects. Supplement to vol. 8, p. 7.

work, like chores. A child under 12 with the duty of attending school may not be employed on the farm; the municipal authorities may, however, permit children above 10 to perform certain kinds of work under specified conditions. Young persons under 16 are forbidden to do any farm work between 9 in the evening and 5 in the morning. This clause supersedes the one of 1911 which prohibited factory work by children between 13 and 17.

Holland's avoidance of measures imposing restraint and her firm insistence on essentials have proved to be sound principles in building up the system. To the teacher must be left a degree of latitude in selecting the studies of the curriculum, in apportioning the number of hours, and, most of all, in finding his own methods. The schedules made out by an official committee usually bear evidence of a desire to include as many subjects as possible with insufficient regard to what may reasonably be managed and assimilated within the time allotted, matters concerning which the teacher, who is responsible for the results, should have something to say.

In leaving the way open for individual and local initiative and encouraging its exercise in the interest of progress, Holland has not altogether escaped the difficulties that obstruct progress of this kind. It has not always been easy for her teachers to get out of the old grooves nor to take up more timely subjects instead of the old ones to which they had been accustomed. The most difficult point in choosing details of the study program was settled, fortunately as it appears, in 1889, when the law applying to instruction in religion was so framed that this subject was not excluded from the schools but its presentation regulated so that there could be no objection to it on sectarian grounds. Its inclusion was made optional out of regard for prevailing views; but if a teacher imparted the instruction in such a way as to interfere with the wishes of school patrons, he made himself liable to severe penalties. The act which placed the private church schools on a par with the State schools by extending to them the same amount—30 per cent of the total expense—as State subvention, has been regarded as a wise measure for a country almost equally divided between Protestants and Catholics. But one less fortunate trend has been the result of this enactment. Between the private schools and the State schools arose an unexpected distinction through which the latter came to be known as schools for the poor. They have, in consequence, suffered a decline so marked that in 1917 a request to the Netherland Teachers' Association insisted on an investigation of the support and the attitude of the municipalities to the two kinds of schools.

The teacher of Holland is prepared for his work by a four-year course in the training colleges. In one respect the entrance conditions differ here from those of similar institutions in other parts of

northern Europe, namely, in the requirement of a strict physical examination over and above everything else. In other countries, to be sure, examiners and school boards are aware of the importance of health and vigor, but they usually go no further than to require the candidate to be free from such physical defects as may be a handicap in the performance of his duties; but in Holland, educators hold that it is advantageous for the pupils to have before them in their years of plasticity a teacher who is himself developed as a strong and even physically attractive personality. Among the further prerequisites for a position, the close supervision of the practice teaching is worthy of note; during the entire course of this part of the teacher's preparation, he has the benefit of experienced help and advice. The number of hours that may be assigned to him as pupil teacher are, both for the sake of pupils under his charge and for his own sake, limited by carefully considered regulations.

The teachers are grouped in three categories as a basis for remuneration and promotion:

1. Those holding the position of head master with certificates qualifying for this position.
2. Those holding such certificates but with a position less advanced than the one for which they qualify.
3. A final class, namely, assistants.

In 1917 the Teachers' Association advocated the recognition of a fourth class, formed from the number of supply teachers appointed to fill positions left temporarily vacant. These teachers have been necessary, but they have also been a source of perplexity to the regularly employed instructors by requiring salaries equal to the latter. For this reason the association asks that they form a class as reserve teachers with regular salaries. Though the remuneration of all classes of teachers has been fair, even generous for normal times, the last few years have, here as elsewhere, created conditions that compelled teachers to insist on an increase commensurate with the advanced cost of living. Through their own organizations as well as through their representation in the lawmaking assembly they have been able to show the reasonableness of their request; but in many districts friction has come about with the farmers who furnish a part of the increased salary.

The interruption and dislocation of the school work by the conflict near her border have not diverted the attention of the teachers of Holland from the permanent issues of their work. Though the opportunity of the farm in responding to the call for foodstuffs drew a large part of the school population to rural localities for a while, there was no evidence that teachers tried to impress pupils with the advantage of either rural opportunities or urban opportunities. The value of studies leading to productiveness was by no

means underestimated. Yet the people of Holland were unwilling to surrender any part of their literary studies in favor of studies with greater claims to meeting this one demand of the times. Although the schools here have one more foreign language than have France, England, and Germany, there was no attempt to relieve the schedule by curtailing the time given to Latin and Greek. In the case of the Girls' Higher Burgher Schools, the control of which is left entirely with the municipal authorities with no State aid, local pressure might have been expected to eliminate the one year of Latin or Greek required for admission to the university. In view of the flexible schedule of these schools, the alteration could readily have been made, yet humanistic instead of productive values so prevailed that these subjects were retained.

Among war measures pertaining to thrift and practical helpfulness, the schools of Holland instead of starting many new courses devoted themselves to strengthening those that already existed. Clearly the choice between the occasional and the permanent was here the determining factor. In consequence the courses in domestic service and domestic life with all the subjects in hygiene, sanitation, and thrift thereto appertaining were strengthened so that they are now taught in a more systematic way up to the time the girls reach 16 with special departments of the same general courses after that age.

Even in this period of stress the teachers of Holland are taking time to improve outside facilities of educational value. This is seen in the efforts made to perfect the educational value of the Netherland School Museum at Amsterdam instituted by the Netherland Teachers Society.[1] This contains an important collection of books and periodicals relating to education in Holland and elsewhere, and of teaching appliances. Not only are current journals displayed on a reading table and past educational journals accessible, but an index has been prepared of the articles on education that have appeared during the past 40 years in Dutch journals of general scope.

In Holland the war has given an impetus to the study of English both independently and in connection with the schools. "Their neutrality has yielded the Hollanders a number of interned guests available as teachers or touchstones of progress." For the purpose of studying the English language and literature English clubs and study associations have been established at the university at Utrecht, also in Amsterdam and other places. To the same end a Dutch firm of publishers is issuing a select series of English literature classics.

Familiarity with the violence of war has had an unfortunate effect on the psychic life of school children not only in the belligerent countries but in neutral countries as well. The reports that are at

[1] The Journal of Education and School World. London, October, 1918.

hand from Germany, Norway, and Holland substantiate the conclusions that would be expected, namely, that details from the front have reached the young with a fascinating appeal, causing a disturbance in their sense of right and wrong. The abnormal conditions existing in certain parts of Holland, especially in the border zone, have furnished temptations to laxity and crime. Het Kind, dealing with this subject, finds that at Utrecht the number of legal actions against young persons under 18 was 176 in 1915, the following year year it was 266, and in 1917 it had increased to 324. The damage that in this way threatens the moral life of the children has roused school authorities in Holland as well as in other countries[1] to consider the most efficient ways of combating it.

Hardships due to the war touched Holland's schools and social system with full severity. Geographically she held the precarious position of lying across the path of traffic between the belligerent countries and the world's food resources. During the course of the war she was entirely dependent on imports conditioned on an exchange of exports, generally viewed with suspicion by the opposing nations. Within her own borders unscrupulous profiteers did not hesitate to sell available food stocks to foreign buyers to an extent that threatened depletion and famine. The high cost of everything necessitated an internal regulation of prices on a basis partly patriarchal and partly socialistic, yet with very little hope of satisfying either the trades people or the consumers. The way in which these perplexities were met shows characteristic balance and clear view of the full effects, so that even when the solution had to be made in an emergency its remote consequences were clearly kept in view.

It is difficult to conceive how the principles that have entered into the intellectual and social life of Holland through the medium of the schools could have been more severely tested than during the past four years and a half. If these principles have guided her to fortunate solutions of perplexing problems and steadied her in embarrassing courses, it is reasonable to see in them evidences of the work accomplished by her schools.

THE SCHOOLS OF FINLAND.

With native literary treasures and native culture embodied in her traditions, Finland had the prerequisites for an educational system with strong national characteristics. From the very first, however, educational progress was swayed by influences tending to divert it from its native trend.

[1] In Germany it is recommended by the Minister of Education, that at stated times a special hour be devoted to the discussion of discipline and order and that notions of revenge be abolished from all forms of school life. In Norway the school authorities have under consideration plans to divert the children's attention from scenes of violence to the magnificence of nature. In Sweden six specialists from the Department of Justice have been appointed to prepare a plan for consistently combating the increasing tendency toward crime among the young.

The foundation on which the present Finnish schools were first built was laid between the years 1860–1870, and fashioned according to the principles of Pestalozzi. Soon a parallel tendency of an opposite character appeared, namely, classical aims, which finally resulted in the founding of the gymnasium of the present day. From the very first, the two languages used in the schools, Finnish and Swedish, have each represented a different tendency in shaping the school system. Again, every stage in the progress has been marked by the political as well as the academic pressure of Russia, Germany, and Sweden.

As in other European countries, the immediate effect of the war was to lower the attendance in general and especially in the secondary schools and to make it difficult to maintain the schools on account of the shortage of teachers.

In the statistics brought down to the 1st day of February, 1915, the schools giving instruction of an elementary character or concerned with these are grouped separately, and include the folk school of the cities and the country districts, trade schools, household schools, continuation schools, training schools for teachers of the primary and elementary classes. They number altogether 4,634, of which 4,470 are the public elementary folk schools. The number of teachers employed was 6,345, and that of the pupils in attendance 198,038. Of the 3,250 schools characterized as higher folk schools 2,806 were Finnish, 433 Swedish, and 11 with both languages. The constantly growing number of schools has reduced the average distance of these from the pupil's home. During the year 1914–15 the number of pupils with less than 3 kilometers between school and home increased by 1,481; those living between 3 and 5 kilometers from the school increased by 285, while the number of those with more than 5 kilometers to go decreased by 319.

In 1915 Evangelical Lutheran congregations to the number of 467 conducted 454 primary schools. This marked, however, a decrease of 199 schools during the preceding five years, one obvious reason being the better facilities offered by the public schools. Another reason pointed out is that many industrial establishments in the communities have taken over arrangements for the first instruction of the children, to which the congregations have readily consented.

The very large number of congregation schools still maintained is due to the unusually advanced age (9 years) at which children enter the folk school. This made some form of preceding rudimentary instruction necessary. It was given at the homes and supervised by the clergy through annual inspection at parish meetings in the villages. The control was made effective by setting the ability to read and write as a condition of preparation for the confirmation rites.

The next stage in the preparation for entrance to the lycees comprises two and often three years in the folk school or an equivalent course of instruction in one of the numerous elementary schools. The lycees comprise eight classes of which the first five have developed so as to present finished courses leading to common occupations or to business and agricultural schools. This tendency has led to the creation of independent schools with five-year courses and equivalent in advancement to the communal middle or real schools of Sweden.

In the statistics the secondary schools ("learned schools") are treated with much fullness of details of which the following seem most significant:

In 1916 there were 19 State lycees, 24 private, and 7 communal, all using the Finnish language. At the same time there were 7 State lycees, 10 private, and 4 communal using the Swedish language; 28 middle schools used Finnish and 8 Swedish; 16 girls' schools used Finnish and 9 Swedish. Of other institutions of advanced rank, 12 used Finnish and 7 Swedish. Of this total of 150 secondary schools, then, 105 used Finnish and 45 Swedish.

The three upper classes of the lycees constitute the gymnasium proper with two groups of courses, the modern group and the classical group. In the latter Latin is obligatory, while a choice is left between Greek and French. Pupils who do not wish instruction in either can elect the modern course in mathematics with the addition of physics, chemistry, or drawing. In case they prefer the brief course in mathematics as offered in the classical group, they can elect this conditioned on taking the modern courses in physics, chemistry, and drawing.

The time and subject schedules now in effect are not at hand, but those that were followed before 1905 throw an interesting light on the system that then prevailed. In the classical gymnasium the apportionment was as follows: The vernacular—the medium of instruction which was either Finnish or Swedish—16 hours; German, 12; Latin, 36; French (elective), 6; Russian, 40. In the modern gymnasium the Finnish was raised to 18; German to 18, French was made required and given 12; English was admitted as an elective with 4, and Russian maintained the same as in the classical gymnasium at 40 hours. In 1908 Russian had been reduced to 20 hours.

The two normal colleges—one at Helsingfors and one at Jyväskylä—are maintained as classical institutions and particularly for the training of teachers for secondary schools. The qualifications for positions include the preliminary university examination for the degree of doctor of philosophy, the completion of two terms of a training college with the practice instruction appertaining thereto. Further, a specified period of service, participation in criticism and conferences, and, finally, a direct teaching test passed upon by a

supervisory committee of the faculty. The candidate is, moreover, required to pass an examination in education and didactics before the professors in these subjects.

Three distinct tendencies are very marked: (1) Up to the outbreak of the war the Finnish-speaking element, as evidenced by student statistics, had made steady headway. Before 1890 Swedish-speaking graduates were in the majority, but since this date the Finnish have come to predominate. (2) The growth of private institutions with consequently greater freedom and variety in teaching plans and cultural agencies. (3) Education for present-day practical demands as offered in the modern line of the lycee has gained ascendency over the classical. This is most clearly seen in the private schools, but a similar influence also sways the State schools.

Finland was far in advance of other countries in providing for the higher education of women. The first public secondary school for girls was begun in 1788 under the name of Demoisellen-Classe der Hauptschule zu Wiborg. In 1804 the name was changed to Töchterschule, and again, in 1842, to Större Fruntimmersskolan. In 1835 a school for young women between 9 and 18 years of age was started in Helsingfors; it was conducted in cooperation with a coeducational primary school for children in the age of 7–10. This institution enjoyed a rapid growth, maintaining a faculty of 13 men teachers and 2 women teachers besides special instructors in singing and calisthenics. This field of educational work become recognized to such an extent that in 1844 the State founded an institution for the advanced instruction of women. The school law of 1843 fixed the status of girls' secondary schools by coordinating them with the school system of the country and specifying the subjects of the curricula in those of Wiborg, Åbo, Helsingfors, and Fredrikshamn. The continual advance of this type of institutions has proceeded by increasing the number of classes of those already existing, by granting them State subventions and by founding new ones. At the present time there are 20 Finnish—or Swedish-speaking secondary schools for girls. In their educational work they were able early to overcome the prevailing prejudice against gymnastics for women, and brought it to such advancement that the instruction in this branch as conducted in Helsingfors became a pattern for neighboring countries. In other schools coeducation came to be extended from the primary classes to advanced secondary instruction until at the present day one-half of the total number of schools admit members of both sexes to the same educational privileges. In the spring semester of 1916 there were 866 women students in the University of Finland out of a total attendance of 3,478.

The People's High Schools conducted in accordance with the principles of those in Denmark have gained recognition in Finland. They are founded, owned, and maintained by local organizations, but receive no State grant for their support nor aid for students.

Facilities for higher education are furnished by the Technical High School of Helsingfors with four-year courses in the sciences theoretical and applied, and by the University of Finland. In 1916 the university had a faculty of 239 members and an attendance of 3,478. Many learned societies connected with the university conduct comprehensive activities in study and research.

The latest reports, under date of October, 1918, which have come to hand through Swedish sources, speak of far-reaching changes and reforms to be inaugurated in the school system of Finland. According to these the Senate has appointed experts to submit a proposition for the reorganization of the free public school activities and, with this in view, to draft a plan for a central board of control to be made up of representatives of every active school organization and school board. The central board is to perform its duties through an executive committee working under its direction. The contemplated activities to be carried out in this manner include the founding of libraries, organizing lecture courses, instruction courses, and training in the practical arts of the home. The Government, too, as it appears, is determined to pass a general compulsory attendance law such as had long been discussed. The cost of all changes is estimated at 8,000,000 marks. The expense of maintaining the folk schools is to be readjusted so that the communities will receive 60 per cent of the total from the State. The chief of school supervision has been requested by the Senate to present a detailed proposition for the complete reorganization of the school system, based on the principle of the folk school as the foundation. The new organization, it is expected, will in its fundamental lines be a six-year folk school, divided into a first period of two years and a second period of four years; a middle school of either three or four years and a three-year lycee, or a total length of 12 or 13 years. Proceeding from the middle school as preparatory, instruction would be given in professional schools, teachers' colleges, and lycees.

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EDUCATION IN ICELAND.

By Holmfridur Armadottir.

Iceland (or Island), which is the proper name, is an island lying in the northeast Atlantic Ocean touching the Arctic Circle with its northernmost points. Its area is about 40,000 square miles; its population consists of about 90,000 people direct descendants from the Norwegian Vikings mingled with Celtic blood.

It was discovered at the end of the ninth century, and settled in the last half of the ninth and first half of the tenth centuries. The settlers had left their country because of the loss of their freedom through political struggles. In the year 930 a commonwealth was

established in Iceland; in 1262 it was united to Norway, and later on it became subject to Denmark or, rather, to the United Kingdom of Denmark and Norway. Since 1814 Iceland has belonged to Denmark alone. On December 1, 1918, Iceland became a sovereign State, though in coordinate union with Denmark. The proclamation of her sovereignty was made on December 2, and celebrated with impressive ceremonies. The national flag of Iceland was raised at Reykjavik the capital, and saluted by a Danish man-of-war sent there for that purpose.

The language spoken and written in Iceland is almost identical with that spoken by the ancestors of the present population, the changes being so slight that the Icelandic youth of to-day can easily read and understand the first book written in it dating from the thirteenth century.

Shortly after the adoption of the Christian faith, in the year 1000, the Icelanders learned the Roman alphabet and substituted it for the ancient Runic, which they had hitherto used for engravings on stone and metal. Already in the twelfth century schools were founded at the two ecclesiastical sees, Volar and Skalholt, and at two other places. Young men went to France and Germany and other countries to study. When they returned they became bishops, ministers, or teachers of the schools. In the thirteenth and fourteenth centuries several monasteries were established, and, as in all other Christian countries, they became the centers of educational development. Some of the schools had the special aim of training young men for the ministry; others had the purpose of general education of the public. History tells us that they were attended by both sexes at all ages, the name of a learned woman who taught Latin in one of the schools being given. In this connection the famous old Icelandic literature deserves especial mention. The Sagas (legendary tales), the Eddas (Scandinavian myths), and other classic Icelandic literature were committed to writing in the twelfth and thirteenth centuries. Early in the sixteenth century the first Icelandic books were published, and the whole Bible was printed in 1583. All through the dark periods of plague, famine, and other disasters, the schools were kept open, and they seem to have been a vigorous source of life for the stricken people. As a link between them and the common people we find, at all times, prominent preachers, religious poets, and civil leaders shining out as stars from the darkness. For ages it was the duty of the clergy to have supervision of the homes.

At the age of 14 years, which was the period fixed by law for confirmation, the children were supposed to know the Lutheran Catechism by heart, and for that they had to learn to read, and many a man and woman became a skilled writer. It was the greatest pleas-

ure for the people in the rural sections to assemble in the main room at the farmhouse during the long, dark, winter evenings, working and studying. One read aloud from the Sagas, Eddas, Folklore, or whatever books they had at hand. while the rest were working with wool, knitting, spinning, carding, carving wood, or doing other kinds of domestic work. The evening ended with religious service, singing psalms, and praying. Gradually the towns grew and formal schools were established. The young people from the country were then sent to schools for the winter season; the working people went to towns or trading places to seek work. Home schools of this kind are therefore becoming more and more rare. About the year 1880 an act was passed by the Althing (Parliament) requiring that all children 14 years old should be trained in reading, writing, and arithmetic, and also be instructed in the catechism and Bible history. To comply with this law, schools and teachers became necessary, and, in time, both were provided. According to the law of 1907, the country is divided into 220 educational districts. In the five towns and in 48 districts, schools have been established, but 167 provide only itinerant instruction. For each of the school districts a school board of five members is elected, but for the itinerant districts a committee of three members. The cabinet appoints the superintendent of elementary education for the whole country. The school boards and committees of education have to provide adequate means of education and are responsible for the fulfillment of the law.

All children are bound to go to school six days a week, not less than six months a year, from 10 to 14 years of age in the school districts, but in the itinerant districts the children at the best and most central farmhouses must get at least a two-months' course each year. For the rest, their instruction depends entirely on the homes. If the parents or guardians wish to teach their children only at home, they may do so. From 10 to 14 the children are expected to go through one grade a year, with examinations. In May is held an examination for all children 14 years of age, whether they have been at school or not, conducted by a censor appointed by the Government or by the country superintendent. If a child has been neglected and not sent to school or taught the required subjects at home, the parents or guardians are fined. The parents or guardians are required to give their children the primary instruction in reading, writing, and numbers, either at home or with the assistance of a teacher. If they do not, the educational committee or the school board is authorized to have the children taught at the cost of the parents or guardians. In many of the elementary schools are grades for children under 10 years of age, but most of them require fees. All schools for children from 10 to 14 years are free. For that age a local contribution bears the entire cost of instruction

with additional support from the county treasury. In several places private schools have been established especially for primary teaching.

The subjects the law requires for examination of pupils at 14 years of age are: Icelandic (reading, grammar, composition, literature), writing, mathematics, religion (catechism, Bible history, psalms), geography, natural history, and Icelandic history. Furthermore, according to governmental decree many schools have added singing, general history, drawing, physical training, and needlework. A few schools give manual training and domestic science; but a great many give instruction in one or two foreign languages, preferably Danish and English. Most schools begin October 1 and close May 14. For that period attendance is compulsory six days a week. At the present time no normal person can be found in the whole country without the knowledge of reading, and hardly one who is not able to write and use numbers. Although there seems to be a great difference between the rural popular education and that of the towns and more thickly inhabited parts of the country, yet children brought up in the rural sections with only two months' instruction a year, have often proved themselves to have better capacities than those from the regular schools. In the country the children have to work the greater part of the year. Study is a luxury for them, to which they look forward. On the contrary, the town children look forward to being free from school and prefer to go into the country and help the farmers there in summer. The simple and healthy country life gives the children living there opportunity to study nature and life in its reality. Very often the young people do not go to high schools (unglingaskolar) till they are 17, 18, or 20 years old. From the time they leave the elementary school till they reach this age they perform manual labor.

The schools corresponding to the American high schools are 25 in number, most of them junior schools. A few of them are evening schools and partly technical. Many of them are connected with the elementary schools, having the same master and directed by the same school board. All these schools are equally for men and women. Two senior schools are for women only. In these are grades for domestic science, and three schools are for domestic science only. All these schools receive more or less aid from the national treasury; a few of them are private, but most of them have grants from local authorities. Professional schools are as follows: Nautical, 1; mechanical, 1; agricultural, 3; commercial, 1; normal, 1; obstetrical, 1. With the exception of the commercial these schools are all national and are supported by the Government. For the deaf and dumb there is one school. In the town is a "real" school (gagnfriedaskoli), established in 1880 and affiliated with the college in Reykjavik. It is a boarding school, as are several of the schools before mentioned. The

College in Reykjavik (the capital of Iceland) is in reality a continuation of the Latin Skalholt school founded in Skalholt immediately after the middle of the eleventh century. It is now in two divisions, the "real" school or high school, and the college. The Icelandic name is: Hinn almenni menntaskoli. It is national as is the "real" school in Akureysi.

The University of Iceland was established by the law of July 30, 1909, and has been active from June 17, 1911. It has four faculties: Theology, philosophy, medicine, and law. Before its foundation there were a school of medicine and a theological seminary in Reykjavik; for all other higher teaching the students had to go abroad. A student from Iceland had great privileges at the University of Copenhagen. Most of them studied there and are still doing so, especially in those subjects not offered at the University of Iceland. Besides the Icelandic faculty, there have been French, German, and Danish professors at the university, sent by the governments of these countries, but when the war broke out the French and German had to retire. Popular lectures were given at the university in philosophy, literature, and history; statistics as to the number of attendants on these, however, are not available. In the normal school is a course for teachers in the spring season, where they not only receive free tuition, but are also allowed their traveling expenses and support. Many teachers go to the Teachers' College in Copenhagen for their further education, and others now go to America. Men and women have equal right to attend all the educational institutions and to fill public offices as well.

Many of the high schools, likewise those for the professions, are free. Schools for advanced education are all free and even give a little support to the poorer pupils.

Since the war began education in Iceland has been at a standstill; indeed, retrogression has been seen in some places. In spite of the fact that the island is so far away from the great disaster, it has been seriously affected. Fuel has been so scarce and the prices of all necessaries so exorbitant that both the school year and the daily hours have been greatly reduced in most schools, and a few have been closed altogether. In common with the rest of the civilized world, Iceland earnestly hopes for better times.

CHAPTER XI.

SOME PHASES OF EDUCATIONAL PROGRESS IN LATIN AMERICA.

By Walter A. Montgomery,
Specialist in Foreign Educational Systems, Bureau of Education.

Contents.—Central America: Practical education; Guatemala; Salvador; Honduras; Costa Rica; Nicaragua; Panama—British Guiana: New school regulation—Argentina: Preliminary; illiteracy; report of National Council of Education; progress of education in the Provinces; changes under the projected law of 1918; secondary education; technical education; normal-school training; higher education—Brazil: Vocational education—Chile: Preliminary; illiteracy; primary education; secondary education; training of teachers; technical education—Uruguay: General introduction; primary education, public and private; rural schools; medical inspection of schools; secondary education; commercial education; training of teachers; higher education—Venezuela.

PRACTICAL EDUCATION IN CENTRAL AMERICA.

One of the most interesting aspects of the school situation in Central America and Panama is the important position occupied by commercial and industrial education in the courses of study of many institutions. Public men and teachers in Guatemala, Salvador, Honduras, Nicaragua, Costa Rica, and Panama have taken into account the need of offering to the new generation an education which shall be completely practical, with the purpose of turning the thoughts and energies of all the youth to fruitful service of their country.

The teaching of arts and crafts, as well as that of commerce and agriculture, was formerly not begun, as in the United States, upon the student's entering the secondary school, though there has for some time been a movement to make such instruction a part of the work of the advanced classes in the primary schools, to be continued in the liceo and the normal schools.

This universal interest in practical lines of education is a striking indication of the influences and tendencies now at work in Central America. In the different countries included under this designation there are schools and academies, workshops and laboratories, intended for the practical education of the student body. When it is remembered that the introduction of practical and industrial education in the school régime of Central America is a matter of the past few years, the progress realized is regarded as highly satisfactory. The rapid increase of the commerce of Central America, the improvement

in the means of intercommunication, the travels of its people abroad, the influence of foreign elements in its territory, and the various interests thus awakened have aroused in the interior of the Republics composing it the belief that national greatness in modern times must rest upon economic and industrial foundations. The influx of foreign capital and the consequent establishment of powerful industrial enterprises have likewise emphasized the necessity of training men for work in such enterprises. The introduction of modern machinery, the increase of the different forms of the application of steam, the adoption of the inventions intended to gather up the results of labor, and numerous similar influences have given rise to a tremendous demand in this part of the continent for skilled and reliable mechanics. Central America has thus addressed itself with enthusiasm to the task of training the children of its schools for the activities of the present day.

The capitals, other important cities, and even many small towns have schools devoted to practical education, generally provided with buildings and equipment well adapted to this end. Honduras, for example, has founded a school for scientific instruction in the cultivation and preparation of tobacco and for the manufacture of cigars and cigarettes in the tobacco district around Danli. In several Provinces of the same Republic, and in Panama, where agriculture is subordinate, the Governments have founded schools for training pupils to weave hats and other objects.

The more generalized industrial schools are those of arts and crafts and the so-called practical schools for boys. Their organization presents marked differences. In some of the countries named there exist schools that receive pupils either as full or half time boarders, and offer night courses as the situation demands. In all these instruction is free. The Government generally offers a certain number of scholarships in the boarding schools for pupils approved by the different Departments or Provinces of the country. Tools, instruments, and supplies used in the schools are provided by the Government. In return the school exacts of such students certain services and thereby carries out certain work that represents a partial reimbursement for the amount spent upon their maintenance. This is the case with the schools of arts and crafts in Honduras and Panama. Some small schools of this class are maintained by means of the labor they carry on for private individuals and by the sale of the products they turn out.

These industrial schools are generally of two kinds: (1) Those in which the training in commercial subjects and in arts and crafts constitutes part of the regular course of study and (2) those devoted exclusively to the teaching of arts and crafts.

(1) In those of the first class the pupils study the ordinary subjects prescribed by the department of public instruction and devote only several hours weekly to arts and crafts. This class in its turn includes two groups of institutions. To be admitted to those of the first group the pupils must know how to read and write and apply the elementary rules of arithmetic. During the entire school year instruction is given in Spanish, geography, history, and arithmetic. The practical schools for girls and boys are generally of this kind, being especially numerous in Guatemala and Honduras. The schools conducted by the Christian Brothers in Nicaragua are also of this type. The duration of studies is from three to five years, a half day being devoted to the classes in the ordinary subjects of primary education and the other half to practical work. In the second group are comprised various institutions which require certificates from the higher elementary schools, such as the liceo and the higher colegio for women in Costa Rica, the National Institute in Salvador, the Central National Institute for Boys in Guatemala, and the normal schools in these countries and in Honduras.

(2) Of the special institutions which constitute the second category, there are to be noted two prominent instances in the schools of arts and crafts in Panama and in Honduras. In organization and purposes they are schools of mechanical arts, and not schools of manual training. Their workshops have not been established to impart general notions of manual arts or a general apprenticeship, but to train the pupils from entrance upon the line of education chosen by themselves. In these schools are taught carpentry, tanning, shoemaking, blacksmithing, cabinetmaking, electricity, installation and management of machinery, mechanics, printing and bookbinding, telegraphy, etc. All workshops in such schools are well equipped with machinery and tools.

All that has been said in regard to modern educational tendencies and influences to which boys are subject in the countries mentioned can be extended, though in less degree, to the girls and young women. Within the past few years women's sphere of action has steadily been enlarged, and has come to include not only teaching but various employments in shops and mercantile establishments. Within the next few years their instruction must be taken into account in schools of domestic training, vocational schools, practical schools, and the technical colegios. The organization and range of these institutions does not differ materially from those for boys. The vocational school for girls is essentially a school of arts and crafts in which the pupils devote themselves from entrance to the study of a special line, such as dressmaking, embroidery, millinery, and, in certain schools, cooking, washing and ironing, etc. A certificate of proficiency is granted them upon the completion of certain assigned

courses. The other schools for girls before mentioned combine general subjects with the special apprenticeship in crafts upon which they enter as soon as they reach the higher classes of the primary school and which they continue into the high school and the normal school.

GUATEMALA.

The type of industrial education that prevails in Guatemala is the combination of general studies with special instruction in the arts and trades given in the practical schools for girls and for boys. There also exists in the capital a school of arts and crafts for women where instruction is given at the same time in the subjects of ordinary instruction. In the departments of manual arts which are largely, but not exclusively, attended by boys, are taught theoretical and practical blacksmithing, carpentry, printing, bookbinding and weaving, besides geography, history, botany, chemistry, zoology, geology, drawing, and Spanish language and literature. In the schools of Guatemala much attention is given subjects of a practical nature, with the purpose of training competent workmen and artisans. There also exist in this country a National School of Commerce, situated in the capital, and a Practical School of Commerce, at Quezaltenango. In both cities there are schools of agriculture which admit to their first-year courses the pupils of the first year of the central normal schools. The capital possesses also a school of telegraphy, recently founded with the view to installing in it a special wireless station.

SALVADOR.

Arts and crafts for women, commercial subjects and mechanical arts, are generally taught in Salvador in the public schools, though their incorporation in the courses of instruction is comparatively recent. Many prominent teachers of the country have taken the pains to spread abroad the appreciation of the necessity of "enlarging the educational sphere of the State, and opening to the youth and to workmen schools where they may acquire practical knowledge of the sciences and the arts and by these means may contribute to the advancement of general intelligence in the country." In compliance with these ideas the Government has founded in Salvador a National School of Graphic Arts aiming "to aid the youth of Salvador to the acquisition of knowledge of a practical nature, and to put it in a position to be successful in the economic struggles which are the most important signs of the modern age." In this school the preference is given to the teaching of physics, mechanics, drawing, printing, lithographing, carving, bookbinding, and technical telegraphy and telephoning. Night courses are also given in this school.

In consequence of the public sentiment above mentioned, there has been opened in the National Institute of Salvador a course in commercial and economic subjects lasting three years. This course comprises the study of various modern languages, commercial law, political economy, industrial chemistry, commercial geography, bookkeeping, stenography and typewriting. The pupils in this school are required to work several hours daily for a period in the different ministerial departments before graduation. Salvador also established in 1913 a school of agriculture, with a department of animal husbandry. Two years later there was established the Technical-Practical Colegio for Girls, in which instruction in crafts for women is combined with that in general subjects.

HONDURAS.

Industrial instruction has attained great importance in Honduras. The School of Arts and Crafts of Tegucigalpa concerns itself chiefly with products in wood and the metals and is steadily training artisans and mechanics. There likewise exists in this city the national automobile school managed by the Government. For some years there has been in operation in Siguatepeque a school of English and of arts and crafts, in which are taught fiber weaving, carpentry, dressmaking, and embroidery. In the normal schools and in the two colegios students may choose between the commercial courses and those relating to arts and crafts. In 1915 was established a technical practical school for girls, where courses in science and in crafts for women are offered parallel with the subjects belonging to the primary schools.

COSTA RICA.

Costa Rica is another of the Central American countries where practical instruction is combined with general. Five institutions of higher grade and the vocational schools for women have well-equipped workshops, laboratories, kitchens, and laundries. Of all Central American States, Costa Rica gives perhaps most attention to this special branch of instruction. It is noteworthy that manual arts and domestic science are uniformly taught in the secondary schools conjointly with the literary and purely scientific subjects.

NICARAGUA.

In Nicaragua manual arts form part of the general instruction, as has been seen in the case of the normal schools conducted by the Christian Brothers. Girls receive practical instruction in the normal schools. Some years ago there was established a special school for the training of telegraph and telephone operators.

PANAMA.

Like Guatemala and Honduras, Panama has devoted special attention to industrial training. The School of Arts and Crafts of the City of Panama is one of the largest and best equipped of its kind. It is essentially a school for artisans and possesses sections of electricity, carpentry, cabinetmaking, printing and bookbinding, carving, foundry work, etc., its principal object being to train men for the separate industrial branches.

Panama also has a vocational school for girls in which a year's instruction is given in telegraphy, one in laundry work, two in dressmaking and embroidery, two in shorthand, two in cooking, two in millinery and flower work.

It has likewise a school of agriculture, in which is given a three years' course, for which the Government offers 30 scholarships to youths approved by local authorities. The Government has also founded from time to time specialized schools in the interior, with the object of encouraging agriculture or some other industry, such as that of the manufacture of Panama hats. Like Honduras, Panama devotes the greatest attention to special industrial schools.

For the furtherance of commercial education in Central and South America a Pan American College of Commerce, to be located at the City of Panama, is projected, under the joint auspices of the Southern Commercial Congress of the United States and the Government of the Republic of Panama. The active support of the countries of the two Americas is to be sought, and it is hoped that it may be opened on January 1, 1921, the quadricentennial year of the City of Panama, the first city to be founded by Europeans in the Western Hemisphere. The college is designed to train the youth of the two continents in practical courses of commerce, shipping, banking, and international trade relations generally.

NEW SCHOOL REGULATIONS IN BRITISH GUIANA.

The last report of the director of primary instruction in British Guiana outlines a new regulation for the common schools. In many of its parts it includes novel measures of school organization which are of interest as suggestions to other South American States for similar action. The regulations relate to the classification of schools, the minimum period of attendance, the age limit of pupils, the occupations of pupils after leaving school, school gardens, etc. As an instance of its stringent character, the regulation decrees that when any school ceases to conform to certain conditions with regard to building, installation, equipment, and health conditions, it shall be classified in B category; and if within 6 months it has not satisfied

the requirements of the regulation, the authorities shall suspend the Government aid hitherto granted. It is to be noted that the primary schools of British Guiana are not directly administered by the authorities.

The school also loses its governmental aid if within two consecutive years it does not maintain a fixed minimum attendance, which varies according to the population of the locality in which it is situated. In return special aids are offered for schools that teach gardening for boys and the care of smaller children for girls from 12 to 14 years.

The greatest educational need of the colony is the establishment of technical primary schools for the instruction of boys and girls from 11 to 15 years. It is projected to establish two such schools in Georgetown in which there shall be taught, in addition to manual arts and other craft, drawing in all its branches, arithmetic and geography as related to commerce, the rudiments of experimental science, shorthand, and business correspondence. Criticism has been directed against the omission of instruction in agriculture, which is admitted to be the most necessary branch in the colony. It is, however, intended to impart agricultural instruction in special schools to be established.

Because of the fact that the majority of the pupils leave school before reaching 12 years, it is not possible to put into practice suggested plans of giving them preoccupational instruction in which they might be making a start before the end of their primary-school studies. On the other hand the traditional primary school is not adequate to give direction toward a vocational subject. Hence, to the regret of the authorities, attempts to link the primary school with the occupation of the pupil have been abandoned.

Much interest has been developed in school gardening; and about 100 gardens are annexed to primary schools, affording practical instruction to pupils in agriculture and horticulture. The Government has also established 8 model gardens, where instruction is given the pupils of neighboring schools.

ARGENTINA.

PRELIMINARY.

Two well-defined stages have marked the progress of national education in Argentina since 1916. The first began with the reorganization of primary instruction by act of the Federal Congress early in that year, which came about largely through the initiative and efforts of the minister of public instruction. It had long been felt that the legal system in force since 1882 was unsatisfactory,

especially on the point of articulation of secondary education with the higher elementary on the one hand and with the universities on the other. Argentine educational thinkers asserted that secondary education prepared neither for practical life nor for entrance to the technical schools and the universities, inasmuch as it had remained unchanged for more than a generation, in the face of the social, economic, scientific, and ethnical changes through which the country had passed.

Together with this dissatisfaction with a special division went the conviction that governmental reform should strike deeper, and instead of busying itself with plans of reform of courses and schedules, should settle the fundamental question of what should be the nature and aims of the national secondary school. This could be done only by so modifying the prevailing system as to make it fit the needs of the school population according to their age, social conditions, and probable future. Proof that it had not so adapted itself was thought to be found in the fact that of the pupils annually completing the 4a elementary grade only 45 per cent continued into the *colegios nacionales*, as contrasted with 55 per cent who went into the 5a grade and commercial schools, while on a moderate estimate 60 per cent left with insufficient equipment for their needs as useful members of society. Furthermore, the secondary school, as organized, offered no opportunity to boys and girls of 13 and 14 years to choose the advanced courses and vocational training for which they felt an aptitude, and so to secure adequate preparation for the university studies or for advanced technical, industrial, and commercial schools.

For this lack of correlation between educational divisions it was proposed to substitute a logical and unbroken sequence. What came to be commonly accepted among education authorities as best serving this purpose was a common intermediate school of three years of an essentially practical character, carrying on general elementary instruction by means of book lessons and developing by special experiments and practical methods individual aptitudes by which to determine future training. As the basis for such a school primary education had, of course, to be modified, and after months of discussion a scheme for general modification of the entire educational fabric was outlined (1916). According to this, the primary school proper was to cover four years; the uniform middle school of the first grade one year; and the differentiated middle school of the second grade two years. Upon these were to be based the *colegios nacionales*, the normal schools, the industrial schools, the various higher special schools, and the national universities. Though marking a meritorious attempt to articulate the several divisions, the

project did not work out satisfactorily in actual operation, and as a constituent part of the national system it was repealed after about a year of operation.

ILLITERACY.

On a basis of population estimated (1917) at slightly more than eight millions, 725,000 were estimated to be illiterate, about 42 per cent of the school population. Illiteracy is most rife in remote Provinces of the Andes and in the Territories, sparsely settled and inhabited by people of roving habits and poorly developed industrially. Under the lead of the director general of the schools of the Province of Mendoza, a systematic campaign to eliminate illiteracy was begun in 1916. It was recognized that financial considerations made it impossible to establish the number of primary schools which would be demanded, certainly not for the many remote points where only the legal minimum of 15 or 20 illiterates were to be found. Home schools (*escuelas del hogar*) were therefore established, officially ranking as auxiliary to the already existent schools, for illiterates of 8 to 20 years, and offering as a minimum curriculum reading, writing, the four fundamental operations of arithmetic, the duties of the Argentine citizen, elements of ethics, and personal hygiene. Such schools may begin any day of the year, and with a minimum of five pupils. Any person desiring to open such a school must fulfill the following conditions:

(*a*) He must be at least 20 years of age, of good moral reputation, certified by the chief civil official of his residence.

(*b*) He must speak the national language correctly and be able to give instruction in it.

Such schools shall not be established at less distance than 5 kilometers from an established primary school supported by national, provincial, or local funds, but if the school be intended exclusively for boys from 15 to 20 years old it may be located at any point. Such schools are to be visited freely by school and civil authorities, and by persons designated by the provincial general inspectors.

Related in character to the *escuelas del hogar* of the Province are the *escuelas tutoriales*, established by national decree of 1916, applying to all the Provinces and especially to the Territories. In these schools, established at points designated by the National Council of Education, any number of children not regularly enrolled in the primary schools may be taught by private individuals who conform to the requirements of primary teachers, and by teachers regularly engaged in primary work. The latter, by special exception, receive additional compensation for such instruction. The same law also

provides remuneration, to be fixed by the general council of education of the Province or Territory for all persons, not teachers, who are certificated to have taught illiterates, whether children or adults, to read and write.

Most novel of all undertakings for the wiping out of illiteracy are the traveling schools (*escuelas ambulantes*). Provided for by the original organic school law of 1884, these schools were not, because of lack of funds, put into operation until 1914. Up to that time there was a conviction that their need was insignificant by contrast with the greater problem of illiteracy in the cities, and that to scatter funds available for combating illiteracy was not prudent. How serious this mistake was appeared in 1914 when it was ascertained by systematic count that of nearly 35,000 children of the Territories not in school only 6,000 lived in towns.

Located first in Province of Catamarca, and in the mountain regions of Rio Negro and the Chubut, these schools are built of materials easily transportable, and accommodate an average of 25 pupils. Sites are selected for them which are most accessible to the largest number of children in the district. Teachers traverse such regions on foot or muleback, carrying necessary equipment for instruction, and remain four and one-half months at each place, giving instruction in reading, writing, elements of arithmetic, and hygiene. A decided advantage is found in this succinct curriculum, the average of successful study by the pupils of these schools being, it is claimed, fully on a par with that of the pupils of the nine months' primary schools, who are required to take the standard number of subjects.

Within their first two years of existence, 20 of these schools were established, as reported by the National Council of Education in December, 1916; and 12 were added in 1917. The report of the inspector general of the Province of Mendoza concluded as follows:

> This new type of school must exist for many years in Argentina to answer the needs of the actual distribution of the population, the lack of adequate means of communication, and the impossibility of maintaining fixed schools in the greater part of the zones engaged in agriculture and cattle raising. It behooves the authorities, therefore, to continue the improvement of the system in such manner that its efficiency shall be steadily greater, and that results shall amply compensate for their maintenance.

An interesting phase of social conscience is shown in the generous offer of the women pupils of the third and fourth years of the normal school at Santa Fe to instruct illiterates afternoons and nights in reading, writing, the elements of arithmetic, national language and history, and practical personal and school hygiene. This offer has been highly commended both by Argentine and foreign educators as a step toward solving the problem of illiteracy, worthy of imitation nationally and locally.

The struggle against illiteracy has been the subject of serious consideration by the executive, the chief school authorities, and the Congress. The executive has constantly urged the National Council of Education to intensify its campaigns and has cooperated by all means in his power in the steady diffusion of education. The Houses of Congress have also busied themselves especially with this grave problem. These efforts have borne fruit which, if not visible at the present time, is certainly destined to raise the level of popular education within the next few years. The authorities have judged that what is needed is the patient labor which does not require an immediate and striking solution of a most difficult problem, but is willing to continue to exercise an ever-increasing influence upon the rising generation, confident of the spread of education and enlightenment with the increase of population and the improvement in means of communication; and that it is not wise to sow schools broadcast throughout the Republic merely for the pleasure of doing something and of doing it rapidly. The success of the struggle against illiteracy, certain as it is, has its roots not in merely spending much money, but in spending money well.

REPORT OF NATIONAL COUNCIL OF EDUCATION.

The progress of education in Argentina is best epitomized in the report of the National Council of Education for the four years ending December 31, 1916. The character of this council is unique in educational polity, wielding, as it does, greater powers than any similar body in countries educationaly advanced, and counting in its membership some of the ablest men in the Nation. Its reports follow traditionally the line of national (the capital city), provincial, and territorial administration. When the very heterogeneous character of the population of Argentina, due to the steady stream of immigration, is taken into account, the necessity of such a central body, vested with powers of initiation and execution in primary education, is apparent. By a wise division of powers in the original organic law, the control of secondary education was left in the hands of the Provinces, with subsidies granted by the National Government, as was the right to prescribe subjects essential to nationalistic and patriotic training. Concentration of effort and power is thus secured, with national acquiescence in the official actions of the council. Its activities center naturally around the establishment of new schools and the construction of school buildings, and the training of teachers to meet the demands of modern conditions.

As a substitute for the abortive intermediate schools established in 1916, which soon proved unsatisfactory, the council decided later in that year to establish, parallel and auxiliary to the higher pri-

mary schools, one of practical arts and crafts for each sex in every district of Buenos Aires. Such schools approximated 100 in number. This type of school was designed for boys and girls not intending to proceed to higher studies, and was later to be extended to the nation at large. Its purpose and program of studies was twofold—to complete the theoretical and higher courses of the higher primary schools with vocational, technical, and manual training, based upon and making use of the materials which were peculiarly Argentine and local in industries, commerce, art, and economics; and to lay stress throughout on nationalistic and patriotic aims. An interesting feature, common to these new schools and the continuation schools now arising in England and France, is the provision by which they operate 2 hours in the morning and 2 hours in the afternoon or night, and are to admit pupils from the fourth to the sixth grade of the primary schools, who have reached the age of 12 years. Statistics as to the success of these schools are not as yet available.

In the matter of building primary schools proper, the report of the council shows progress throughout the four years covered. A total of 62 schools, with 426 teachers and 19,563 pupils, was added to the system. Because of national economic and financial conditions prevailing half a century ago, the great majority of the primary schools began operation in private buildings, which did not conform to pedagogical or even sanitary requirements. For many years excessive rents were often paid by the State, but upon the revaluation of property in many Provinces in 1915, an economy in rents was effected, and the funds thus saved were devoted to new schools. Despite high prices of material and difficulties of labor, in December, 1916, eleven school buildings were in process of erection, at an estimated cost of $750,000, with a capacity of 22,000 pupils. According to the report of the council: "The construction of properly equipped Government primary school buildings has constituted one of the most serious problems and, therefore, one of the chief occupations of the council." It was frankly admitted, however, that, with all the efforts of the council, accommodations for children in the primary schools were still far from adequate, it being estimated on that date that 4,000 additional schools of this grade were needed for the more than 600,000 children in the capital and the Territories who, for one reason or another, were not in school.

The activity of the council continued to be marked in 1917. In April of that year, 143 new schools were decreed, 39 for the Federal Capital, 18 for the Provinces under the legal national subvention, and 86 for the Territories (30 being *escuelas ambulantes*), the Congress voting two millions in the national budget for the execution of this decree. The centralizing tendencies of South American coun-

tries in general, and the overwhelming dominance of the capital, secured for it so generous a share of this that it is estimated that in the Federal capital there will be for the first time room for all children of school age. For the poorer Provinces, and the Territories, which by the Tainez law of 1886 are absolutely dependent upon the central authority of the National Council, 250 schools of one and two rooms were assigned, but on an estimate about one-third of the children were still left unprovided with school facilities. Attention was repeatedly called to the need of a uniform and rigorously applied national law for compulsory school attendance.

During the year 1918 approximately 400 schools were established, and the council proposes to establish as many more during 1919 in the Provinces and the national Territories. The nation has taken charge of many provincial schools which the respective governments could not maintain by reason of lack of resources. The Province of Mendoza alone transferred 130 schools to the council of education during the month of August, 1918. Relative to the establishment of schools, regard has been had chiefly to the population of the districts which petitioned for them, as well as the number of children of school age, in order that the buildings may be installed in populous centers, where a constant attendance of pupils is reasonably assured.

The general plan of the council for the diffusion of primary education has not been put into practice in full, because of the lack of resources in some instances and in others because of the scarcity of building materials in the country. School equipment has been secured in various countries, supplies necessary having been purchased in the United States to the value of $350,000. The demand has been still unsatisfied, the capital city alone calling for the establishment of new schools every year, because of the increase of children of school age, and the Provinces have always been behind the necessary number of school buildings and facilities and have never reached the goal set by the authorities. An encouraging feature of the situation is that upon the completion of all the school buildings now under construction accommodations for 56,000 pupils in addition will be provided.

Peculiar attention has been given to the development of night schools by the council, 86 having been established and maintained by the council in the four years covered by the report. An admirably broadened scope was given them in the appeal issued by the council to the nation that the full purpose of such schools should be realized not only by the attendance of illiterates, but also of youths and adults "who, possessing some degree of education, are also desirous of improving that as related to the needs of their lives." All reforms and modifications of night schools have concerned themselves with this larger clientele. A further socializing of the night school is seen

in the appeal of the council to proprietors, managers of factories, and employers of labor generally to encourage in every way in their power their employees to attend night schools and to offer prizes of various kinds for diligence and progress. Literature bearing on these schools was distributed free by the council.

In 1915 the council was empowered, by the terms of the will of a philanthropic resident of Buenos Aires, Don Felix Berasconi, who bequeathed for educational purposes a sum of three and a half million dollars, to proceed to the erection and establishment of an institution under State control which should give instruction in general primary, scientific, scientific-industrial, physical, and social education. A building was to be begun in 1916, planned in seven sections, conforming to the most modern pedagogical and sanitary demands, and with a capacity of more than 3,000 pupils. Designed to benefit the working people preeminently, it was to be situated in the section of the city showing the greatest proportion of them.

Responding to the general feeling of dissatisfaction with the results of primary education in the city of Buenos Aires, which has been unaffected by criticism for seven years, the council in June, 1917, sent out questionnaires to all inspectors and to the body of teachers calling for an expression of opinion as to (1) the merits and defects of the plans of studies, schedules, etc., then in force; (2) those of projected or possible programs, with additional features worthy to be incorporated; and (3) educational considerations bearing upon the problems of the schools of the capital. The answers showed encouraging grasp of the educational needs of the city, with significant unanimity as to the practical methods of working out necessary reforms. Salient points were:

1. That all programs should leave room for and be closely articulated with manual arts and domestic economy.

2. That the courses of arithmetic in the first, second, third, fourth, and fifth grades were overloaded, as were those of grammar in the fourth, geometry in the third and fifth, nature study in the second, geography in the second and fifth, singing in the second, and music.

3. That the primary school cycle should commence at 7 years and end at 12.

4. That primary courses and schedules for urban schools should be strictly differentiated from those for rural and country town schools.

5. That from October 15 to April 15 the school day should be from 7.30 to 11.30; from April 15 to September 30 from 12 to 4.

6. That the advancement of the teacher with the class merited a fair trial, the teacher remaining with the same class a minimum of two years and a maximum of three.

7. That the establishment of normal schools essentially for rural teachers was imperative.

It is recognized that the clearness and sanity of these answers had a marked effect upon the substance of the law presented to the Federal Congress in August, 1918.

Another interesting instance of the submission of a pedagogic matter to the teachers of the city of Buenos Aires is shown in the questionnaire asking their opinion as to the best method of teaching spelling, sent out by the inspector of the tenth district, to the teachers. In accordance with the answers to this, the vocabulary used in primary schools was reduced to categories corresponding to the several grades, to its difficulties, and to the actual needs of the life and dominant occupations of the quarter of the city from which the children were drawn. This step was highly commended in French educational circles as marking efficient grappling with pedagogical difficulties felt in all cities of whatsoever country.

The regulation of the medical and dental inspection of national schools, under decree of March, 1918, was noteworthy. According to this, professional inspectors, chosen by the Government, must within the first three months of each school year examine individually all children entering school for the first time, periodically inspect the school buildings and ground and the health conditions of the teaching and administrative staffs, and take all prophylactic measures deemed necessary against epidemics and contagious diseases. Such reports shall be transmitted to the medical inspector general. Dental inspection of schools is to have a prominent part. Every month the chief inspector shall assemble for report and mutual discussion all medical and dental inspectors in such territorial divisions as he shall see fit.

Of the regulations in detail promulgated by the council in 1918, the most important is that changing the school year to two divisions, the first beginning March 1 and continuing until June 30, followed by three weeks of vacation, and the second beginning July 21 and continuing until November 20, followed by the long vacation of the year. This change is regarded as conforming with climatic effects upon the health of school children and as being a step long needed.

PROGRESS OF EDUCATION IN THE PROVINCES.

Outside the scope of the National Council are the powers of the provincial councils. These are local, auxiliary, and reinforcing in character. Some of the Provinces are practically inactive on the side of primary education, contenting themselves with the provisions made in that field by the National Government. Others, however, among them Santa Fe, San Luis, Cordoba, Entre Rios, and,

of course, Buenos Aires, are worthy of note and commendation for steady interest in matters educational, and in financial support of schools carried on independently of the central authority.

Progress in the Province of Santa Fe, as evidenced by the annual message of the governor of that Province for 1917, was steady, despite the need of economy in provincial finances due to conditions resulting from the World War. An increase of 14 provincial schools over the year previous and of the grades in 36 schools was noted. Two problems were kept steadily in view: The improvement in the teaching personnel, accentuated by the disclosure of the fact that more than one-third of the teachers in the provincial schools lacked teacher training, and the construction of better school buildings. It was estimated that with these from 25 to 30 per cent of additional pupils could be taught by the same teaching force.

In the Province of San Luis the general inspector of provinces reported for 1916 the establishment of 160 local associations of the national *Amigos de la Educacion.* This society, composed of parents and others interested in primary education, has for its objects the close linking of home and school, the fight against illiteracy, the promotion of good feeling and companionship between natives and immigrants, the celebration of national festivals, the securing of better primary enrollment and attendance especially by the poorer children, with the inculcation of their self-respect, and cooperation with the regional and national authorities in the safeguarding of public health.

In this Province, by volunteer organizations of teachers and others interested, local patriotic conferences were inaugurated on topics of national history, hygiene, political economy, ethics, and themes generally related to home and school matters.

In the Province of Buenos Aires school excursions have been developed and made an organic part of instruction in civic and national spirit. They have been so arranged that children in the several zones may come by personal touch to know and correspond by letter with each other. In some places participation in these excursions has been made a reward of good lessons and conduct. They are to be taken in the last 15 days of October, and children are not to remain more than 3 days in one locality. Groups of not more than 12 pupils are recommended.

In July, 1916, the council general of the Province of Buenos Aires initiated courses in the normal school for the training of teachers and graduates of the normal schools in the recognition and study of retardation and its causes, and in early correction of abnormalities most frequently met. The program of courses includes a series of 16 lessons on related medical and pedagogical topics.

Of direct bearing upon educational problems among the rural population is the project of the law recently sent by the executive of the Province of Buenos Aires to the legislature, providing for the issuance of bonds to the amount of $45,000,000 for the expropriation of parts of the great landed estates and the division of the land thus expropriated into small tracts for the use of small farmers. Subsequent purchase under advantageous terms is to be encouraged. According to reports, the prevailing system of "arrendatorios," or small tenants for short terms, has led to so acute an agrarian unrest, with the consequent shifting and aimless wandering of an increasing element of the population, as to constitute a social and economic menace no longer to be ignored. The educational effects in the increase of illiteracy and the general retardation of primary education have been manifest.

In 1918 the Legislature of the Province of Entre Rios enacted into law a series of provisions guaranteeing the stability of the scale of salaries for teachers in provincial schools. Promotion and increase of salary were based rigorously upon merit; teachers were declared unremovable during good conduct and fitness; initial salaries were fixed as follows: (*a*) For normal teacher, $160 per month; (*b*) for rural normal teacher, $120 per month; (*c*) for rural teacher, $100 per month; (*d*) for special teacher, $80 per month. Every five years the teacher who has worked in the same place for that period shall receive a bonus of 20 per cent on his initial salary.

The government of the Province of Cordoba has approved a plan for the introduction of agricultural courses in the primary schools, presented and prepared by experts in agronomy and pedagogy, without dislocation of existing courses and schedules.

The inspectors of this Province presented for the consideration of the provincial chamber of deputies the project of a law to establish a normal school for the preparation of rural teachers exclusively, the courses offered being:

(*a*) The development of subjects related to fundamental studies in the primary schools;

(*b*) Practice teaching adapted to the needs of the primary schools of the locality; and

(*c*) Elementary teaching, both theoretical and practical, in manual arts, agriculture and cattle breeding, and minor rural industries.

Private schools conforming to governmental requirements were legally recognized and incorporated by decree of 1917 and their consequent validation effected. Pupils of the fifth and sixth grades of such private schools applying for leaving certificates are required to undergo an examination upon all subjects for those grades of the official national programs before a board of three members appointed by the inspector.

Officially apart from the Ministry of Public Education but calling for special mention was the establishment in 1917 under the encouragement of the National Department of Agriculture of 16 schools in rural domestic science in nine Provinces, including Buenos Aires. Courses are offered in minor industries, such as dairying, beekeeping, care of fowls, hog raising, agriculture, horticulture, and canning of fruits and vegetables. Five hundred women have been enrolled. A number of these schools, the largest at Tucuman, have been put on a permanent basis, and private associations are working to effect this in many places.

School celebrations of national festivals, long popular in Argentina, have been especially marked during the year 1918, the centennial year for the nation. They were held in all schools on July 8, the chief feature being the oath to the flag and the singing of the national hymn in the presence of the school and civic authorities.

CHANGES UNDER THE PROJECTED LAW OF 1918.

Following the former order of education in Argentina, the second stage of primary education began with the educational bill submitted with the approval of the President to the Federal Congress in August, 1918. In this were incorporated changes of far wider scope than any ever before projected. Not only primary education, but the entire fabric of Argentine education was to be nationalized in content of courses, in methods of instruction, and in special preparation of teachers for tasks devolving on them under the new régime. The bill provided for large development of industrial and vocational courses and called for the use of materials peculiarly national and local. It laid stress upon civic and patriotic training, in view of the heterogeneous constitution of the Argentine population through steady streams of immigration and the necessity of molding these diverse elements into a body of patriotic and intelligent citizens. It provided for the establishment of primary schools throughout the nation under more flexible financial and administrative regulations than the old, for the segregation of specific revenues for the exclusive use of the Ministry of Public Instruction, and the consequent abolition of the old system of national subsidies to individual localities. Especially in the fight against illiteracy did the projected law embody progressive features. The National Council of Education was empowered to establish standard primary schools wherever there were as many as 20 illiterate children of school age. In the message which accompanied the recommendation of the law the President pointed out that the projected law tended to give unity and stability to the several divisions of education under the direction of the department of national instruction and adapted them to the material

progress of the nation and to latter-day civilization. His identification of popular education with national progress justifies a quotation at length:

As primary education was established by law in 1864, it contains regulations which in reality have lost their original justfication; for Argentine civilization now demands urgent reforms in the the matter of general instruction in order to give greater consistency and reason to the latter. and in order to make it more practical, more adaptable to the various regional needs of the Republic. It is especially urgent to carry its action to all the sections of the country not yet reached by the system in order to arrive at the real aims of a truly national education. Chief among these is to eradicate illiteracy, the most patriotic task in which we can engage and the one upon whose successful execution alone can any real national progress and enlightenment rest.

The institutions of higher education have continued to develop in the direction of autonomy and within the limit determined by the law of 1885; but with the primary, they demand modifications in the course and arrangement of studies in order to abolish antiquated practices and methods and to reach the level of the great modern universities of the world.

Secondary instruction, in its turn, has lacked and still lacks a law to fix it in definite form and to define its real character in accordance with constitutional precepts and the nature of our political institutions. It has existed subject to the continual change of plans and regulations, harassed by the application of widely varying educational conceptions, in a state of continuous instability, and therefore reduced to a mere administrative mechanism without power of initiative relative to its immediate needs and without sufficient social influence to realize its true aims. To remedy these evils and to fill these gaps is one of the purposes of this law, in which the attempt has been made to include only that which ought to be general and permanent. The primary aim of secondary education should be to spread education among the towns and cities in such a way that in all the country there shall be trained, educated citizens fitted to play their part in the future civilization of the country. Preparatory instruction has therefore been kept under the control of the universities, which will fix their courses of study, their duration, and their extension both general and special. Both the plans of the preparatory courses, as well as those of the professions taught in the faculties of the university, have been projected along the lines already mentioned. The programs of the normal schools have been formulated in accordance with the technical ideas which should distinguish them, separating the general studies from those properly called pedagogical or professional, arranging them so that the former shall precede and the latter be intensified toward the end of the course.

As regards practical subjects of instruction, the project outlines only the general features according to which they must be taught. Instruction will be imparted in accordance with the necessities of the immediate field of each school, with special regard to natural production, commerce, industries, and aptitudes of the population, all with the purpose of adjusting anew the activities of the Argentine youth, which has hitherto been by preference inclined toward the more speculative studies rather than those of practical and of immediate application. It is left to the authorities of technical education to prepare plans and courses of study adapted to each class of institutions.

Enrollment in all schools has been made absolutely free, a logical consequence of compulsory education, which has as yet never been effective, but which is an indispensible condition to placing all upon the same plane of equality, a thing inherent in the principles of republican institutions.

The Goverment considers that the power wielded by the nation to spread primary education in the Provinces is so ample, in the form established by this projected law, that the regulations in force concerning financial subventions are without reason or justification. Once the Provinces have complied with the duty imposed upon them by the constitution in this regard up to the limit of their capacity the accompanying responsibility of the Federal Government will disappear.

The executive, knowing the great value of the teaching profession in the general concert of human activities, seeks every means to establish and dignify the career of teacher, making it a real profession surrounded by all the honors and all the public considerations which it can legitimately claim. It is therefore sought in the reform to fix proper conditions for different categories of teachers, as well as a scale of salaries, and proportional and periodic increase, thus guaranteeing the stability of the profession and assuring it an honorable and tranquil retirement. With such aims in view for the retirement of secondary teachers, the executive has believed it equitable to establish similar lines of financial aid for pensions and for increase of salaries as those offered to the teachers of primary education.

SECONDARY EDUCATION.

Reference has been made to the establishment of intermediate schools, at first uniform, later differentiated, substituted for the former fifth and sixth years of the primary school and intended to bridge the chasm between the primary and the secondary schools. This marked a further innovation, in that secondary education had always been left in Argentina to the Provinces, the State nationally exercising only a nominal oversight of this division. For financial reasons, as well as because of the necessity of giving uniformity to a type so widely scattered, the intermediate school was from the very first regarded as national in scope. It may be likened in many respects to the junior high school of American cities. It was designed to give instruction of a general and cultural nature in languages, history, geography, and mathematics, combined with experimental studies in the elements of physical and natural science. Much earlier entrance, its advocates claimed, would thus be possible upon subjects of vocational and technical character, which should test the nascent abilities and aptitudes of the pupil. Especial attention was to be given woodworking, typewriting, stenography, linotyping, decorative design, photography, and special arts and crafts favored by local conditions.

This experiment, though marking an advance in educational methods, was unsuccessful, and after a year of existence such schools were discontinued. They did, however, affect instruction in secondary education, leaving their impress in the radical requirement of early specialization after the fifth and sixth higher primary grades.

The educational policy of Argentina thus returned to its traditional status; and secondary education still centers around the 37 colegios nacionales, institutions for boys of 10 to 14 years of age,

which admit those with leaving certificates from the fifth and sixth grades of the higher primary schools, and by revisal of 1911 offer courses arranged by fourfold division of subjects into the physical-mathematical, the chemical-biological, the historical-geographical, and the literary-philosophical groups. A decree of the National Council dated February, 1916, made the certificate of sixth grade of the public school obligatory for admission to the colegio. This was regarded as going far toward settling two fundamental difficulties—the first, the long desired abolition of the entrance examination, as discredited by experience and prejudicial to secondary training, and the second, the official recognition of the compulsory attendance law for children of 6 to 14 years.

Among the new subjects assigned for the colegios is the study of Italian, now restored after being abolished by previous decree. In accordance with this requirement, a course in this language has been instituted in the normal schools for the preparation of teachers.

The close connection of the interests of the colegio nacionale with the university is brought out in the report of the rector of the National University of Buenos Aires for 1916. It is of significance as striking out new lines in what had always been a conservative division, and carried weight in the fluid state of public opinion on education which prevailed just at that time.

Taking up the instructional aspect of secondary education, and the claims put forward by zealous partisans of the opposing views that the colegios should prepare either for higher studies or for practical life, but not for both, he urged legal provisions for both forms of training to supply the demand felt in all modern states for men of thought as well as efficiency in action. In the light of this demand all wrangling as to programs of study could only be to the damage of the State. Since the Argentine colegios half a century ago were modeled after the French lycées, with their emphasis upon the cultural studies, the world had moved far, economically and socially, and sane modifications in secondary education now clamored for recognition.

On the side of administration the peculiar question for Argentina, the land of great distances and many climates and productions, was whether the best organization for secondary instruction was the concentration of power in the hands of a council or of the minister of public instruction, or more or less complete autonomy to be granted to the individual institution. In either case the fixed principle was to be accepted that the universities were directly concerned in the discipline and studies of the students they were to receive, and that they should therefore have the right of intervening in matters of organization and studies of the colegios.

A just decentralization of the colegios could be easily realized and would bring such beneficial results as: (1) More direct and immediate action of the authorities; (2) closer articulation of the colegios with the universities in the matter of studies for preparation for the latter; (3) formation of intellectual groups that would be encouraged to take root permanently in the Provinces, thus avoiding the wholesale migration of the directing classes to the capital; (4) ease of reform, as contrasted with the present system, wherein every change in the program of studies was a disturbance whose utility was not always certain; (5) the best selection, so far as possible, of the personal directive staff of the colegios, as the men in higher education would be familiar with the problems of secondary instruction; (6) economy of administrative expense; (7) the possibility of transforming certain of the colegios into schools of arts, trades, and industries in which general instruction, continuing the primary, might be combined with the special and technical preparation so much needed for the material well-being of the several regions of the Republic.

In the projected law of public instruction, introduced in August, 1918, it is provided that all matters relating to secondary education shall be under the authority of the national universities, with full power to regulate content of courses, curricula, etc. This is manifestly a step suggested by the traditional system of Spain, in which the standard secondary schools (*institutos*) are arranged according to university districts and are governed by university rector and council. Its wisdom and advisability for a country of the Western Hemisphere have been variously considered.

TECHNICAL EDUCATION.

By the projected law of August, 1918, a National Board of Technical Education is to be established to ascertain the progress of this branch of education in other countries, to adapt whatever may be possible to the conditions and needs of Argentina, to foster technical instruction in the national schools, and to keep in touch with its progress throughout the world.

NORMAL-SCHOOL TRAINING.

The sequence of studies prescribed for pupils of the normal school according to the decree of March, 1916, is also worthy of notice. Immediately following, and based upon the intermediate schools which, as described above, were discarded after trial, the normal school required four years for the teachers' diploma, after which the student might proceed to higher studies for the degree of

teacher of modern languages in two years or that of teacher of languages in normal school in three years, or that of teacher of philosophy in any institution in six years. A commendable gain of one year in each of these was effected, and this feature is to be embodied in the new provisions now under consideration. In addition, the new project of educational law outlines a teacher's course of four years, clearly differentiating between the general or cultural and the pedagogical or professional courses. The former are assigned to the first three years as required; the latter are reserved for the last year, constituting an intensive curriculum of pedagogical history and methods and practice teaching in the required annexed practice school. The completion (1918) of the Normal School Sarmiento in Buenos Aires, named in honor of the founder of popular education in South America, is to be noted. This school, capable of accommodating 1,000 pupils and equipped with the most modern apparatus, is worthy of comparison with the finest schools in the other countries educationally most advanced.

HIGHER EDUCATION.

With the provision incorporated in the projected law, by which control of national secondary education is vested in the universities, the latter will touch national education much more intimately than ever before. The universities of Argentina are those of Buenos Aires, Cordoba, and La Plata, which are national, and those of Santa Fe and Tucuman, which are provincial but will soon be nationalized. In 1917 there was a growing feeling in university circles in favor of decentralization, with greater degree of autonomy for each university. The report of the rector of the university of Buenos Aires for 1917 was of interest as showing the effect of this upon the colegios as well as the universities. How far this has been checked by the projected provision to intrust secondary education to universities can not be learned.

The unrest among the student bodies in the institutions of higher education has constituted perhaps the most remarkable feature of the educational history of the past year. In Buenos Aires reform was demanded in the statutes under which the university was governed, and the adoption of methods in conformity with new tendencies in university instruction. The students demanded especially the right to vote for the election of the authorities. Satisfactory agreement was reached, and the university, after several days of suspension of classes and demonstrations on the part of the student body, resumed instruction, which was uninterrupted for the rest of the year. At the University of Cordoba the conflict between the students and the authorities assumed more serious proportions. Regu-

lar work was suspended, the efforts of the mediator appointed by the National Government to hear the claims of the student body and to decide upon the just and practical course for the university authorities to adopt were unsatisfactory to the complainants, and the authority of the minister of public instruction was invoked. Upon investigation the latter official advocated in his report to the executive a complete reorganization of the university in its statutes, regulations, acts of discipline, and staff of professors. These changes were ratified by the executive and were practically embodied in the project of the law submitted to the Congress in those sections pertaining to university education. In the other three universities, those of La Plata, Tucuman, and Santa Fe, the disturbances which impeded the prosecution of the regular routine of studies were comparatively insignificant, though the spirit of unrest was marked and many of the reforms and changes secured in the two leading universities were readily accepted.

The growth of the so-called student centers (*centros estudiantiles*) has been a feature of higher education during the past two years. These organizations have come to be representative of student life and of the student point of view, and have therefore gained much importance in the eyes of the authorities. They are organized according to departments of studies, such as the centers of medical and dental students, of engineering students, of political science students, of students of architecture, and of law. Each numbers from 100 to 500 members. They are grouped as a whole into the University Federation of Buenos Aires, in which each is represented by delegates, and which is regarded as the mouthpiece of all university students in the metropolis.

Plans are already under way by the executive council of the University of Buenos Aires for the celebration of the first centenary of its foundation, which will occur in October, 1921. Invitations have been extended to the institutions of higher education in all countries of the world to designate and send representatives. Though the actual building of the ancient colegio nacional, in which the university began its operation, has been materially changed, yet the present building occupies the same site, and it has been decided to hold the centennial celebration in it.

Of interest is the projected foundation of a popular university at Buenos Aires, constituted along industrial lines and frankly designed to counteract the technical and industrial influence of North American universities in South American countries.

A survey of educational progress in Argentina may fittingly conclude with mention of the annual American Congress of Education and Commercial Extension, held in Montevideo in January, 1919,

in which representatives of all the Latin-American countries participated, and those of Argentina, from her economic and educational leadership, were most prominent. The proceedings of the congress will be discussed in the chapter on Uruguay.

VOCATIONAL EDUCATION IN BRAZIL.

Educational activity in Brazil has been most marked in the field of vocational education. A special commission, appointed by the Director General of Public Instruction, consisting of five experienced teachers in subjects of this nature, was instructed to formulate courses for the State schools which were to be established by law in the Federal District. They were to serve as models for subsequent schools of the same character in the several States and Territories. The commission, of which Senhor Coryntho da Fonseca was the spokesman, after several months of conference and personal visits of inspection to the vocational schools already existent in the several centers, especially in Sao Paulo, and after hearing reports from active teachers in the subjects, presented its report in March, 1919. It was approved by the Vice President, serving ad interim for the President, and was recommended by him to be put into actual operation pending its formal enactment into law by the Congress.

The report as finally presented rested upon four main considerations:

1. The State, in the field of instruction, has primarily an educational function and only secondarily a vocational one. Courses in shop training, designed to awake and develop an aptitude in the pupil for a particular industry, must of course enter into any well-rounded scheme of education. This in turn must be designed to promote a general and not a specialized technical education which will introduce both sexes to industrial and commercial life. For practical reasons of expense, if for no other, the State should not be expected to prepare pupils for specialized vocations.

2. The task of the commission being to deal with the branches of vocational training best adapted to give the pupil a broad outlook upon general industrial activities, the commission judged it best to confine its recommendations to manual work of construction in wood, metal, and plastic material. In methods as well as content of instruction it is emphasized that such work must proceed along the lines of teaching by example. In such teaching much that is old and fundamental must be stressed by way of throwing light upon the elements of the training that are common to all branches of manual arts.

3. In its decision to urge a general attitude toward industrial training rather than specialized methods peculiar to one branch, the commission was confirmed by the testimony of all except one of the directors of the vocational institutions in Brazil. Only one advocated specialized instruction. Written representations of the faculties of the vocational schools Alvaro Baptista, and Souza Aguiar, in Rio, further confirmed this view.

4. The results of vocational instruction in Brazil as actually observed within the last few years convinced the commission—

(*a*) That unspecialized training best provided the foundations for good citizenship as well as industrial training.

(*b*) That by this training the latent technical aptitudes of the student were more effectively revealed and developed, as shown by steady increase in salaries of the graduates, than was the case with the apprentices who had been trained exclusively in one line.

(*c*) That the superior adaptation of the graduates of the general vocational school had been shown by tables giving information as to their progress in skill and value to their employers. These tables were naturally incomplete, but their general drift was undeniable.

(*d*) That the chief cause of the poor attendance upon the vocational instruction for boys is the prevalent idea that the vocational school is an index of lower social standing, enrolling only those boys that can not obtain any other means of education. Thus the vocational school is sharply differentiated socially from other types of schools. It suffers from being regarded as preeminently the school to train workmen. The commission had in mind the purpose of preparing public sentiment for the passing of this traditional prejudice when it attempted to inspire a just estimate of manual work in the public mind and to organize such courses as would adequately carry out this idea.

(*e*) That the vocational school must be established as a direct continuation of the primary school, ministering to the innate tendency in the child to realize things with his own hands; that thus the traditional and depressing prejudice mentioned would be counteracted, as time would not be given for it to intervene in the child's mind. The workshop, thus articulated with general training, would come to be the fulfillment of an aspiration, inculcating as well the love of work and respect for it.

(*f*) That the success of the projected schools depends largely upon the cooperation of the industrial firms of Brazil, which should be appealed to for their sympathy and for the encouragement of their adolescent employees to attend these schools; that the granting of daylight hours to employees to attend such schools, as has been done in England and France, with the consequent improve-

ment in the physical and mental condition of the pupils, is a step to be commended to all employers as patriotic citizens.

The salient provisions of the report of the commission are as follows:

ARTICE 1. The technical and vocational instruction maintained by the prefecture of the Federal District has for its aim to complete the primary elementary instruction by means of a general technical education leading the youth of both sexes preferably to industrial and commercial activities.

ART. 2. Technical and vocational instruction shall be given in the following types of schools:

(*a*) Primary vocational schools.

(*b*) Secondary vocational institutes.

(*c*) Secondary agricultural schools.

(*d*) Vocational finishing courses.

(*e*) Normal school of arts and crafts.

Types (*a*), (*d*), and (*c*) shall be day schools exclusively; types (*b*) and (*c*) shall offer boarding accommodations for pupils from distance.

ART. 3. In schools of types (*a*) and (*d*) instruction shall be imparted predominantly in the recitation rooms.

ART. 4. The courses of the primary vocational school for boys shall include the following subjects:

(*a*) The usual subjects of the complementary course of the primary schools, with fuller development of the studies of physics, chemistry, natural history, hygiene, and mathematics.

(*b*) Modeling and free-hand and mechanical drawing.

ART. 5. The courses of the primary vocational school for girls shall include:

(*a*) The usual subjects of the complementary course of the primary schools, with fuller development of the studies of hygiene and domestic economy.

(*b*) Modeling and free-hand drawing.

ART. 6. The subjects of the vocational finishing courses shall include:

(*a*) In the commercial course, Portuguese and civic instruction, commercial geography, French and one other modern language, English or German, to be chosen by the pupil, commercial correspondence and accounting, typewriting, stenography, and arithmetic.

(*b*) In the industrial course, Portuguese and civic instruction, arithmetic, and geography, elements of applied physics, chemistry, and natural history, accounting as related to the particular vocation selected by the pupil, free-hand and mechanical drawing.

ART. 7. The vocational finishing courses are designed primarily for young men already employed in industry and commerce, who seek to improve their vocational knowledge.

ART. 8. The two types of vocational finishing schools may be taught conjointly in the same building.

ART. 9. Teachers and assistants imparting instruction shall be appointed as follows:

(*a*) There shall be a teacher and so many assistants for each branch as shall be made necessary by the attendance.

(*b*) For the instruction in technical accounting related to each vocation there shall be employed special teachers only where 15 or more students are enrolled for each course, and they shall receive salaries only when actually teaching. The same teachers shall be in charge of the various related branches of technical instruction in the shops.

ART. 10. The courses in the secondary vocational institutes for boys shall include—

(*a*) The elementary and middle instruction for pupils who have not had them.

(*b*) Physical exercises and military drill.

(*c*) Vocal and instrumental music.

ART. 11. The courses in the vocational institutes for girls shall include—

(*a*) Primary instruction for such pupils as have not had it.

(*b*) Vocational drawing and modeling.

In the vocational institutes the elementary primary instruction shall be followed by an intensive course in manual arts, such as sloyd, wood carving, and weaving in straw, vine, and bamboo.

ART. 12. The primary vocational schools shall also offer a commercial course consisting of the following subjects:

(*a*) Commercial correspondence and accounting.

(*b*) Typewriting and stenography.

(*c*) French and one other modern language, English or German.

ART. 13. Instruction in the workshops of vocational schools for boys shall be given first in a general compulsory course of three years, during which the pupil shall in turn be trained in the workshops in cold and molten metals, including foundry work and wrought-iron work. The pupil shall then be allowed to specialize in any workshop or section at his choice. The pupils of the vocational institutes for boys shall likewise take a compulsory course in horticulture and kindred subjects.

ART. 14. The agricultural schools and the vocational institutes shall require attendance on the courses of civil training and agronomy, with optional specialization in any line selected when the general course is completed.

ART. 15. In the vocational schools and institutes for girls there shall be a compulsory general course upon the following practical subjects: Cooking, laundering, ironing and starching, housekeeping, sewing and dressmaking. Along with this general course the pupils shall attend certain vocational courses chosen by themselves from sewing, lace making, and embroidery, artificial-flower work, etc.

ART. 16. For admission to the schools of vocational instruction the following shall be the legal requirements as to age:

(*a*) For vocational and agricultural schools, minimum age 13, maximum 21.

(*b*) For the vocational institutes for boys, minimum age 10, maximum 13.

(*c*) For the vocational institutes for girls, minimum age 7, maximum 13.

(*d*) For the normal school of arts and trades, minimum age 14, maximum 25.

(*e*) For the vocational finishing courses, minimum age 13.

ART. 17. For matriculation in the vocational and agricultural schools and the finishing courses the candidates shall submit to an examination upon the subjects taught in the middle course of the primary school. In the commercial courses of the finishing schools, in the girls' schools, and in the normal school of arts and trades, the entrance examination shall be upon the subjects of the final examination of the primary schools.

ART. 18. The school year in the entire system of vocational instruction, with the exception of agricultural schools, shall begin March 1 and close November 30. The period from December 1 to December 24 shall be devoted to examinations and to school exhibitions. In the agricultural schools, because of their nature, the pupils shall have 60 days of annual vacation granted to them in groups by the director in accordance with the demands of the agricultural seasons and labors.

ART. 19. The courses of the primary vocational schools, of the institutes, and of the finishing courses shall be divided into periods of 4 to 5 years; the finish-

ing courses into periods of three years; and the commercial course of the schools for girls into a period of two years.

ART. 24. The officials of inspection of technical and vocational instruction shall draw up annual statistics of attendance and of the results of the vocational instruction upon the bases of data furnished by the directors of the several schools and, so far as possible, by employers and by the former pupils who have themselves left the schools. These statistics shall relate to the following topics:

(*a*) Number of pupils placed, with indication of the establishments where they are employed.

(*b*) Initial salary obtained by them as related to the period of schooling.

(*c*) Technical aptitude revealed by former pupils and their capacity of adaptation to the various industrial works.

(*d*) Progress of increase in salary of former pupils.

(*e*) All available information as to individual former pupils with regard to the advantages or disadvantages of their schooling in the decision of economic life, and their success in it.

ART. 25. All posts of assistants and substitutes in the vocational system shall be filled by competitive examinations.

(*a*) For the assistant in drawing in the vocational schools in institutes for boys, the examination shall be tests in drawing, in artistic training, and in pedagogical fitness.

(*b*) For the filling of the same post in the vocational schools and institutes for girls the examination shall be tests in writing at dictation, in decorative composition, in embroidery and lacework, and in pedagogical fitness.

(*c*) The competitive test for filling the post of substitutes in shopwork shall be upon vocational design of an assigned theme for shopwork and the execution of the same.

ART. 26. The teachers in vocational instruction shall be named by means of promotion of the assistants and substitutes.

ART. 27. There shall be a substitute for every group of 20 pupils in shopwork, and an assistant for every class of 30 pupils.

ART. 28. When any primary school is transformed into a vocational school there shall be annexed the elementary primary course in which shall be taught intensively the manual arts prescribed for the elementary instruction of the institutes, but the pupils shall attend the shopwork of the vocational courses only when they have completed the work of the middle course and attained the age of 13 years.

EDUCATION IN CHILE.

PRELIMINARY.

The last two years have seen in Chile a distinct gathering up of the threads of educational purpose. The feeling of dissatisfaction with the primary school system, for many years inarticulate, has found a voice, and all signs point to Chile's finally securing a modernized system of public instruction. The head and front of the indictment drawn by national students of education has been the complete Germanization of the system through the employment of a considerable number of German educational experts during the de-

cade from 1904 to 1914. The climax came in the revelations of the propagandist activities of the German educators brought out at the meeting of the National Educational Association in 1917.

Financial support of public instruction in Chile has never been stinted, so far as its existent state was concerned. As merely one item may be adduced the fact that in March, 1916, the Congress authorized the President to devote to public instruction for specific aims such as the building and remodeling of schoolhouses, $4,000,000 annually for 10 years, through the medium of the Central Council of Education, in which was vested the discretion as to methods and objects of the expenditure. In 1918 the budget was voted by the Congress of $35,450,000 for public instruction, as against that of $32,373,404 for 1917. So that the authorities of the Government must justly be credited with a practical interest in education which encourages teachers and other active workers in their efforts toward greater efficiency.

In 1917 there had been increased discussion of matters educational; and in June of that year President Sanfuentes in his message showed that the time had come to impress on the national system of public instruction a more practical stamp, making it adequate to the needs of everyday life and the special conditions of the country. Along with this he urged the specialization of secondary education as, just then, the urgent and opportune point of attack for the development of Chile's scientific and industrial possibilities.

This message was followed by action of the Congress which clearly showed the traditional line of cleavage long prevailing in Chile's social and political system. The demand for some form of modernized public instruction could no longer be repressed; and a conservative deputy introduced the project of a law to insert in the constitution a provision for compulsory primary schooling and compulsory religious instruction, the only modification of the latter being the concession to the parent to choose the forms and means of such instruction. The radical party was not slow in countering with a project adopting the feature of compulsory attendance but decentralizing and completely secularizing the existing system. The latter proposal, now made for the first time in the history of Chilean legislation, was especially bold, as Chile has never done away with the essentially religious tone of her education. She retains representatives of the State church on her National Council of Education, freely recognizes parochial primary schools, and has her secondary schools largely managed by religious instructors and under distinctively religious auspices.

The compromise bill formulated by a specially appointed commission of the Congress sought to satisfy both extremes. It vested su-

preme administrative authority in educational matters in a council of 18, sitting in Santiago, presided over by the Minister of Justice and Instruction; but it allowed 11 of the members to be named by the Senate, the Chamber of Deputies, and the President of the Republic. This feature was severely criticized by the liberals and by the National Educational Association as still keeping educational authority in the hands of politicians, not intrusting it to men really interested in education, and making it possible to block all educational progress whenever desired.

The bill made four years' attendance in primary schools, private or public, compulsory for all children between 7 and 13, and required all reaching the latter age without completing the prescribed course to continue until 15. Poverty could not be pleaded in excuse, as grants by the State were specified and graduated in amounts according to need. Exemption from religious instruction was allowed upon written application of the parent or upon certification of the local junta, another feature opposed by the National Educational Association on the ground that the junta's powers could never be so amplified legally. Programs of study and schedules should be under the authority of the inspector general of primary instruction. Primary instruction was to be imparted to complete illiterates in schools called supplementary, managed independently of existing primary schools, and to partial illiterates in schools called complementary, conducted in conjunction with existent primary schools.

The bill, as outlined above, encountered opposition from many sources, and still remains unenacted. Pending its passage, the Minister of Public Instruction, by virtue of the power vested in him, issued in 1918 a decree organizing primary education in three grades of two years each, continued by one grade of vocational education of from one to three years. Attendance is not specifically compulsory, though the local junta has power so to declare it in the schools of its jurisdiction. The requirements as to qualifications of a primary teacher are made more rigorous; he must be a citizen of Chile, of good character, not less than 18 nor more than 40 years of age at the time of appointment, and a graduate of a Government normal school, or holding a degree of a Chilean or recognized foreign institution.

ILLITERACY.

The problem of illiteracy in Chile is a serious one, the estimated figures for 1917 showing 959,061 illiterates out of a total population of 3,249,279. Since the year 1900 the struggle against it has grown in vigor. The National Educational Association has shown especial efficiency, and has worked through committees having the following phases in charge: Compulsory school attendance, the legal require-

ments, condition of the schools and the teaching force, school revenues, school buildings and sanitation, and special education.

This steady pressure prepared public sentiment for the leadership of the most influential agency ever invoked in the fight against illiteracy, viz, the conferences organized by the powerful newspaper El Mercurio. Under its auspices these conferences were held in a 3-days' series in July, 1917, and were attended and participated in by men and women identified with every phase of national education. The following topics were the salient ones of those discussed:

1. Comparative study of illiteracy statistics in various countries.
2. Means of combating illiteracy in leading nations.
3. Practicable means of action in Chile.
4. Means of contribution, and proportion in which the State, the municipal authorities, and the Provinces may contribute to the budget necessary.
5. Cooperation of private initiative.
6. Means of making school attendance compulsory.
7. Regulation of child labor.
8. Reforms necessary in actual plans of study and in classification of schools.
9. Necessity and practical means of giving the schools a more Nationalistic character.
10. Minimum of knowledge to be required by compulsory attendance law.
11. Place of night schools, Sunday schools, and traveling schools, in the struggle against illiteracy.

While no action of a legal character resulted from these conferences, yet the impetus given to the cause was powerful, and had weight in bringing about the decree and the projected law already outlined. Such a move, combining at once social and economic as well as educational characteristics, seeking to bring public opinion to bear on the solution of a problem underlying the life of a nation, and launched by a newspaper, is unique in the history of education.

The Territory of Magellanes has shown itself remarkably efficient in handling the problem of illiteracy. It is the southernmost area of the country, and little favored by nature, being a long strip of barren and rocky coast, with a climate singularly bleak and uninviting. Its industries are based exclusively upon its mineral resources; and its population, though intelligent, is very sparse. By the census of 1917, its percentage of illiteracy was 20; according to the estimate of the author of a study of the Territory, published in the Anales de la Universidad, April, 1918, this has been reduced to 7 per cent. Credit is largely due the Society of Popular Instruction, a private organization, established in 1911, which offers free

instruction to pupils of all ages. In spite of the prevailing inclemency of the climate, the sessions of its day and night schools are excellently attended. The system is centralized in Punta Arenas.

PRIMARY EDUCATION.

Unlike Argentina and Brazil, primary public education has always been left in the hands of the central national government, the individual Province having control of financial outlay and the construction of school buildings, and this only when requirements of the national law are fulfilled. Uniform programs of study and schedules of hours are enforced throughout the nation. But conditions of scarcity of materials and labor render it impossible to keep many of the old buildings in repair. The tendency long criticized by the Association of Teachers, to cram school buildings into the half dozen larger centers, seems in a fair way to be checked.[1]

This new order of things is most plainly seen in the attention paid to rural schools, which have predominated in the number built since 1916. The Government has instructed the committee on public works and the department of primary instruction to develop a plan of building uniform types of rural school. The expenses are to be borne out of the fund just mentioned. Three types are contemplated, with a capacity of 80, 160, and 400 pupils respectively, solidly constructed, conforming strictly to all modern demands of sanitation, lighting, and heating. In many places the North American principle of consolidation of schools has been applied, to the distinct improvement of attendance and instruction, 200 small and struggling schools having been abolished and 100 annexed to others more centrally situated. With these gains, however, the crying need in Chile is acknowledged to be more schools. It is estimated that 10,000 elementary schools are yet needed for her approximately 750,000 children, of whom slightly less than 400,000 are in the schools of this grade, and 50,000 in private parochial schools. All educational thinkers are agreed that the situation calls for legal compulsory attendance on primary instruction, rigidly enforced.

SECONDARY EDUCATION.

Secondary education in Chile is organized in three grades: (1) National high schools; (2) liceos of the second class, and (3) complete liceos of the first class.

(1) The high schools are a development of the last few years, and are situated only in the larger centers. They number 30 for boys

[1] Criticism has been freely expressed in the public press of the use of a disproportionately large part of the primary school fund voted by the Congress for the use of the executive.

and 12 for girls, enrolling less than 12,000 pupils, and are generally little more than higher elementary schools. They are almost exclusively technical, and do not prepare the pupil for advanced study.

(2) The liceos of the second class (sometimes called colegios), of which about 100 exist in the Provinces and Territories, offer courses covering three years in the elementary subjects of instruction common to scientific and literary groups.

(3) The liceos of the first class, numbering 40 for boys and 31 for girls, and offering the full course of six years, are representative of the best in secondary education in Latin-America. Those for boys, following the tradition of the Spanish system for corresponding schools, are administered by the University of Chile; those for girls, by the Minister of Public Instruction and the National Council. The practical and scientific wave which swept over this division of education in 1915 caused the reinforcement of physical and chemical teaching. Spanish, history and geography, religion (optional), French, mathematics, natural sciences, gymnastics and singing, and manual training run through all six years of the course; English (or German or Italian), philosophy, civics, penmanship and drawing, mechanical drawing (optional), extend through varying numbers of years. Students of secondary education are struck with the excessive number of hours required weekly, the minimum being 29 for the first year and the maximum 33 for each of the last three years.

The essential purpose of the liceo of the first class is to prepare for the university, or for the professions; and national scholarships are granted, including maintenance at the hostels, or annexed boarding halls which were established five years ago.

The system of secondary education has long been criticized by Chilean educational thinkers as being too largely mental and literary, and as paying little, if any, attention to the physical and moral. The attempt to organize sports and physical exercises in secondary education has met far less encouragement than in other South American countries.

By decree of May, 1917, classes for illiterate girls over 7 years old were annexed to liceos for girls, the ministry basing the number to be admitted upon the attendance of the year previous. This was stoutly opposed by the National Educational Association as being a confusion of classification, a violation of the continuity of the educational system, and an evasion of the palpable duty of the school authorities, which should press the Government to establish fitting and proper schools for such illiterate girls.

The Government has appointed a commission of prominent men for the study of reforms necessary and advisable for programs of

secondary education for girls. As matters stand, the same programs of study are set for both boys and girls, a traditional arrangement the disadvantages of which are coming fully to be recognized.

Despite unfavorable and antiquated programs of studies, the Province of Nuble has made noteworthy progress in female secondary education. In Chillan, its capital, are conducted four liceos, three of which are for girls. Ambitious courses in the classics, social sciences, and rudimentary science are offered. One of them, the Instituto Pedagogico, founded in 1912, exercises far-reaching influence over the social, moral, and artistic conditions of the Province. The American Liceo, a private institution, conducted by teachers from the United States, devotes especial attention to the teaching of English, colloquial and literary, and also gives instruction generally along thoroughly modern high-school lines.

TRAINING OF TEACHERS.

Chile's system of training teachers is distinctively eclectic, borrowing, as it has done, from France, Sweden, Germany, and the United States. Before 1870 French influence predominated, the great Argentine educator, Sarmiento, himself a pupil of the school of Saint-Simon, having founded the first normal school in 1842 while in exile from the tyranny of the dictator Rosas. German influence became pronounced about 1880, when that nation began to supply men and women teachers in the normals and as instructors in all grades of education. Since 25 years ago the tide began to turn toward North American influence, especially of the type of education developed in the Northwestern States. The Chilean ideal is a judicious combination of (1) an institution for the training of teachers for public schools who shall have adequate culture, specialized training, manual skill, and theoretical and practical knowledge of modern subjects, and (2) an institution for training in social relations and habits, exercising steady influence on the social environment of the school by means of popular courses and conferences, and participation in popular movements.

The full course in the 16 training colleges for teachers covers five years, of which the first three are devoted to general education and the last two to professional training. The course for the fifth year is essentially professional, consisting of pedagogy (history, methodology, and practice teaching), 17 hours weekly; Spanish, 1 hour; English or French or German, 4 hours; civics and economics, 2 hours; hygiene, 2 hours; horticulture or metallography, 2 hours; drawing, 1 hour; manual arts, 2 hours; music, 1 hour; physical education, 3 hours. All expenses are defrayed, in return for which the pupil is pledged to teach for seven years in the national schools.

The actual method of instruction is along German lines. Object lessons, those in natural history and history and geography have all impressed recent foreign visitors as essentially Herbartian. Perhaps in no other country of the world, since the well-drilled German schools fell into chaos, is the influence of the normal schools upon the system and method of public instruction more powerful than in Chile. Indeed, this potent influence has overleaped the boundaries of Chile proper and affected every country of Latin America. A supreme example is the influence of the Instituto Pedagogico, the best known of Chilean normal schools, founded in 1909, with predominatingly German faculty, which has developed into a type of higher normal school with a colegio annexed, emphasizing practice teaching with subsequent criticism and courses of general pedagogy and methodology in every subject. Its certificates rank highest in the secondary and normal education of the capital city; students are attracted to it from the other Latin-American States, and return home to reorganize education there along its lines. Its boast is that it inspired the establishment of the Instituto Nacional at Buenos Aires.

Scandinavian and Belgian influences are at work in the Instituto de Profesores Especiales. Established in 1906, it was definitely reorganized in 1910 and installed in the building especially constructed for it. Of its 300 pupils 200 are women, and the majority of both men and women are active teachers in the schools of the capital. It offers courses common to all the specialized sections, such as psychology, French, pedagogy, civics, and school legislation, and includes five sections, fundamental to its organization: Physical education, manual arts, drawing and penmanship, domestic economy, and vocal music. For the convenience of teachers, instruction is given from 7 to 9 a. m. and from 4 to 8 p. m.

The last few years have seen wide extension of the demand for rural normal schools, and many critics of the existent schools have urged that they follow those of the State of Wisconsin as a model. The essential solidarity of educational aims of the South American republics is shown by the fact that Chile, Argentina, and Bolivia during the same period drew their inspiration from the same North American source.

The decree already mentioned under the head of primary education emphasizes the duty of the normal schools to prepare free of all expense primary teachers for any of the three grades of instruction. Each normal school is also required to have annexed such specially organized practice schools as shall be necessary. At the discretion of the President of the Republic, the normal schools shall offer special courses for those students who have passed the examinations of the fifth year of the colegios, with the aim of at-

tracting such students into the field of teaching. That the need of wider training of the teachers is a pressing one in Chile is shown by the fact that, in 1915, of 3,000 rural teachers, only 350, and of 6,240 primary teachers of the nation at large, only 2,435, had normal school training. The service had to be recruited by 2,000 graduates of primary schools who passed examinations, and by 1,850 applicants who held no certificate and were allowed to serve as temporary substitutes.

Of special interest is the annual reciprocity of teachers between the Government of Chile and the Universities of the States of California and Washington, arranged in 1918. Each party is to send four. For the present the Chilean commission has expressed predominant interest in secondary education, and has called for one university professor, one normal-school teacher, one teacher of technical subjects, and one teacher (preferably a woman) in secondary education. The universities mentioned will act as the agents in the selection of the instructors.

Interchange of university professors has also been arranged with Uruguay, which is for the present confined to medical instruction.

The National Educational Association has at many meetings pressed for the scientific and practical training of the teachers of Chile in vocational studies; and for the appropriation by the Congress of a definite sum for sending normal teachers abroad for study in the modern practical and sociological subjects.

TECHNICAL EDUCATION.

For this branch of education the National Educational Association in 1917 recommended that there be established by law a Council of Industrial Education composed of a director and 12 members, four of whom shall be professors of the fundamental technical branches, one a woman inspector of vocational schools for women, one an inspector general of primary education, one the director general of railroads, and one a director and inspector of army munitions. Their duties should be to exercise superintendency over the entire system of technical and industrial education to be organized in the Republic, over the national school of arts and trades, and over such industrial schools for girls and women as might be established. On this board should be likewise all inspectors and officials of such branches as might be later established. A bill embodying these provisions was introduced in the Congress but has not as yet been acted upon.

Steady progress in all branches of technical education has been shown. The schools of higher primary grade offering technical

courses number 288, with physical training and gymnastics compulsory in all grades. There were also in operation 29 technical colegios for women; 6 agricultural colegios; 10 commercial schools, controlled by the commission upon commercial education; and 3 schools of mines.

The department of industrial promotion has urged upon the Congress the establishment of a chain of industrial and agricultural schools.

With the establishment by law of the Industrial University of Valparaiso there will be completed the full cycle of industrial education in Chile, consisting of: (1) Elementary industrial training in two schools already established and in six more to be established; (2) secondary industrial training in the School of Arts and Crafts; and (3) higher industrial training in the Technical School of Valparaiso.

In November, 1918, met the first National Congress of Dairying, organized under the auspices of the Agronomic Society of Chile. It urged the legal organization of instruction in this branch in (1) special schools of dairying in northern and central Chile; (2) courses annexed to already established schools of agriculture; (3) in establishments of secondary education for youths of both sexes in popular meetings and public traveling courses; (4) in rural primary schools for illiterate adults.

It is appropriate to mention just here the comprehensive project of the board of missions of the Methodist Episcopal Church of the United States for the establishment of an agricultural and industrial system of education in southern Chile. It has been approved by the Government of Chile as a potent aid in the uplift of the peon class. A ranch of nearly 4,000 acres has been purchased along the Malleco River, on which it is purposed to train the native population in the rudimentary subjects of instruction, and especially in modern agricultural methods. The management will employ the best available experts in horticulture, agriculture, and domestic arts to be found in the South American countries who may be acquainted with the needs of Chilean rural life.

THE NATIONAL EDUCATIONAL ASSOCIATION OF CHILE.

This body plays a larger part in educational thought and leadership than the corresponding body in any other Latin American State. Its activities are planned for close articulation of the social and educational needs of the nation. One of the furthest reaching is the public-extension work in subjects of university and secondary instruction. In 1917, its eleventh year of operation, it held 14 conferences at the University of Chile, with an attendance of 15,000, an

increase of 50 per cent over the previous year. The subjects treated were patriotic, historical, literary, artistic, sociological, commercial, and medico-therapeutic.

In secondary extension during 1917 there were held in provincial capitals 19 conferences on subjects more popular and more exclusively educational and sociological.

The department of university extension has also for three years devoted itself to collecting international data upon immigration and naturalization laws, and has cooperated with all the labor organizations of the Republic to hinder the passage of premature and unscientific laws in this field.

The activities of the association cover a wide range. In his report for the year 1917 the president reviewed the activities of the body and examined the most important problems to which it had addressed itself during the period. They were:

1. The establishment of a rural normal school, a project not yet realized.
2. Democratic education by the progressive elimination of primary courses of education in secondary institutions.
3. Obligatory primary instruction, sought by a law passed by the Chamber of Deputies in 1917, but as yet not acted upon by the Senate.
4. Nationalization of the Chilean system of education, a question which needs to be presented still more in detail to the nation and the Congress.

Like Argentina, Chile has a grave problem in the assimilation of alien elements, and her nationalism is alarmed at the activity of the school organizations of diverse races existent on her soil. French students of education are intensely interested in this development as a vindication of their prophecies, for they have long been pointing out the Germanization of Chilean education.

The association has vigorously urged legislation requiring the close and systematic inspection of all nongovernmental schools, especially those of secondary grade in north Chile, where German propaganda has for years been an open secret, carried on, as was well known, by a German-Chilean Union of Teachers, and where German liceos exist in full operation. The association urged the requirement in secondary schools of essentially national subjects, such as Spanish and the history, geography, and civics of Chile, taught by Chileans and descendants of Chileans.

In the field of physical education, the activities of the association have been specially directed to securing proper playgrounds for schools and to arousing practical interest in this field among philanthropists and the public at large. The association has taken strong ground for antialcoholic instruction in primary and secondary

schools, urging that such be incorporated in the textbooks in the study of physiology, hygiene, and temperance, and in independent courses in public schools and State colegios. The project encountered opposition in the National Congress. The association has also grappled with the problem of immorality, issuing in May, 1917, appeals to families on sexual ethics and the systematic inculcation of ethical ideas of sex by educational and therapeutic measures. During 1917, fraternal relations were established with Brazil and Bolivia, on the occasion of the inauguration of the Higher Normal Institute.

EDUCATION IN URUGUAY.

GENERAL INTRODUCTION.

The marked educational awakening of Uruguay during the last biennium has been only one phase of the universal demand of the nation for a new social and economic adjustment. Perhaps the chief manifestation of this has been the adoption of the new constitution in place of the old, which had been in force exactly 90 years. At a plebiscite of November, 1917, the constitution as formulated was submitted to the people and adopted by a vote of 85,000 to 4,000; and it became the fundamental law of the land on March 1, 1919. As regards its bearings upon educational administration, the most noteworthy change—and perhaps that around which centered most opposition during its consideration—was the provision which divides the executive power between a President and a National Council of Administration.

The latter body, composed of nine members elected for six years directly by the people, and absolutely independent of the President, has charge of all matters relating to public instruction, public works, labor, industries, public charities, health, and the preparation of the annual national budget. The administrative officers of public instruction of all grades, including the minister, are appointed by the National Council and are subject to its authority according to such particular laws and regulations as the Congress may enact. This substitution of a composite board for an individual as the fountainhead of educational authority is an experiment whose operations will be observed with much interest in a country of South America habituated by tradition to authority concentrated in an individual.

ILLITERACY.

Instruction of adults and the night schools.—The problem of combating illiteracy, as in all the more progressive South American countries during the last biennium, has received more systematic con-

sideration than during any previous period.[1] As will be seen later in the consideration of the rural schools, measures have been taken which are of unusual importance for the instruction of youthful illiterates. In the related field of instruction of adults who are illiterates or nearly so, work of a creative nature has been done in Uruguay. The mere statistics show progress, the courses offered for adults in the year 1916-17 being 55 in excess of the former year and the enrollment 5,284, an increase of 1,671 over that year; but the new spirit animating this branch is the notable feature. The authorities have kept it steadily in mind to carry adult education out from the capital city to the rural districts; and the national authorities of primary education have cooperated efficiently in lending schoolhouses as places for adult instruction and encouraging primary teachers to assist in this work. The Government has furthered the study of the problem in the researches of Señor Hipolito Coirolo, director of the largest night school for adults in Montevideo. Señor Coirolo spent nearly two years in collecting systematic data from Argentina, Brazil, Colombia, and Paraguay, which were naturally confronted by the same problems in adult illiteracy. In March, 1917, he presented to the authorities the results of his findings in a project for the organic reform of instruction for adults in the night schools. Señor Coirolo maintained that the time was ripe for progress in this field to keep pace with the other educational demands, more especially as it was admitted that the prevailing system was a more or less poorly made combination of regulations and practices covering many localities and periods, and had been only tentatively adopted by presidential decree in 1903, and given legal existence in 1907, when 35 night schools were organized. All familiar with conditions knew that they were now completely out of touch with modern social and educational demands.

Señor Coirolo found the curriculum of night schools too largely theoretical and bookish and in only a few instances offering practical instruction. After careful study of the subjects offered in the night schools of progressive countries, he urged that the night schools of the future be organized upon the following main lines:

1. The completion of 17 years of age requisite for admission.

2. The division into three classes, each occupying a year according to the degree of illiteracy, and the division of each class into three cycles of three months each, the cycle to be the unit of time, without limitation upon the transfer of pupils from one cycle to another.

3. The subjects to be introduced in logical sequence and to be taught in accordance with the development of the pupil and to con-

[1] See executive message of May, 1917, accompanying project of law for appropriation of $50,000 for appointment of 100 assistant primary teachers for the Departments of the Republic.

sist of reading, language work, writing, arithmetic, elements of applied geometry, singing, drawing, moral instruction, elements of anatomy, physiology, hygiene, civic instruction, geography, and history (national and universal); talks and lessons on objects of daily life, manual arts, domestic economy, and household arts; elements of political economy, sociology, psychology, duties of parents, accounting, and industrial training. Individual conferences with teachers, reading, writing, and arithmetic are to be continued through all three years; and each year is to close with a review and finishing course, devoting attention to individual needs.

4. Under the head of general administration the proponent urged the elimination of religious instruction in night schools, less attention to examinations for promotion, the prohibition of holding night schools in buildings occupied by children during the day, and careful inspection of night schools by appointed authorities.

Certain of these provisions were embodied in a ministerial decree of October, 1917, which stressed the importance of this branch of education in the national life, and appropriated $10,000 for the increase of the staff of teachers in commercial subjects and domestic arts.

PRIMARY EDUCATION, PUBLIC AND PRIVATE.

In 1917 slightly less than 100,000 pupils were enrolled in the 1,014 public primary schools of Uruguay, an increase of 2,500 over the preceding year. Of these, nearly 65,000 were enrolled in the city of Montevideo alone.

In administration and inspection the authorities in this field were active and progressive. Tentative reforms in the programs of study for the schools of towns and villages, a step long urged by them, were outlined by the minister of education; and wider latitude was allowed such individual schools in the matter of adapting nature study and practical courses to regular school work in accordance with local conditions and occupations. This step was in keeping with the attention paid to rural schools, which will be discussed later.

By executive resolution of July, 1917, the long-discussed change in the school year was made by which it shall hereafter open March 1 and close December 15. As with the similar change in Argentina, beneficial results, especially in the rural schools, are expected, as this arrangement is in conformity with climatic conditions. The change was made after investigation among the teaching force, and the country teachers won a victory over their city fellows, who favored vacations in the summer. This is but another and a significant effect of the steady centripetal attraction of the overshadowing capital city, more marked even in the new countries of South America than in the

old ones of Europe. The country teachers have openly expressed their wish to spend the longest posisble time in the capital, in spite of the inconveniences of such a sojourn in the summer. A further light upon the country teacher's point of view is shown by the information that the long vacations in winter permit the small landowner to employ his children in labors of battage, which begin in December and last most of the winter. The schools are therefore practically empty in winter. It is manifestly wiser to put the former long vacation of July at this time.

Complaints having become more frequent in regard to the blocking of educational administration in certain departments because of disagreements among inspectors, more drastic requirements were laid down by resolutions of the National Inspection of Primary Instruction, dated February, 1917. The authority of the departmental inspector over the subinspectors was confirmed; in the event of disagreement or insubordination the departmental inspector was required to present the case to the Department of National Inspection; the visitation of schools was distributed as nearly equally as possible; and the responsibility for inaction was put squarely upon the inspectors.

These provisions, rigorous as they were, did not prove adequate, and much of the business of the schools of the outlying departments still remained blocked. The executive, therefore, in November, 1917, transmitted to the Congress, along with a message emphasizing the necessity of the law, a project for the establishment of three divisions of regional inspectors of primary education to exercise general supervision over the departmental inspectors and the schools of the Republic. These regional inspectors acting as a unit were to constitute the technical inspection of the school authorities. Their functions were to be regulated by the executive in accordance with the reports of the national inspection and the general direction of primary instruction. The hitherto existing chief inspectors, technical, adjunct, and chief of statistics were to be transformed into regional inspectors, and under their immediate supervision were to be put all the departmental inspectors. The projected law encountered unexpected opposition, and its passage has not as yet been secured.

Scientific interest in the character of the textbooks adopted for use in the primary schools of Uruguay has been aroused by the Government's offer of prizes for satisfactory textbooks and by the publication in the Anales de Instruccion Primaria of illustrative lines and themes of treatment. The general assembly has authorized the offer of $6,000 in prizes in the contest for the composition of a book combining in a single volume all the textbook material needed in the fourth, fifth, and sixth classes in the public schools of Montevideo. This offer had as its object to lower the cost of education and thus to

facilitate attendance, as the book in question was to be distributed gratuitously in cases of need.

A circular issued by the department of technical inspection in April, 1917, called the attention of teachers to the abuses of assigning written home work and limited such tasks to 30 minutes in classes of the first grade and to one hour for those in higher grades.

By executive decree, school savings funds and a system of aid for necessitous children, supplying clothing, midday meal, transportation, and books, were established and placed in charge of the administrative council for each department, composed of the departmental authorities of primary education, and the civil authorities of the several localties, presided over by the departmental inspectors. The funds for the institution of this system were to be drawn from State subventions to municipalities, school fees, and legacies and gifts to such objects. Although the Congress in October, 1917, appropriated $30,000 to organize the system, financial considerations have as yet prevented its practical organization.

Private instruction.—For the first time in the history of Uruguay systematic steps have been taken to ascertain the real nature and aims of private instruction. By executive decree of May, 1917, the inspector of private instruction and the assistant director general of primary public instruction were directed to address to every private educational institution in Uruguay a questionnaire in duplicate calling for information concerning its teaching staff, the mental and physical condition of its pupils, the hygienic conditions of the building and site, classrooms, dormitories, playgrounds, source and nature of drinking water, lighting conditions, school furniture and equipment, programs of study, methods, textbooks, school hours, and the general organization and administration of the school. No time limit was set for the reply, but it was requested within a reasonable time. The gist of the information gathered and the action of the Government have not as yet been published. Such a move has naturally aroused opposition in conservative and ecclesiastical circles, and its results are awaited with keen interest by other South American countries which have to deal with similar problems.

The issues aroused by the consideration of the private schools continued to grow more acute, and culminated in the introduction of a bill in the Congress in March, 1918, forbidding the opening of private schools of any grade without the written permission of the inspectoral department of private instruction or the departmental inspectors of primary instruction; and requiring all teachers in private schools to hold a State teacher's diploma in accordance with the provisions of the law of public instruction, and debarring the clergy from teaching in any such private schools. The bill naturally became a storm center and is as yet unenacted into law.

RURAL SCHOOLS.

Until the breaking out of the World War, and the consequent upsetting of traditions in all South American countries whose outlet is on the Atlantic Ocean, educational thought in Uruguay concerned itself largely with the capital city. In this respect, as in that of population (one out of three people in Uruguay lives in Montevideo), the centralizing tendency of South American countries is well illustrated. But a vital change began to show itself from 1914 to 1916, and in the latter year it acquired extraordinary impetus from the support of national leaders and of the press. The nation has grown steadily to recognize the proper balance to be observed between the claims of the schools of the capital and those of the rural districts. It has come to see that a healthy national life was possible only with organic changes in the schools of the outlying departments, and that these of Montevideo could without danger be left at their present status until the education of the people from whom the great city was steadily recruited should be attended to. It is in the light of this radical change in the national attitude that the educational history of Uruguay for the last biennium should be read.

This epoch in educational progress has been further marked by the recognition of the need of financial support for rural education, and the further need of differentiating the subjects of instruction proper for rural children from those adapted to the city. In getting this principle clearly before the public mind, the educational authorities of Uruguay have played a part excelled in few countries for skill and devotion to the national interests. Mention should be made of the able contributions of Señor A. J. Pérez, National Inspector of Primary Education, especially of his study entitled "De la cultura necessaria en la democracia" (Anales, 1918), which applies to modern conditions De Tocqueville's main lines of thought.

A commission of nine experienced teachers, six men and three women, with Señor Pérez as chairman, was appointed by executive decree to formulate the program of study for the projected rural schools. It began its sessions in February, 1917, and met frequently for two months. Its report was presented in May, 1917. Approved by the executive in June, by decree it went into effect on March 1, 1918. The main contentions of the commission in support of its plan are well worthy of notice:

1. Far-reaching changes within a generation in the commercial and industrial life of the nation have affected the rural districts and have called for different subjects and methods of instruction for the children of these districts. The rural school of the future must be

recognized as fundamentally an elementary industrial school adjusted to local conditions.

2. The successful rural school must have the following aims: To inculcate conscientious and efficient labor; to minister to a well-regulated and happy home life; to diffuse the knowledge of private and public hygiene, and to further the increase of population and public wealth and, in general, the possession of a well-founded and enduring popular liberty.

3. The intimate relation of the rural schools with the problems of home life requires the new rural school to be taught by women, and therefore the training of young women as teachers in such schools should be at once initiated and continued as the basis of their success. Concrete illustration is found in the successful intensive training of 24 young women in a course of six weeks at the normal institute at Montevideo in the summer of 1917.

4. In the administrative organization the committee was guided by the following general principles: (*a*) Not to install rural schools by foundation or transfer except in localities where donations of ground of not less than 4 hectares (10 acres) should be immediately available; (*b*) to urge similar donations, public or private, to existing rural schools which lacked grounds of the minimum area above indicated; (*c*) to propose and encourage the transfer of rural schools that had no grounds annexed nor could obtain such by donation to another parish where such advantages could be obtained without prejudice to the interests of the rural schools in the district.

5. No child below 7 years of age should be admitted to the rural schools.

6. The programs of study for the rural schools occupied the greater part of the commission's time. The subjects of instruction as reported covered three years, and were reading, language work, writing, arithmetic, drawing, agriculture, domestic economy, elements of applied geometry, geography and history (local, national, and universal), singing, and gymnastics. In the view of the commission itself, the feature which peculiarly differentiates these new programs is the complete application of practical methods and aims to each of these subjects, the elimination of abstract and memory teaching, and, above all, the development of the subjects of drawing, agriculture, and domestic economy. The fundamental aim throughout was to correlate instruction with the conditions and occupations of life in the several communities and to lead the pupil to see each subject as related to practical utility.

Following the promulgation of the report of the commission, lively interest was manifested by the nation at large in the initiation of such rural schools. Practical difficulties, however, were foreseen in securing funds for their launching upon the nation-wide scale hoped

for, and restlessness in certain quarters was manifested, though the Chamber of Deputies promptly voted the funds necessary. The National Rural Congress of Uruguay, in session in August, 1917, addressed to the minister of public instruction an urgent plea for carrying out the terms of the report in time for the opening of at least a part of such schools with the new school year.

MEDICAL INSPECTION OF SCHOOLS.

The medical inspection of schools has been favorably regarded in Uruguay for a number of years. It was initiated by law in 1913 with the examination of the pupils of the normal schools in Montevideo and the division of urban and rural schools into five groups. Since then popular approval of its application to the schools of the nation has steadily grown.

Under the present law individual inspection of the physical condition of pupils concerns itself only with those who enter for the first time. Naturally the law is applied with varying degrees of rigor, the schools of the capital being visited regularly by the medical inspectors, while those of the outlying departments are dependent upon the energy and faithfulness of the individual inspector. The law assigns to each a certain number of schools to visit. Capable medical inspectors have served their nation well in pointing out the grave disadvantages from the use of primary schools for night schools for adults, especially the danger of tuberculosis.

Medical inspectors are also required by law to include in their trimonthly reports recommendations for repairs, alterations, etc., of school buildings and grounds called for by sanitary or hygenic considerations.

Dental inspection has also been systematically carried on in most of the schools of the capital, the reports of oral and dental affections observed in the children reaching 76 per cent of the total ailments noted. Ocular inspection in the schools of Montevido has also been made a separate field within the last biennium.

By an amendment of 1916 to the existing law an annual physical examination of teachers in the schools of Montevideo will be required. This was naturally, and in certain instances bitterly, opposed; but the opposition has largely died down, and the teachers themselves have come to realize the benefits involved.

PHYSICAL TRAINING.

In accordance with the wish of educational officials to diffuse among the schools of Uruguay the benefits of international progress in the physical betterment of school children, a commission was named by the executive in April, 1916, to draw up a plan of physical education

in schools. This commission, acting in cooperation with the general direction of primary instruction, recommended to the executive the appointment of a permanent technical commission of physical training for schools, and this recommendation was approved by executive decree of March 8, 1918. The commission so appointed was to consist of a member of the general direction of primary instruction, one of the national commission of physical education, a physician of the medical school staff, a physician to be named by the National Council of Hygiene, the technical inspector of primary education, the technical director of the National Commission of Physical Education, the teachers of gymnastics of the normal institutes and of the primary schools of the capital, and two physicians who were specialists in diseases of children.

The province of the commission was to draw up for the general direction of primary instruction programs of physical exercises for schools; to outline methods of instruction; to see that these programs and methods were practically carried out in the public schools, to inform the school authorities upon points of deficiency in instruction and to indicate measures of correcting these; to organize gymnastic meetings and exhibitions for schools, and in general to promote the diffusion of physical education in the schools.

In furtherance of the awakened national interest in physical education, the executive has appointed departmental commissions in various departments for the immediate provision of adequate playgrounds and the acquisition of apparatus for games to be installed in town and village plazas. These have cooperated with the National Commission for Physical Education, the latter having decreed the establishment, upon application of residents, of neighborhood and community playing centers. All games, especially those of North America, which are adapted to the climate and environment have been systematically encouraged. In localities where it was required by law the executive has authorized the municipal authorities, with the consent of the national commission, to negotiate such loans as were necessary for the financial carrying out of this nation-wide scheme. These are steps of very great significance in a country of South America not by tradition or racial inheritance addicted to outdoor sports.

SECONDARY EDUCATION.

By executive message of February 14, 1918, the work of certain of the departmental liceos in discovering boys of talent in the higher elementary schools who were without means of continuing their education, and giving them opportunities to pursue their studies by means of a system of scholarships, was highly commended, especially

as a beginning of bridging the chasm between elementary and secondary education.

In response to popular demand, courses in Italian and Portuguese were incorporated by decree of the secondary education division of public instruction in 1917. With the object of making known to teachers in secondary education the international progress in this field, a journal entitled "Revista de Enseñanza Secundaria" was established by executive decree under the direction of the secretary of this division. All reports and public business concerning this division are to be published in this journal.

By executive decree of November, 1917, all courses for the training of primary-school teachers maintained since April, 1916, in the liceos of the outlying departments were discontinued. They had been originally instituted by way of experiment for supplying teachers for the rural schools, and were not regarded as serving this purpose. Furthermore, in view of the agitation for improved rural schools, it was regarded as useless to continue a system of training which had proved, because of its environment, impracticable to harmonize with modern schools.

COMMERCIAL EDUCATION.

The past biennium has seen a considerable development of interest in commercial education. By executive recommendation and by law of January, 1916, there were introduced in the liceos and national schools of commerce in the capital and three of the larger cities courses of varying length for the training of boys for the consular, diplomatic, and foreign agency services. By ministerial decree of April, 1917, there were incorporated in the national schools of commerce courses in civil and commercial law, American history, and advanced courses in accounting and bookkeeping; and legal permission was given the individual school to extend the latter courses into the fifth year wherever deemed suitable. In common with students finishing the courses in the liceos, those from national school of commerce were granted opportunity to compete for scholarships abroad offered by decree of January, 1918. These scholarships are good for one or more years according to the success of the holder, and are apportioned among the departments according to the discretion of the council of secondary and preparatory education. Among the usual scholastic requirements called for are periodical reports from the holder of such a scholarship concerning the social and economic conditions of the people among whom he has been sent to study.

Following the plan drawn up at Montevideo in the summer of 1918 by governmental and educational representatives from most of

the South American countries, invitations were sent to all interested in commercial education to attend the South American Congress of Commercial Education to be held in that city in January–February, 1919. The best talent in this division of education was assigned the discussion of topics which were considered as most urgent at the present time. They were treated under two main heads, those of (*a*) economic commercial expansion and (*b*) commercial instruction. The former head, not being essentially educational, calls for no notice here. The latter included the following topics:

1. From what points, how, and by what means commercial education should be developed on the American continent; extent and subdivision of such instruction.
2. Means of stimulating acquaintance among the peoples of the Americas.
3. The centers of commercial education as professional schools, and as institutions of modern culture.
4. Should courses in business ethics be included in the curriculum of the advanced classes? Morale, character, and culture of students of commerce and of consular service.
5. Universal history of commerce as an indispensable element in the training of competent consuls.
6. Are screen films necessary in giving instruction in commerce and geography?
7. Countinghouse practice.
8. How should commerce be taught?
9. Teaching of languages in the centers of commercial education.
10. Preparation of women for a commercial career.

Among the resolutions officially adopted by the congress which had educational bearing were those recommending that—

(*a*) Institutes or sections of economic expansion in faculties of economic science, schools, and higher centers of economic and commercial study be established which should devote themselves especially to the study and practical solution of the various economic questions affecting inter-American relations and solidarity.

(*b*) For social and economic ends American countries create and aid industrial schools for fisheries and derived industries.

(*c*) Propaganda primers be prepared for exchange among the public schools of the (South) American Continent.

(*d*) There be included in programs of higher commercial study courses of comparative American economy and comparative customs legislation (the latter for consular courses), and that existing seminaries of economic investigation or higher commerce schools write the economic and financial history of their respective countries.

(*e*) The interchange of professors and students between the higher institutions of commercial learning be initiated.

(*f*) International agreements be concluded for the reciprocal recognition of degrees issued by institutions of commercial learning and that scholarships be granted for the interchange of students.

(*g*) The compilation of legislation of American countries concerning commercial education be intrusted to the permanent commission created by the congress. The commission will be assisted in this work by a committee of professors and experts in commercial education and will be charged with proposing plans and curricula in accordance with the following: Commercial instruction, which presupposes primary education, to be divided into three categories—(*a*) Elementary instruction, which may be dependent or independent; (*b*) secondary instruction; (*c*) higher instruction. The purpose of these branches is: (*a*) To train auxiliaries of commerce; (*b*) to prepare for commerce in general; (*c*) to furnish economic, financial, and commercial knowledge preparing for directive functions in commerce and industry, insurance and consular work, etc.

(*h*) Preliminary cultural studies of two grades be established, one confined to the first and second categories of commercial instruction, and the second for broader instruction in the third category.

(*i*) The study of the proposal of the National Institute of Commerce of La Paz, Bolivia, concerning education of women be referred to the permanent commission.

(*k*) Higher institutions of commercial education establish, if not already existing, in their curricula the separation of commercial from economic geography, the study of commercial geography to begin in primary schools, with periodical competitions for the preparation of the best commercial and economic geographies of each country and the exchange of prize works be arranged for.

(*l*) Institutions of bibliography and information be established, independent of or annexed to seminaries or institutes, for investigation existing or to be founded in America, and providing for the widest exchange of economic, financial, and commercial information collected.

(*m*) The practice of the professions receiving diplomas from higher institutions of commercial learning in commercial, civil, and administrative matters be legally recognized.

(*n*) An extraordinary prize to be known as the Pablo Fontaina Prize for Commercial Studies be offered for students of higher institutions of commercial learning. (Sr. Pablo Fontaina is director of the Superior School of Commerce of Montevideo and played a prominent part in the organization and work of the congress.)

(*o*) Entrance into consular and diplomatic services be granted by competitive examination or to candidates presenting degrees issued by official institutions of higher commercial learning.

(*p*) Courses of ethics in preparatory studies and lectures on commercial ethics in higher institutions of commercial learning delivered by distinguished professional men be established.

TRAINING OF TEACHERS.

Uruguay has always been progressive in this field. In 1914 Señorita Leonor Hourticou, the directress of the Normal Institute for Girls, submitted to the national inspector of primary instruction a far-reaching and systematic plan of reform in the aims and methods of practice teaching. She urged the establishment of a general directorate of teachers' practice training, composed of directors of normal institutes and the national technical inspector of schools, which body was to operate through a salaried secretary. Practice teaching for the first grade was to be required for one year with a minimum of 160 sessions and for the second year for at least three months with a minimum number of 60 sessions. Twelve schools for practice teaching were to be established at Montevideo. Local inspectors were to be appointed by the general directorate. While this scheme was not enacted into law, yet it had very great value in focusing the attention of the educational authorities upon the practical problem of reorganizing practice teaching.

These recommendations were allowed to lapse; but along with the demand for improved schools went a similar one for the improvement of the schools in towns and villages. In 1916 a committee of which the directress of the Normal Institute for Girls was chairman was appointed to formulate a training course for nonrural teachers which should be in keeping with the recognized needs of modern schools. In October, 1916, it presented as its report an outline of studies recommended to be incorporated in the three years' training course for primary teachers.

Taking up for the present only the teachers of the first and second grades, the committee recommended the following courses: Arithmetic, accounting, algebra, applied geometry, penmanship and drawing, elements of biology, zoology, botany, mineralogy and geology, anatomy, physiology and hygiene, physics and chemistry, studies in industries, geography and cosmography, history (national, South American, and universal), constitutional law, sociology and political economy, literature and composition, French, philosophy, and pedagogy with practice teaching. By the approval of the executive these courses were to go into effect in September, 1917.

Training of rural teachers.—The movement to improve the conditions of rural life which has been mentioned before began in earnest in 1914. In that year a report based upon an intensive study of the social and economic needs of the rural districts was presented to the general direction of primary instruction by a committee of teachers especially appointed for that purpose. Though no official action was taken at the time, the ventilation of the subject was very opportune and aroused public interest in a field so vital to the welfare of the nation. In every phase of rural education, and especially in the training of the teachers required, practical reforms were recognized as urgently necessary. From the strictly pedagogical point of view, the projects for teacher training as laid down in that report were of supreme interest, as constituting the basis upon which all subsequent suggestions have rested. They called for the establishment of a normal school exclusively for women rural teachers, which was preferably to be located either within the capital city or within easy access of it. This school was to work along the three main lines of agriculture, horticulture, and domestic science. For admission there was to be required, in addition to the usual certificates of mental, moral, and physical fitness, the certificate of completion of at least the third year of the program of the rural schools.

The courses were to cover at least two years, preferably three, with provision for four-year courses for pupils aspiring to the post of rural inspectors, an aspiration which was encouraged in the report. Only two or three scholarships were to be offered in each department, and the number of pupils was to be restricted to 50 for the first year. No purely theoretical instruction whatsoever was to be allowed. Increasingly specialized work in the practice school annexed was to be required of every pupil each year. For the last two years the work of practice teaching was to be so arranged as to alternate by semesters with the classroom work assigned. The latter, toward the end of each semester, was to review all the work from the beginning.

The projected institute was to be provided with all grounds, buildings, and equipment necessary for the teaching of every phase of rural life, including the care of fowls and cattle, with library and laboratories, with a modern gymnasium, with a hall for the teaching of the fine arts, and, most important of all, with a mixed practice school under the direction of the authorities of the institute, consisting of at least three grades and preferably four.

Summer courses for teachers, both men and women, were to be offered, emphasizing practical work in all courses related to rural life. Traveling schools of agriculture were outlined to appeal especially to youths of years beyond the rural school age and already engaged in farming, each class to have not less than 8 pupils and not more than 15, and to continue for periods ranging from one week

to two months according to the demand in each locality. These traveling schools were to be organized for the same unit of territory as the rural schools already in existence. Each course was to be arranged in cycles as follows: (1) Three years' course in dairying; (2) four years' course in domestic science; (3) three years' course for rural teachers, men and women. Suitable certificates were to be awarded students satisfactorily completing these courses.

As regards the courses in rural schools, the committee found that the advantages accruing did not justify instructing pupils below 8 years of age in formal agriculture, satisfactory progress being made if the pupil was awakened to a love of nature and an interest in the life of the farm. Pupils above 8 were to be instructed in agricultural courses progressively adapted to their maturity and to the peculiar conditions of locality, soil, and climate.

As regards courses in domestic science, though the subject does not permit of a sharp age line of cleavage, yet the youngest girls might most profitably be given the elements, while the older girls might, in the discretion of trained teachers, take up the formal and technical study of food values in connection with elementary chemistry, physiology, and biology.

Anticipating the establishment of the normal schools for the exclusive training of teachers for the projected rural schools, the executive in November, 1917, sent to the Congress, along with the accompanying message, the project of a law for establishing two normal schools of agriculture in the Departments of Colonia and San Jose. These schools were intended to minister to the special need of these outlying departments. Their courses were to be intensive in character, adapted especially to the training of teachers for these localities, and to cover a year. Indeed, the bill specifically mentioned their purposes as intimately related with the forthcoming rural schools. The bill at once became a law, and the schools were to begin operation in March, 1918.

HIGHER EDUCATION.

In the field of university education no changes, administrative or instructional, are recorded for the past biennium; but there has been a certain amount of dissatisfaction with the administrative government of the University of Montevideo. In September, 1918, the executive sent to the Congress, along with an accompanying message, the project of a law clearly defining the constitution of the directive councils of the several faculties of the University of Montevideo as established by the laws of 1908 and 1915. Contention had arisen as to the right of electing representatives to each of these councils. By the new law each such council was to have 10

members and a dean. In the faculty of law four of these were to be elected by the attorneys who were also professors; four attorneys to be selected by those neither professors nor substitutes; one minor attorney by those neither professors nor substitutes; one student delegate by the students themselves.

In the faculty of medicine four members were to be elected by the professors, substitutes, and chiefs of clinics and laboratories; three members to be elected by the physicians not embraced in the above categories; one member to be elected by the pharmacists; and one by the dentists not included in the categories above; one member to be elected by the students of medicine, pharmacy, and dentistry.

In the faculty of engineering four members were to be elected by the professors and substitutes; three members to be elected by the engineers; and two by the surveyors who were neither professors nor substitutes; one member to be elected by the students of engineering and surveying.

In the faculty of architecture five members were to be elected by the professors and substitutes; four members to be elected by architects who were neither professors nor substitutes; one member to be elected by the students of architecture.

By decrees of 1917 enacted into law, seven years of advanced courses were required for the degree of doctor of medicine and five years for the degree of architect. Special courses of one and two years in construction and materials, leading to certificates but not to degrees, were formulated and allowed by the ministry of public instruction.

In pursuance of the policy of exchanging professors between the various countries of South America formulated at the Pan American Conference held at Buenos Aires in 1910, special exchange was arranged with Chile in 1916.

EDUCATION IN VENEZUELA.

Primary education in Venezuela, during the biennium under consideration, has enlisted the practical interest of the National Government as never before. This has taken shape primarily in the two fundamental administrative decrees of the Provisional President, Dr. Bustillos. The first, issued in February, 1917, outlines the general requirements laid down in the organic law of public instruction under certain regulations for primary public schools. These are divided into three main heads: (*a*) The primary elementary schools, in which only those subjects belonging to compulsory primary instruction are taught; (*b*) higher primary schools, in which are taught the subjects belonging to higher primary instruction; (*c*) complete

primary schools, in which instruction is given in both the above divisions at once.

The decree requires that each school be equipped with all modern appliances for the physical well-being of the pupils. Children are not admitted below 7 years of age; only those below 7 years are admitted to the mothers' schools or the kindergartens; only those above 14 are admitted to the schools for adults.

The subjects required in the elementary primary schools are: Reading, writing, and elements of Spanish; elements of arithmetic and the metric system; rudiments of geography and history of Venezuela; rudiments of ethics and civic instruction; rudiments of behavior and hygiene; the national hymn and school songs; the first elements of manual arts, and, for girls, of sewing.

In the higher primary schools are taught the following: Elements of Spanish grammar, elementary arithmetic, metric system, geography and history of Venezuela, elements of universal geography and history, elementary science, ethical and civic instruction, behavior and elementary hygiene, elements of drawing and music, manual arts and elements of agriculture and cattle raising for boys, sewing and domestic economy for girls, gymnastic exercises.

Religious instruction is imparted to pupils whose parents or guardians require it, provided that the number of such be at least 10. The celebration of school festivals as required by law, the establishment of libraries in each school accessible to both pupils and teachers, and the keeping of books and registers by teachers and directors are among the general provisions emphasized in the regulations.

The second decree, issued by the Provisional President in July, 1917, sets forth the regulations for the official inspection of public instruction. It expressly concerns the following schools:

1. Those maintained or aided by the Federal Union.
2. Those of primary, secondary, and normal instruction, maintained or aided by the States or by the municipalities.
3. Public and private schools satisfying legal requirements of good conduct and school hygiene.

The official inspection of schools has its ultimate authority vested in the following grades of functionaries:

1. Committees (juntas) constituted by law in localities maintaining a school.
2. Technical inspectors of primary, secondary, and normal instruction for the Federal District and the States of the Union.
3. A superintendent for the Federal District.
4. Inspectors necessary for the operation of higher and special instruction.
5. Commissioners appointed for special educational cases.

The duties and responsibilities imposed by law upon the juntas of primary instruction are detailed at greatest length, as upon them rests the proper execution of the law and the success of the entire system. Most important of all these duties are those pertaining to the enforcement of compulsory primary instruction. The juntas are required to keep themselves informed of the primary instruction imparted to all children of school age in their district, whether in schools public or private or at home; to require all parents and guardians of children of school age to have such children instructed as required by law; to keep themselves informed of the progress of all such children; to impose fines as required by law upon all parents or guardians who neglect the instruction of children; to see that the children admitted to schools of all grades conform in age, state of health, etc., to the requirements of the law; to visit the schools in their district frequently and regularly; and to keep registers of all facts pertaining to the attendance upon such schools.

The duties and responsibilities of the inspectoral juntas of secondary instruction and those of normal instruction are full and exacting and along the lines already laid down.

The technical inspectors as a group have charge of all three grades of instruction, each in the district assigned to him. As fixed by ministerial decree, there are 10 of these, excluding the superintendent for the Federal District. These functionaries are the direct agents of the ministry of public instruction, and form the connecting link between that office and the local juntas. They are vested with complete power to compel the execution of the law by the local juntas under penalties prescribed by law. They are instructed to work in complete harmony with the juntas, to call meetings, and to outline to them their duties under the law. They are also required to instruct teachers in their duties. In short, the inspectors are the element upon which the successful working of the machinery of the regulations depends.

The superintendent of public instruction in the Federal District is directly under the authority of the minister of education.

The inspectors of higher and special instruction have duties and responsibilities analogous to those of the inspectors already mentioned, though these, for obvious reasons, are not outlined at such length.

In the field of primary instruction the interest aroused in rural schools has been the most marked feature in the past biennium. The ministry of public instruction has paid special attention to the project of establishing rural schools, fixed or traveling, in the vicinity of the main manufacturing, industrial, or commercial centers of the country, and the President by decree of July, 1917, in commending

the project, urged upon the juntas wherever possible to develop this type of schools. Especially in the agricultural or cattle-raising sections was the project received with enthusiasm, applying, as it did, directly to the problems of illiteracy and the training of the country population in practical subjects related to daily life. By special decree the President urged the introduction of elementary courses in agriculture in the established schedule of studies.

Among the States which definitely established such schools the State of Trujillo, fourth in population, took the lead by establishing 14, with predominant emphasis upon practical courses in agriculture and related subjects. Such schools began at once to serve as centers for the instruction not only of the children of school age but of the population generally in new methods, the use of machines, cooperative societies, etc. Similarly in sections devoted to cattle raising they were centers of inspiration and instruction in related subjects.

During the last biennium the industrial plants located in the centers of Venezuela have established primary schools for the children of their operatives, with the approval of the authorities, State and municipal. The minister of public instruction, in his memoria for 1918, urge upon the Congress the passage of a law recognizing the work of these schools, arranging for their inspection by the governmental technical inspectors and the classification and certification of pupils completing the courses offered in them. Such schools have also done much in combating the illiteracy among adults by means of night schools, and they have in many places, by employing excellent teachers, served the very useful purpose of raising the standard of requirement in various districts for the public schools, State or municipal.

Secondary education in Venezuela, according to the memoria referred to, suffers much from the insufficiency and irregularity of the revenues devoted to it, with the consequent inefficient equipment for modern and scientific subjects and the inadequate salaries of the teachers. On the pedagogical side the memoria found the effects experienced by secondary education from the mechanical and memory instruction, too largely prevalent in primary education, a permanent obstacle to any hope of real reform in secondary education.

The colegios, a type of secondary school peculiar to the Spanish-American countries, of grade preparatory to the liceos, seem to be disappearing from Venezuelan education. There are now left only 13 Federal colegios, all the others maintained by the States and municipalities having lapsed. The explanation probably lies in the exaggerated theoretical instruction they offered and its lack of adaptation to the actual needs of the nation. A number of them occupied buildings of some size and pretension, and the minister in

his last memoria suggested that the vocational and industrial schools needed in the educational system might well be installed in these buildings.

Interest in the education of girls has made progress in Venezuela, an especially promising liceo for girls having been established at Caracas, offering advanced courses covering two years, with special attention to physical training and modern subjects.

Education in arts and crafts for men has long been popular in Venezuela, perhaps largely because of the national talent in those subjects. The school at Caracas, established in 1916, offers a four-year course, with English as the only foreign language. Within two years it reached an enrollment of 288 in the regular classes and 213 in the night courses.

Commercial education and training in political science courses have grown in popularity during the last biennium. Schools of the former have been established at Caracas, Maracaibo, Ciudad Bolívar, and Puerto Cabello; and of the latter, at Caracas, subsidized by the Government and regarded as an important adjunct in training for the legal profession.

In the field of the primary normal schools, the ministry has seen the necessity of their serving more largely the educational needs of the nation by supplying more and better teachers to the schools. It is, therefore, proposed to revise them thoroughly, especially in regard to the chief defect observed since their establishment, namely, the poor preparation of students who enter. It is proposed to offer, preparatory to the normal school proper, a perfecting course in essentials covering two or three years, to which would be added French, drawing, gymnastics, and music. Such a course would preferably be offered in the higher primary schools. The pupil should then proceed to the specialized subjects of pedagogy, methodology, psychology, and the history of education, these subjects to cover one year.

Another serious problem is the great difficulty experienced in securing suitable candidates for the scholarships offered in the primary normal schools by the several States and Territories. In many of them the memoria reports that the appointments had to lapse in view of the fact that no candidates qualified for them. The minister therefore suggested that a system of boarding departments, annexed to the normal schools, each accommodating about 20 boys of 10 to 13 years, should be established as feeders to the normal school system.

By presidential decree, dated July, 1917, special courses in practical agriculture, horticulture, floriculture, and domestic sciences were established in the primary normal schools, with the view of especially equipping teachers for the rural schools, whose establishment has come to be regarded as so necessary for the nation.

By presidential decree of March, 1917, an experimental station of agriculture and forestry, with an acclimatization garden, was established near Caracas. It is intended to serve as a model for other such stations in other parts of the country. "The objects of the station are the improvement of the methods of cultivation of the chief agricultural products of Venezuela; the introduction, selection, and distribution of seeds; experiments in reforestation; the suitability of soils to crops and of crops to various regions; and practical work for the training of agricultural foremen and forest rangers."

CHAPTER XII.

EDUCATIONAL CONDITIONS IN JAPAN.

By

WALTER A. MONTGOMERY,

Specialist in Foreign Educational Systems.

CONTENTS.—General educational activities—Elementary instruction—Middle schools—High schools for girls—Higher schools—Normal schools—Special schools—Vocational schools—Technical continuation schools—Higher education—Japanese educational work in Formosa.

GENERAL EDUCATIONAL ACTIVITIES.[1]

The chief educational undertakings during the year covered by the report were necessitated by the urgent economic conditions of the Japanese Empire, which were, as those of all other countries of the world, profoundly affected by the war. The immediate problem, as avowed by the minister of education, was to cultivate in every line of governmental activity the powers of the Japanese people as directed toward the material development of national resources. Every opportunity, such as conferences of local school and secular authorities, of school directors, and lecture institutes, was systematically utilized to emphasize essential points in national education, and in turn to obtain the mature opinions of all classes and individuals qualified to speak. A board appointed by the Department of Education investigated the educational and social conditions of the leading countries of the world, and reports of their findings were published at regular intervals, being sent to all local authorities, civil and educational, to the heads of all educational institutions above the elementary grade, and to all persons connected in an administrative capacity with education.

As was to be expected from the express avowal of educational purposes, the progress in technical education was most marked. Indeed, Japan's unique educational fusion of traditional training in the national humanistic studies with that in modern science, precludes changes in any save the latter. Additional technical schools were established in a number of centers under the direct control of the department; and vigorous measures were taken to establish close and helpful relations between them and local industries and business interests. A cardinal purpose of these schools is to train competent teachers rapidly, and to distribute them in parts of the Empire where their need is felt to be most urgent.

The activity of the several groups of educational workers did not slacken during the year covered. Conferences were held of directors

[1] This study is based upon the 43d annual report of the Minister of State for Education, 1915–16. Translated and published by the Department of Education, Tokyo, 1918.

of higher schools, directors of special schools of medicine, directors of special technical schools, directors of higher normal schools for men and for women, and directors of middle schools. In accordance with the centralized Japanese system, certain questions deemed most urgent of solution were selected in advance and submitted to each group for discussion; as a result, many helpful suggestions were forwarded to the minister for his consideration. Besides, the regular lecture institutes for teachers of elementary grade were held in the duly prescribed rotation of time and place, at which systematic instruction was imparted in the subjects deemed most needed for the particular group. Especial stress was naturally laid upon the institutes for teachers of industry, agriculture, and commerce. Both in subject and methods, war-time needs were had in view throughout.

A far-reaching innovation was the initiation of a lecture institute for school inspectors designed "to impart general knowledge of the system of elementary education and of pedagogical administration to persons having direct supervision over local education, such as prefectural and district inspectors. Applicants are admitted upon the recommendation of the governmental officials of the respective localities." The subjects taught are of interest for their practical nature: National morality, pedagogics, educational administration, and the examination of elementary school books dealing with morality, the Japanese language and history, school hygiene, and practice in teaching art, science, manual arts, and gymnastics.

A lecture institute on school hygiene was also initiated with the purpose of training intensively persons having charge of school sanitation. Besides the strictly technical branches, such vital topics as hygienics, epidemiology, educational pathology, treatment of defective children, theoretical gymnastics, and school sanitary administration were emphasized. As going to show the unique solidarity of Japanese education and as a model of educational cooperation, it is of interest to note that the lectures for these institutes were drawn from all the higher institutions, such as the Imperial University of Tokyo, related higher technical schools, the higher normal schools, and the imperial colleges of medicine.

In this connection may be mentioned the remarkable work, both in theory and in popular relief work actually done, of the institute for the study of infectious diseases. Though not essentially pedagogical, the preeminent value of this institute to national education was recognized during the year covered in the report, and it was put definitely under the control of the minister of education, and formally annexed to the Imperial University of Tokyo. Examinations of pathological specimens submitted, investigation of locally prevalent diseases, treatment of patients, dissection of subjects, preparation of serums, and holding lecture institutes were parts of the manifold

activities of this organization. Under the system of sending promising students for study abroad, formally inaugurated in 1912, a total of 13 were sent during the year 1915–16 to the United States, 9 to England, and 1 each to China and Switzerland. Courses in applied sciences were almost exclusively their chosen fields.

A movement to foster respect for elementary education is seen in the imperial regulations relating to letters of merit in elementary education, designed to honor meritorious persons connected with that branch. They are bestowed by the minister of education, on local evidence and the recommendation of a special committee, and are published in the Official Gazette. The recipients are elementary school teachers, the heads of municipalities, members of elementary school committees, and school physicians. During the year 1915–16 this honor was received by 48 persons.

The committee for the investigation of school books and charts is another manifestation of the efficiency which prevails in all departments of Japanese education. Appointed by and under the supervision of the minister of education, it works in three sections, the first examining and recasting books, charts, and manuscripts dealing with ethics, the second with history, and the third with the Japanese language.

ELEMENTARY INSTRUCTION.

Elementary schools are divided into ordinary elementary and higher elementary, the former obligatory upon cities, towns, or villages, and extending over six years; and the latter covering two years additional, or three years, as local boards may decree, and provide funds for maintenance. Supplementary courses in continuation subjects, or in the development of subjects already taught, may be established by the approval of the minister of education. A third type of elementary school is that in which, under the same roof, the ordinary and the higher elementary courses of one or more years are conjointly established. It is an interesting adaptation on oriental soil of the school consolidation movement, the progress of which has been so marked in the rural districts of certain States of the Union during the past few years.

A significant feature is that as compared with the figures of the preceding year, the schools of the individual type decreased, the ordinary elementary schools by 224, the higher schools by 23. In those of composite character, the mixture of ordinary and higher elementary schools, there was an increase of 267, a step evidently recommended on the scores both of convenience of access and economy of maintenance. In 1915–16 there were in attendance upon the ordinary elementary schools 5,840,268 boys and girls, a decrease of 156,000 from the preceding year. This perhaps may be explained

on the assumption that even in Japan the well-administered law of compulsory elementary school attendance had to yield in face of the heavy economic pressure upon the body of the people and the demand of the average family for the wages of the children. The total number of those who had completed the ordinary elementary school course, and were in attendance upon the higher elementary course was 1,773,099, showing a decrease of 24,000 from the preceding year, perhaps to be explained on the same assumption as above. Somewhat fewer than 100,000 pupils were allowed to postpone school attendance, and nearly 125,000 were exempted from obligatory school attendance. The average percentage, for both sexes, of attendance upon prescribed course of instruction makes an even better showing than for the preceding year, being 98.47 as compared with 98.26.

Teachers in elementary schools.—In 1915–16, 99,292 men and 42,830 women taught in the ordinary elementary schools of Japan, an increase of nearly 2,000 men and slightly more than 1,000 women. In the higher elementary schools 17,890 men and 2,980 women were teachers, the numbers being practically static.

Salaries.—Eleven categories of teachers in elementary schools, according to the salary received, show salaries ranging from 5 yen[1] (probationary) to 105 yen monthly, the three categories which receive from 10 to 25 yen including more than two-thirds of the total.

Pensions.—In accordance with the law relating to pensions for retired teachers and to the families of deceased teachers in elementary schools, 1,741,959,367 yen was apportioned for pensions, and 1,715,007,397 yen was expended, a marked increase over the preceding year.

In addition an educational fund was created in 1916 for the relief of public elementary teachers. Loans to municipal bodies, appropriations for the encouragement of elementary schools, for needy children, for prizes and bonuses for regular attendance, for salaries of elementary teachers in remote districts, for the encouragement and investigation of popular education, and for all purposes approved by the minister of education come within the purview of this most useful fund. A stock fund for additional salaries to teachers in elementary schools was created in 1900 by special law and by imperial ordinance, such relief to be recommended by local authorities, and approved by the minister of education. Under these provisions about 70,000 teachers received slightly over 2,500,000 yen in addition to regular salaries.

MIDDLE SCHOOLS.

Leaving the elementary school of both grades, the student is struck with the small numbers enrolled in the middle schools, both public and private, only 141,215, or 4 per cent of the number in the

[1] The yen is worth about 46 cents.

elementary, being listed for 1915–16. No changes in courses or administration, and an increase of only 2,000 pupils in attendance are to be noted for this grade of instruction; boys 12 years and over, graduates of ordinary elementary schools are admitted, and the course extends over five years. The situation is significant of the essentially aristocratic character of Japanese education. The clientèle of the middle schools is exclusively the official, military, and wealthy merchant classes, who desire for their sons the training necessary for these, and the university and other specialized careers. For their purposes the instruction and methods of the middle schools are admirably thorough and efficient. The courses are closely articulated with the advanced lines above mentioned, and the teachers are carefully selected for their training and competence. Interesting features are the steady increase during the past few years of the number of foreigners among them, there being 81 in 1915–16 out of a total of 6,443, and the subsequent careers of the graduates of regular courses of the public middle schools. Business and the advanced special schools and special technical schools have attracted over 40 per cent of the total of nearly 20,000.

HIGH SCHOOLS FOR GIRLS.

Corresponding to the middle schools for boys in aim and governmental establishment, but falling below them in curriculum, are the high schools for girls. Provisions for their establishment are identical, both public and private, with those for the boys' middle schools. A marked feature in this division of education was, for the year covered, the expansion of domestic science courses, and the further provision made for girls' high schools offering only domestic courses, and denominated officially "Domestic high schools for girls."

Those admitted to the course must be above the age of 12 and be graduates from ordinary elementary schools, or girls of equivalent attainments. The course of study extends over four years, when the graduates from ordinary elementary schools are admitted; over three years when the applicants for admission have completed the first-year course of higher elementary schools; over two or three years when they have completed the second-year course of higher elementary schools; and over two years when the domestic course is taken after the higher elementary school. Those who wish to study one or more subjects in the domestic course may be admitted as elective pupils. Supplementary courses of not more than two years may be provided in the regular high schools or in the domestic high schools for girls for the benefit of their graduates. A postgraduate course of two or three years may be provided only in regular high schools for the benefit of those graduates who wish to study some particular subjects as their specialty.

Similarly to the two middle schools attached to the higher normals for men the Government maintains two high schools for girls attached to the Tokyo and the Nara Higher Normal School for Women. Together they enrolled, for the year covered, about 900 students, a

slight increase over the preceding year. There were also 162 public high schools for girls, enrolling 58,009 students, and 125 public domestic high schools for girls, enrolling 17,370 students. Under private management there were 59 high schools for girls, enrolling 16,889 students, and 18 domestic high schools for girls, enrolling 2,747 students. A slight increase in all enrollments over that for the preceding year is seen.

HIGHER SCHOOLS.

A trend visible for the past four years in the higher schools is noteworthy. Higher schools, as the term is used in Japan, are secondary institutions for boys in which preparatory courses are offered for entrance into the imperial universities. There are eight such schools, located in centers of population and industry. As originally contemplated in the ordinance relating to higher schools (1905), the higher schools were also to provide special courses in professional training, and they did so provide them until the development of these into independent institutions, which then ranked as special technical schools. With this, all such appended courses disappeared, during the year under consideration, from the curriculum of the higher schools. For admission to higher schools, graduation from middle schools, or the passing of test examinations prescribed, along with careful physical examination, is required. Following, therefore, exclusively the narrower field of preparation for the imperial universities, the work of the higher schools has come to be divided into three departments, devoted respectively to the preparation of students for the college of law or literature; for the college of pharmacy, engineering, science, or agriculture; and for the college of medicine.

NORMAL SCHOOLS.

In Japan the normal training of teachers is given in—

(1) Normal schools aiming to train teachers for elementary schools, of which there must be at least one in each prefecture. They admit to the first section graduates of the higher elementary schools of three-year courses, graduates of their own preparatory course, and boys of 15 or girls of 14, at the discretion of the director; and to the second section graduates of middle schools or boys of 17 and girls of 16, at the discretion of the director. The courses in each section cover one year.

2. (*a*) The two higher normal schools for men, which train teachers for normal schools, middle schools, and girls' high schools.

(*b*) The two higher schools for women, training teachers for girls' normals, girls' departments in normals, and high schools for girls.

Both admit graduates of elementary normal schools and of public and private middle schools on competitive examinations. The

courses in both are identical, except for manual arts and domestic arts courses, and extend over three years.

As in the case of the higher normal schools, an elementary school for practice teaching must be attached to each elementary normal school, and, in the case of normal schools admitting women, a kindergarten also. Under special circumstances, and with the consent of the minister, local authorities may permit the substitution of already existent public or private elementary schools or kindergartens convenient of access in place of the required observation and practice schools required by law.

For rapid training of teachers for technical schools a number of institutes were founded in 1915–16 which were of the nature of schools attached to colleges of the imperial universities and higher technical schools, and designed to use the already existent advantages of buildings, laboratories, and observation schools for the teaching of younger pupils. Special ordinances of the Department of Education allowed exemption from fees and expenses on the students contracting to serve as teachers in technical schools.

Japan's system of teacher training is the result of a careful study of European institutions. She has borrowed whatever she judged best in the educational polity of each country. Her system is therefore of an essentially composite order. Its original features, however, constitute a valuable attempt to adopt diverse elements.

SPECIAL SCHOOLS.

Mention has been made of the development of certain courses, originally incorporated in the curriculum of the higher schools, into special courses, and later into independent special schools. These are designed to give only advanced training in professional subjects; and only men and women are admitted who have completed the prescribed curriculum in middle schools, or in high schools for girls, with at least a four years' course, and other men and women of maturity and approved attainments. In the case of special schools in which fine arts and music are taught admission is left to the decision of the minister of education.

Under this important class of schools the Government maintains (*a*) five special schools of medicine at important points, enrolling 2,375 students in 1915–16; (*b*) the Tokyo School of Foreign Languages, enrolling 604 students, offering instruction in 12 languages and extending over three years or for a shorter course of two years. In response to a decided demand, a course in Portuguese was substituted in place of Siamese. The enrollment of this school was 604 pupils, an increase of 14 per cent over the preceding year; (*c*) the Tokyo Fine Arts School, enrolling 547 students, and the Tokyo Academy of Music, enrolling 593 students, an increase of 12 per cent over preceding year.

In addition to these governmental schools, five public schools of medicine, pharmacy, and fine arts were maintained by communes; and 53 in literature and the sciences were maintained by private support.[1]

VOCATIONAL SCHOOLS.

Vocational schools, for the distinctive training of boys intending to engage in productive labor such as manufactures, agriculture, and commerce, are of five kinds, technical, agricultural, commercial, nautical, and continuation. Technical education is offered of primary grade, embracing practical subjects in crafts, arts, and sciences, and such subjects of study as ethics, Japanese mathematics, general science, and gymnastics. Elasticity is given these courses by the addition of other subjects demanded by local circumstances, and the dropping of still others, except ethics and those bearing directly on the branch studied. A subdivision of these is the apprentices' schools, covering not less than six months nor more than four years. In the school proper the course is not more than three years.

Great flexibility also is allowed in the qualifications for admission, these varying extensively in various localities. Technical education of secondary grade is of similar nature to the primary, but more formal, less flexible, and more inclusive of the sciences and the theoretical side of technical training. Schools of this grade may be attached to any middle school of two years' duration, and special courses may be arranged for boys in business or at work. Only pupils may be admitted to this grade of schools who have attained the age of 14 years, graduated from a higher elementary school of two years' course, or who possess equivalent attainments. Requirements for teachers in this grade of schools are also quite rigorous. In 1915–16 the number of technical schools was 9,001, an increase of 553 over the preceding year, and that of the private technical schools was 366, an increase of 20. Approximately 95,000 pupils were enrolled in all schools of this kind, exclusive of continuation schools.

TECHNICAL CONTINUATION SCHOOLS.

These schools freely admit graduates of an ordinary elementary school, or boys of equal attainments, if not less than 14 years of age. In the judgment of the authorities, even this requirement may be waived, provided the applicant is under no further obligation to attend an ordinary elementary school. Ages and maturity of boys in attendance on these schools vary greatly, as do length of courses, school periods, season, and hours of the school sessions. All are left to the judgment of the individual school authorities. These very important schools in 1915–16 enrolled 407,600 male pu-

[1] Figures of enrollment were not available.

pils and 89,601 females, an increase of nearly 50,000 of both sexes over the preceding year.

HIGHER EDUCATION.

No change in the courses or administration of higher education is to be chronicled for the year 1915–16, the last for which reports are available. Among educational ordinances of the ministry of public instruction, external to the imperial universities, but closely affecting them, was that which placed private and municipal institutions of higher instruction which comply with standards laid down by the ministry on a par with the imperial universities, in that the graduates of the former will have equal advantages in competing for civil-service positions. This is regarded as a governmental step entailing far-reaching consequences in Government service. Details of its provisions are as yet unavailable.

Considerable material and financial extensions are planned for the future. The Government intends to devote 44,000,000 yen ($21,934,000) to extend the agencies of higher education, this sum to be a continuing expenditure extending over six years from 1919–20 to 1924–25. Of this sum, 39,500,000 yen ($18,690,750) is to be expended on the building and extension of schoolhouses and 4,500,000 yen ($2,243,250) on the training of teachers. It is proposed that the greater part of the latter sum be appropriated to the costs of dispatching and maintaining students abroad.

The proposal is to establish, in addition to the higher educational institutions already in existence, 10 high schools, 17 technical and commercial schools, 1 foreign-language school, and 1 school of pharmacy, besides extending the present colleges and organizing new ones. It is expected that the program will be completely carried into execution in the course of six years, and that teaching at the new institutions will commence in 1925.

As already reported, the Emperor has contributed the sum of 10,000,000 yen ($4,985,000) toward the necessary funds, and the balance is to be met by public bonds or temporary loans. It may be added that in the educational year 1917–18 about 56,000 students applied for admission to public and private higher and special schools, while the capacity of these schools was only sufficient to accommodate 14,000.[1]

JAPANESE EDUCATIONAL WORK IN FORMOSA.[2]

(A sketch of provincial educational administration.)

The administration of the schools in the island of Formosa by the Japanese Department of Education has constituted throughout a remarkable record of progress in the face of serious obstacles.

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[1] Japan Chronicle of Jan. 8, 1919.

[2] This sketch is based upon the report compiled by the Department of Educational Affairs of the Government of Formosa, 1916.

Formosa passed to Japan by cession from China in April, 1895. Very similar to the troubles encountered by the United States authorities upon their occupation of the Philippine Islands, racial and religious problems at once asserted themselves, taking shape in uprisings and forays on the part of rebellious natives. After two months of military activities, the condition of the island was regarded as sufficiently settled to allow the initiation of a system of education. The provisional office for the Department of Education was accordingly opened in the city of Taihoku; and the active director at once proceeded to establish schools in the most suitable localities, housed generally in the temple buildings, which were the only structures left intact.

The question of language was at once to the fore. The native children of Chinese descent were, of course, averse to learning the language of the new rulers. The patience and skill, however, of the pioneer teachers were beginning to triumph and to show results, when the smouldering opposition again flared out in open violence. By preconcerted plot an attack was made upon all remote schools, and many teachers were killed. But the plans of the department were retarded only for a short time. By imperial ordinance the organization of the schools was put under military protection, new schools were built, and old ones restored and enlarged. These latter consisted entirely of the so-called language institutes, located in the larger towns, and grouped around the nucleus of the original native private schools, called the "reading and writing halls." These language institutes now became the basis of the new system. Recognizing as the immediate task the teaching of the Japanese language to the native children, the department called for Japanese teachers as volunteers for the work in Formosa. This picked body of men and women received intensive instruction for three months in the native Formosan language, and was then distributed among the several schools.

Following up the policy of preparing teachers, preferably native, a normal-school department was annexed to the language school proper, and to it fell the task of supplying the needed teachers.

With the pacification of the island, the growth of the elementary schools was so rapid that the Government could not wait for the first graduates of the newly-established normal schools, and seven distinct times the policy of training Japanese volunteers for the native schools was repeated. In the very maintenance of the latter, innumerable difficulties, inherent in the situation, had to be overcome. Chief among these were the fickleness of the native population, which, with the wearing off of the novelty of the schools, became wearied with the alien discipline enforced upon them; their superstitious and religious scruples; the dissemination of false

rumors as to the subjects taught and methods used; the deep-seated antipathy of the influential classes to Japan and all things Japanese, and their contempt for the Japanese teachers; the hostility on the part of the teachers and parents to the elimination of the traditionally beloved "reading and writing halls," with their support from fees and their exclusive concentration upon the Chinese classics; the physical difficulties in the way of attendance even in districts reduced to order; and the terrorizing of even favorable parents by threats and the violence of predatory gangs.

In the face of all these difficulties, however, steady progress was made. The military impress left upon the schools gradually disappeared, as the respect of the natives for schools and teachers grew. A most important phase of the change of attitude was the reconciliation of the natives to Formosan youths taking work in the system. The work of these pioneer teachers covers, roughly, three years, closing in 1898, when the Japanese language institutes were formally organized into regular public schools. By successive logical steps, each of wider scope, the administration of educational affairs in Formosa came finally, in 1911, under the control of the educational department of the imperial civil Government, which is its present status. It operates in two sections, a highly centralized governmental section, and a locally representative body, composed of men of experience, vested with special powers in the matter of school support and finances.

In content and method, practical educational work in Formosa has, for compelling reasons of race diversities, grouped itself under three headings, named in the order of their establishment by the Japanese authorities: (1) Work for the natives of Chinese descent; (2) work for the aborigines, and (3) work for Japanese children.

Education of children of native Formosans of Chinese descent.— Elementary general or public education for the children of native Formosans of Chinese descent constitutes the keystone of the system, and has undergone many modifications and revisions before reaching its final state. Establishment of new schools had at first been made too easy, and had been accompanied by a corresponding laxity in providing for their maintenance. The permission of the Governor General, instead of, as formerly, the local governor, effected a needed centralization, and stopped the duplication of local educational plants. The age for attendance was extended to cover from 7 to 20 years, instead of 16; but only 6 years, under special circumstances shortened to 4, are required; and a latitude of 2 or even 3 years is allowed beyond the age of 7 years for beginning school.

The subjects taught in the six compulsory years are identical with those in the imperial schools. In the shortened four-year course science is omitted. Courses in agriculture, mechanics, and commerce are added wherever approved by the authorities. In all these public

schools only practical ends are had in view. Their beneficial results are everywhere evident. The Japanese and Formosans are brought more closely together; the importance of the Japanese language is felt more and more keenly. Many public schools have been established at the request of the natives themselves. Another interesting formative result that has also manifested itself is the steadily increasing number of well-trained Japanese teachers attracted to the Formosan schools.

Higher instruction for native boys is represented by a few middle schools of four years, admitting boys of 13 who have completed the fourth year of the public schools, by girls' schools attached to the language schools, and by higher Japanese language departments attached to the language schools for boys and girls. The unique feature of this grade of instruction, induced by difference of conditions from those in Japan proper, is the training offered in them for teachers of public elementary schools. This is done by means of an annexed normal school of two divisions, the higher for prospective Japanese teachers, with special training in the native Formosan language, and the lower for native teachers.

Industrial education for native Formosans is provided in the Industrial Training Institute, the industrial department of the language school at Taihoku, and two experimental farm schools not under the Department of Education, but under the direct control of the Governor General. A further step is the provision of higher general education, combined with the industrial, in the Japanese language course of the language school at Taihoku, though, as yet, the demand for this by native Formosans is limited.

An interesting survival from pre-Japanese days, as well as a significant proof of the wisdom of the Japanese authorities, is the existence of the " reading and writing halls." These are private schools established and conducted by native teachers. They have weathered very adverse conditions; they were long regarded by the Japanese authorities as dangerous to Japanese rule; and they were often near extinction. But they always maintained an influence too strong to be ignored. Socially and ethnologically, they are the last and most typical representatives of the Formosan civilization. They are allowed individual independence and great latitude in courses and methods. Each is under the nominal control of the local civil authority, which generally pursues the good-natured policy of encouraging their adoption of modern subjects, especially the Japanese language and arithmetic, rather than forcibly compelling it, and seeks by tactful methods to bring about a closer acquaintance and union with the public-school teachers and schools. The schoolhouse is generally the residence of the master, or some buildings connected with the local Chinese temple. the religious associations of the school of this

type constituting one of its strongest holds upon the natives. Children are generally admitted at 7 and continue until 14 or 15. The center of work is of course the Chinese classics, with no fixed course outlined; penmanship is stressed in connection with the literary work. Advanced pupils learn recitation, composition, and versification, all rigorously based upon the classics.

Despite the wishes of the Japanese educational administration, these schools increased in the period 1912 to 1915 from 541 to 611, and their enrollment from 16,000 to 19,000, in round numbers, an enrollment of almost exactly one-third of the total enrollment of native Formosans in the official public schools. This constitutes what is apparently the only problem that has baffled the Japanese educational department in its career in Formosa.

Elementary school for aborigines.—Even greater conservatism had to be encountered in dealing with the partly civilized aborigines than has been seen in the case of the natives of Chinese descent. With the sweeping reorganization of the primitive language institutes into the public school system, exception had frankly to be made for the aborigines. Their primitive language institutes were retained, and after many years and tentative modifications, developed into a public school system quite different from that in operation for the Chinese descendants. Only four years' attendance is required; the subjects taught are only morals, Japanese, and arithmetic. Agriculture, manual training, and singing may be added, in the case of tribes intellectually more advanced. Supreme control is vested in the local civil authorities, who are allowed wide discretion in all matters concerning these schools. Children are admitted at 8 years of age. An encouraging growth in the popularity of these schools, and increase in numbers, has been evident. Native aboriginal youths have come forward as candidates for teachers; approximately 3,000 pupils were enrolled in 1915 in 23 schools, an increase of over 500 pupils since 1913.

Education of Japanese children in Formosa.—The education of Japanese children whose parents are residents of Formosa is conducted along substantially the same lines as prevail in imperial Japan proper.

For administration purposes, and by imperial ordinance, the Governor General of the island corresponds to the imperial prefectural governor, and the local civil authority to those of towns and cities in Japan proper. Encouragement is offered to promising pupils to proceed to the imperial schools, and this is made easy by close articulation of subjects and courses. It is interesting to note also that an increasing number of native Formosan students go each year to complete their education in the schools of Imperial Japan. The Government is alive to the importance of encouraging this tendency,

and in 1907 the office of student superintendent in Tokyo was created, with especial charge of the proficiency and conduct of all Formosan students resident in Japan. With this official, the authorities of all institutions enrolling Formosan students must closely cooperate.

As has been indicated, the Japanese Government, soon after its occupation of Formosa, recognized that the training of native teachers for the native schools was a matter of vital necessity if the natives were to be won over to acceptance of the public schools, and, through them, of the Japanese rule and language. An index of the attitude of the natives in both these respects was constituted by the number of Formosan youth who came forward as teacher candidates. Progress in this respect has been steady and gratifying, 619 graduates of such training having gone into school work in the 13 years of its existence. Several local institutions have been abolished. Normal instruction for natives is now organized solely in the B (or lower) division of the public-school course in the normal-school department of the Language School at Taihoku. Candidates from 14 to 23 years of age, with certificates of graduation from the six years' public school, are admitted after examination upon elementary Japanese and arithmetic. The four years' course covers ethics, pedagogy, Japanese language, Chinese classics, geography, mathematics, science, drawing, music, agriculture, and gymnastics. Manual training and commercial subjects are optional. All expenses are defrayed by the Japanese Government. "The aim of the educational work of this department is to make the graduates the embodiment of the ideal of the public-school education which is to bring about the diffusion of the Japanese language, the cultivation of the spirit of loyalty and obedience, and the encouragement of the habit of honest labor among the people." "The source of general education in Formosa" is the significant name bestowed upon it.

For teachers already actively engaged, teachers' training extension work during the summers is systematically forwarded by the education authorities. Under the direct control of the Government, instructors and lecturers travel the round of assigned circuits, a system which has advantageously supplanted the old one of gathering many pupils into one place. The other side of the work, that done by the local authorities, is probably more successful in reaching closely the mass of native teachers. All native and Japanese teachers of the district meet, and a point is made of inviting all teachers of the old-style "reading and writing halls." Perhaps no other one influence is so potent in leading the way to some realization—however embryonic at present—of the essential unity of Japanese education in Formosa.

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