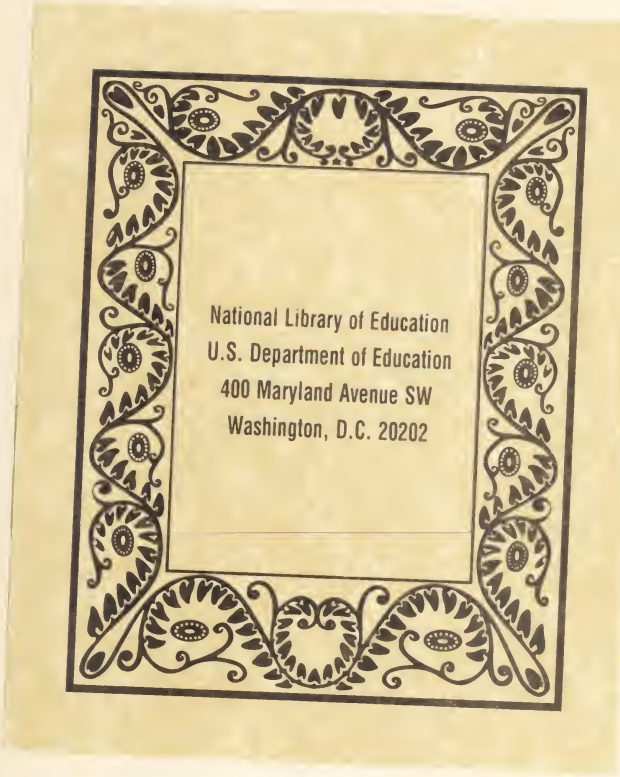
U. S. Office of Education
Annual Report 1945/46.

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For "Administration of the Library" see p. 141


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Annual Report *of the* Federal Security Agency

SECTION TWO

U. S. Office of Education

1945

FEDERAL SECURITY AGENCY . . . . . WATSON B. MILLER, *Administrator*
U. S. OFFICE OF EDUCATION . . . . . JOHN W. STUDEBAKER, *Commissioner*

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Annual Report
of the
Federal Security Agency

SECTION
TWO

U. S. Office of Education

FOR THE FISCAL YEAR

1945

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LETTER OF TRANSMITTAL

FEDERAL SECURITY AGENCY,
U. S. OFFICE OF EDUCATION,
Washington, D. C., November 1, 1945.

SIR: I have the honor to submit my annual report embracing the activities of the U. S. Office of Education for the fiscal year ending June 30, 1945.

Respectfully,

JOHN W. STUDEBAKER,
U. S. Commissioner of Education.

The Honorable WATSON B. MILLER,
Federal Security Administrator.

FOREWORD

In part II of the 1944 Annual Report of the U. S. Office of Education there was set forth a plan of organization to improve the services of the Office to American education. That plan contemplated no innovations in the types of activities which the Office of Education would carry on, but rather an expansion of staff and improvement of organization within the Office by which to accomplish more efficiently the purpose for which the Office of Education was established, namely, (1) "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and (2) of diffusing such information respecting the organization and management of schools, school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems and (3) otherwise promote the cause of education throughout the country."

During the fiscal year 1945 the aforementioned plan was widely and thoughtfully discussed in educational circles and in the Congress. A relatively small increase in appropriations was provided to the Office of Education with which to begin the proposed improvements in its services. Early in the fiscal year 1946 these improvements were begun by the regrouping of staff and functions of the Office in eight operating divisions. As a preview of next year's annual report it may be indicated that these divisions now functioning will provide the outline for the 1946 annual report.

The present report for the fiscal year ending June 30, 1945, gives a brief panoramic view of the services and activities of the Office under the plan of organization existing during the final wartime year. It reflects the far-reaching relationships of the war to the activities of the Office of Education and of the Nation's schools, school systems, and colleges.

As this report goes to press the war itself has been brought to a victorious conclusion. We have entered upon the postwar period with its manifold problems and responsibilities and its great opportunities for the winning of a just and lasting peace. Education in the United States inevitably shares these responsibilities and must have an important part in peacetime development and progress of the United States. It must provide the solid foundation of understanding and good will necessary for the solution of the many complicated domestic and international problems of the period of reconstruction and recovery. The Office of Education strengthened for its long-term peacetime task will endeavor ever more efficiently to serve schools, school systems, and colleges of the United States and "otherwise promote the cause of education throughout the country."

JOHN W. STUDEBAKER,
U. S. Commissioner of Education.

Higher Education

Services to Colleges and Universities

THROUGHOUT THE WAR PERIOD, the major share of the time and efforts of the Division of Higher Education staff was devoted to the many urgent problems arising from, or associated with, the war effort. At the close of the fiscal year, the early end of the war was anticipated, and the emphasis upon wartime activities was increasingly being shifted to undertakings important in meeting the problems of the peace soon to come. The initiation of activities looking to the solution of postwar problems, however, involved more than the resumption of prewar activities. War is the mother of change; and the effects of the greatest of wars upon the higher institutions and the Nation they serve are widespread and profound. New emphases in research, curriculum construction, and teaching were anticipated to assist not only in repairing the ravages of the war upon the colleges and their human product, but also in meeting new social, economic, political, and educational problems and conditions.

A New Periodical

For years the Office has felt the need for a suitable medium of communication with colleges and universities and with persons and groups particularly interested in higher learning. To meet this need it established a new semimonthly periodical, HIGHER EDUCATION, publication of which began in January 1945.

The basic law creating the Federal Office of Education in 1867 intended that the new Office should collect and diffuse such information as would aid the people of the Nation in establishing and maintaining efficient schools, colleges, and universities. Accordingly, the new periodical includes information concerning Federal activities related to higher education, reports of statistical and other studies of education made by staff members of the office, and materials from the colleges and universities and from educational organizations and associations.

The publication is the responsibility of the Division of Higher Education, which has appointed a managing committee to be in charge of the work. However, the Division is assisted by representatives of other divisions. HIGHER EDUCATION, therefore, represents the higher education interests of the Office.

HIGHER EDUCATION is sent free to college and university presidents, deans of most of the schools, and a limited number of other officials, and to college and university libraries. Others may receive it at a

subscription rate of 75 cents, from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Letters received from many sources indicate that this periodical is much appreciated throughout the country.

Land-Grant Colleges and Universities

The usual reporting and certification activities of the Office relating to the land-grant colleges and universities were carried on. During the year 1943–44 these 69 institutions enrolled 135,722 nonmilitary and 130,110 military students in residence, a total of 265,832. This was an increase of 30,443, or 13 percent, from the year 1940–41. A total of 29,672 degrees were conferred, of which number 3,552, or 12 percent, were graduate degrees. From 1942–43 to 1943–44 the number of degrees conferred dropped 12,554, or 29 percent.

The income of the land-grant colleges for general and educational purposes for the year 1943–44 amounted to $275,308,908, of which amount 37 percent was from Federal sources. An additional amount of $8,781,895 was received for physical plant and $9,481,664 for additions to endowment. The income for general and educational purposes increased by 24 percent from 1942–43 to 1943–44. It will be observed that the rate of increase in income was greater than the rate of increase of students.

Visits of 2 to 4 days' duration were made to five land-grant colleges and universities for the purpose of studying their programs and learning about new developments in their organization and activities. Two members of the staff attended the annual meetings of the Association of Land-Grant Colleges and Universities and the Conference of Presidents of Negro Land-Grant Colleges.

Howard University

During the fiscal year 1945, the seventy-eighth in the history of the University, it operated 9 schools and colleges, enrolled 4,628 students, and employed a teaching staff of 275 persons. The total expenditure for the year was $1,913,866, of which amount $1,043,045, or 54 percent, was from the Federal Government.

Dental Education and Research

The Office maintains a cooperative relationship with dental education and research, which is carried on by a member of the Division. He serves as: (1) the chairman of the standing Committee on Teaching of the American Association of Dental Schools; and (2) a member of the Committee on Research of the American College of Dentists. During the year, with the cooperation of five associates, he completed a work on teaching.

In March 1944, the American Association of Dental Schools adopted a comprehensive plan for the continuous study of the dental curriculum and dental teaching, and it appointed a standing committee to have

charge of the work. Two committees—one for histology and one for oral diagnosis—have been appointed to consider the teaching of those subjects in dental schools, to prepare reports on them, and to organize conferences for the annual program of the Association in March 1946. The Committee on Teaching has supervised the work of the two committees. The report on histology has been completed and published; the one on oral diagnosis has been prepared in tentative form.

The Committee on Research of the American College of Dentists awards grants-in-aid for research on dental problems, most of which is carried on in dental schools. Currently the Committee is engaged in a study of the medico-dental relationship.

The work on teaching, a publication of 349 pages, is entitled *Teaching in Colleges and Universities With Special Reference to Dentistry* and it was published in May 1945 by the American Association of Dental Schools. It is a comprehensive work which treats such topics as psychological interpretations of learning, various methods and means of teaching at the level of higher education, and ways and means of encouraging good teaching.

Higher Education Institutions

The service of providing information on the accredited status of institutions of higher education to interested agencies and persons was rendered more efficient through the publication and distribution during the year of a new edition of the bulletin on *Accredited Higher Institutions*, the first issued since 1938. This service is one for which the demand constantly increases as new occasions for it arise, particularly in Federal education programs. The new bulletin is more helpful than those issued in past years, for it indicates the purpose for which each institution is accredited.

As has been the custom over a period of years, a member of the staff of the Division cooperated in the preparation of the annual directory of institutions of higher education. (U. S. Office of Education's Annual Directory. Part III, Colleges and Universities.) A form to obtain data on changes in personnel, organization, control, accreditation, and other items is sent to each institution in June each year. On the basis of the data secured from the institutions on these forms the directory is compiled. During the period in which the directory is going through the press, attempt is made to keep informed, through press releases, educational journals, and other sources, of current changes in college and university personnel, to be incorporated in the directory before its final printing.

Inquiries From Servicemen and Veterans

The provision by the Government of financial aid to veterans desirous of obtaining further training has brought to the Division thou-

sands of inquiries from the men and women returning from the service as well as from those still overseas. The answering of these inquiries, in addition to the number commonly received, many of which require special investigations, consumed much of the time of several persons in the Division.

Teacher Personnel Problems

The collection and dissemination of information concerning the extent of, and methods for, meeting teacher shortages continued as a divisional activity throughout the year. More than half of the enrollment of prospective teachers in college had been lost during the war. Approximately 70,000 teachers were employed on war emergency permits, and several thousand classrooms remained unstaffed. Nevertheless, the ravages of the war on school personnel were checked materially through Nation-wide efforts by many conjoined agencies, to make legislators, school boards, and taxpayers more fully conscious of the predicament of the schools. Positive action was taken toward raising salaries and improving working conditions in teaching in most States, and in tens of thousands of local school districts, with the result that teaching was placed in a more favorable competitive position in the employment market.

Informational service was rendered to several thousand teachers, school officers and others, who inquired concerning conditions of teacher supply and demand, teacher-placement organizations and agencies, methods of securing teaching positions, methods of remedying teacher shortages, and problems intensified by the effects of the war. As teachers return from war work and from the armed forces during the next year, these problems are expected to become of even greater interest to individual teachers as well as to school employers. Circulars and other materials on appropriate topics were therefore written or revised, as follows: How to secure teaching positions; teacher placement, registration, and related services; wartime changes in teacher certification; and others.

Several articles and numerous shorter pieces of material on teacher personnel and related topics were prepared for use in Office periodicals and by the education press. Illustrative topics treated in these articles included: The Army specialized training program; postwar faculty recruitment; suggestions for securing teaching positions; Federal educational benefits for veterans; the teacher shortage; and others.

Teacher-Education Problems

Because of wartime travel restrictions, only a few of the dozen or more national education associations interested directly in the preparation of teachers, held their regular meetings during the year. In such meetings as were held, the divisional staff participated to the

maximum extent permitted by their many war-related duties. An example of such participation that will serve to illustrate others, is afforded by the work of staff members in the School for Executives, held at Jackson's Mill, W. Va., August 15–24. This work conference on teacher-education problems was sponsored by four national organizations, and was attended by 229 presidents, deans, and other executives and staff members of teachers colleges, colleges, schools, and school systems. Forty States and the District of Columbia were represented in the group. Office staff members participated as advisers and in other capacities. More than a score of organized study groups engaged in the consideration of a wide range of administrative, curriculum, personnel, community relations and other problems involved in the preservice and in-service education of teachers.

Other meetings of organizations which were attended include that of the Council on Cooperation in Teacher Education, which is sponsoring a program of intergroup relations, and those of State or local conferences.

Other activities in teacher education were undertaken as part of projects in which all or most of the members of the Division participated, such as the Study of Postwar Problems; State Surveys; Study of Vocational Education of College Grade; Investigation of Military Training Aids and Methods of Instruction; publication of the divisional periodical entitled HIGHER EDUCATION; and similar projects described elswhere in this report.

State Surveys

The long-standing participation by the Office in State and other surveys of education was continued during the year in a survey of higher education in Mississippi, and in a somewhat similar investigation in Illinois. Three members of the Division participated in the Mississippi investigation, which included field work in all of the State institutions in higher education, consultative services, and like activities. Areas of investigation in Mississippi included State administration of higher education, college curricula, teacher education, plant and facilities, staff personnel, graduate work, and similar aspects of the field of activities in State higher education. Special consultative services were rendered in Illinois by the Chief of the Division.

Study of Vocational Education of College Grade

Toward the close of the year, an investigation of vocational education of college grade was initiated. It was planned to examine this growing field in junior colleges, technical institutions, universities and colleges, and elswhere in institutions of higher education. A conference of national leaders in this field was held in Washington, and a conference was also held in California in connection with the project. The undertaking will be completed during the fiscal year 1946.

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Summer School Courses in Counseling, Guidance, and Personnel Work

In February 1945, the Division of Higher Education cooperated with the Occupational Information and Guidance Service of the Vocational Division in making a survey of course and other offerings in counseling, guidance and personnel work to be offered during the summer period of 1945. (For further report on this project see page 36 in the Occupational Information and Guidance Report.)

Conferences on Training of Secondary School Counselors

In April 1945, the Division of Higher Education cooperated with the Occupational Information and Guidance Service of the Vocational Division, in sponsoring conferences of representatives of colleges and universities interested in the training of secondary school counselors.

Study of Training Aids Used in the Armed Services

During the year, three members of the Division of Higher Education served as members of the Committee on Military Training Aids and Instructional Materials, appointed by the U. S. Commissioner of Education to study the development and use of training aids and devices in the armed services. One of the representatives of the Division served as chairman of the Committee. Visits were made to a number of Army and Navy installations, conferences were held with responsible service officials, and materials observed and studied. The data and information secured have been presented in the form of a bulletin entitled *Use of Training Aids in the Armed Services* (Bulletin 1945, No. 9) which has been distributed to interested individuals and groups in secondary and higher education.

Postwar Planning in Higher Education

The staff of the Division has continued the program, initiated at the beginning of the previous fiscal year, of stimulating and assisting State-wide and regional groups of colleges in developing plans calculated to meet the over-all needs of a specified geographical area. On invitation from voluntary and legally authorized bodies, the staff participated during the year in 28 State-wide conferences, in 7 regional meetings, and in 5 conferences of national professional organizations.

The Division has also encouraged the work of these and other postwar planning groups through the preparation and distribution of 7,500 copies of each of two bulletins. Schools and colleges expressed an urgent need for information on the probable number, incidence, and educational level of World War II veterans likely to resume education. With the cooperation of the War and Navy Departments data on the age and previous education of 8,000,000 enlisted personnel and 729,000 officers were compiled and arranged by States. This bulletin, *Data for State-Wide Planning of Veterans' Education*, has also been in demand by the several agencies of Federal and State governments

concerned with veterans' problems. Industrial and other private employers have also made use of the document. The second bulletin, *Higher Education Looks Ahead*, presents a round-up of information secured from the colleges and from professional and lay associations on what they are doing to readjust program and procedure to meet postwar educational needs, especially those of returning veterans and young war workers whose education has been interrupted.

The staff has also been able to assist individual colleges in working toward a solution of their postwar problems, chiefly through correspondence and Office consultations with college officials. The staff has worked in a similar manner to assist Army and Navy Separation Center staffs with the educational counseling problems they face in demobilizing members of the armed forces. In addition, the Division has provided similar services to local offices of the Veterans' Administration, and to many types of voluntary organizations that have assumed a responsibility for veterans' education.

Engineering, Science, and Management War Training

The Engineering, Science, and Management War Training program of the fiscal year 1944–45 was the fifth and last of a series of similar programs which have been conducted since October 9, 1940. For brevity, the program is usually referred to as the ESMWT–III program; or, when no reference to the preceding programs is involved, simply as ESMWT. The history of earlier programs may be found in the annual reports for preceding years.

The Division of Higher Education was authorized to conduct ESMWT–III in Public Law 373, 78th Congress, 2d Session, approved June 28, 1944. That act provided not to exceed $10,000,000 for the cost of short courses of college grade to be provided by colleges and designed to meet the shortage of engineers, chemists, physicists, and production supervisors in fields essential to the war effort. These courses were required to be of types approved by the Chairman of the War Manpower Commission. Not to exceed 12½ percent of the amount allotted from this appropriation to any college was expendable for the purchase of additional equipment and the rental of space. An appropriation to cover the expenses necessary to liquidate the program was made in Public Law 124, 79th Congress, 1st Session, approved July 3, 1945.

The total number of men and women enrolled in ESMWT–III was 237,593, and approximately $7,500,000 of the $10,000,000 appropriation was encumbered to meet the cost of their instruction. The saving of $2,500,000 resulted chiefly from the cancellation of the anticipated summer program of courses starting prior to June 30 and ending not later than September 30. In previous years the cost of

the program for this period was about one-fifth of the total for the year. Other contributing factors were a severely limited administrative budget for use in developing the program, an inability to purchase anticipated and needed equipment under wartime restrictions, and the tight manpower situation which during the year drastically reduced the supply of unemployed persons who were qualified to pursue ESMWT courses. Lack of qualified applicants for preemployment training made it impossible to organize and conduct courses in the anticipated volume, even though the need in war industry for trained personnel in the authorized fields far exceeded the capacity of all facilities provided to meet it.

Of the entire ESMWT–III enrollment, 156,555 were in courses organized to meet the shortage of engineers; 6,331 in courses for chemists; 5,984 in courses for physicists; and 68,723 in courses relating to nonengineering production supervision.

Trends in Enrollment

The downward trend in enrollment noted in the ESMWT–II program continued through the ESMWT–III program. This trend is not believed to indicate a corresponding decrease in the need for college trained engineers, chemists, physicists, production supervisors, and their technical assistants, but rather a continued depletion of the supply of qualified potential trainees. A complex set of contributing factors, including optimism concerning the early end of the war, abundant opportunities for high earnings by relatively untrained workers, competition among war activities for manpower, the limited number of high-school graduates with adequate knowledge of mathematics, and the early closing of the program, seriously reduced the volume of preemployment training. The training of employed persons for up-grading to more responsible work was affected by these same factors, but to a lesser extent. The enrollment in in-service courses was 62 percent of the similar enrollment under ESMWT–II, while in preemployment courses the ESMWT–III enrollment was only 21 percent of that under ESMWT–II. Enrollment in preemployment courses constituted only 4 percent of the total enrollment under ESMWT–III, as contrasted to 11 percent during ESMWT–II and 36 percent during ESMWT–I.

Table 1, which sets forth the 10 specific types of courses in which greatest ESMWT–III enrollments were reported, affords an interesting contrast with similar data for the preceding fiscal year. Electronics courses, for instance, which ranked tenth among last year's enrollments, stand fourth in ESMWT–III. Conversely, Accounting courses have dropped in rank of enrollment from third place in ESMWT–II to fifth in the program here reported; and Communications from sixth place to ninth. Production Engineering, which this

year ranks in sixth place, was not among the first 10 courses under ESMWT–II. These and similar variations illustrate the changing requirements of the war production program and the flexibility with which ESMWT has met them.

Table 1.—*Cumulative enrollment by specific type of course from July 1, 1944, through June 30, 1945*

Type of course	*Enrollment*	*Percent of total*
Industrial Organization and Management	23,211	9.8
Personnel Administration and Labor	21,576	9.0
Mathematics (Basic Sciences for Engineers)	16,305	6.9
Electronics	15,088	6.3
Accounting	12,538	5.3
Production Engineering	12,522	5.3
Engineering Drawing and Descriptive Geometry	12,192	5.1
Safety	9,608	4.1
Communications	9,433	4.0
Structures (Aeronautical Engineering)	7,023	2.9
All other courses	98,097	41.3
TOTAL	237,593	100.0

The geographical distribution of the training, which was in close agreement with the volume of industrial activity relating to war production, is illustrated in table 2, which details ESMWT–III enrollment in the 10 States that ranked highest for the fiscal year.

Table 2.—*Cumulative enrollment, by State, from July 1, 1944, through June 30, 1945*

State	*Enrollment*	*Percent of total*
California	48,776	20.5
Pennsylvania	22,615	9.5
New York	20,627	8.7
Texas	19,055	8.0
Illinois	18,494	7.8
New Jersey	12,615	5.3
Ohio	11,514	4.9
Indiana	9,173	3.9
Michigan	6,088	2.6
Maryland	5,787	2.4
All other States	62,849	26.4
TOTAL	237,593	100.0

Training of women.—Enrollment of women declined from about 19 percent of the total under ESMWT–II to about 14 percent of the total under ESMWT–III. Table 4 in this report shows the trend of the enrollment of women through the 5 years. The enrollment reached its maximum under ESMWT–I and has steadily declined since. For the entire 5 years, the enrollment of women represents about 16 percent of the total enrollment.

Training of Negroes.—Little change in the ratio of Negro to total enrollment occurred during the fiscal year. Negro enrollments decreased from about 1.75 percent of ESMWT–II to approximately 1.2 percent of ESMWT–III enrollments.

Training of men not liable for military induction.—Although data reported by participating institutions do not specify the Selective Service classification of trainees, increasing age of those enrolled, and the growing proportion of employed men attending classes indicate that relatively few men in class 1–A have attended ESMWT courses during the year. While the program, of course, made no effort to discriminate against such men, the training usually did not appeal to those facing imminent induction, and employers have preferred to hire women or men with reasonable assurance of deferment.

Significantly, veterans of the current war are rapidly assuming importance as replacements for industrial personnel and, consequently, as candidates for ESMWT.

ESMWT has never had any special authorization for the training of veterans; and, consequently, they have been enrolled under exactly the same terms and conditions as have applied to any other applicants, after due consideration of their prior education and experience and their suitability for employment in the fields for which the training has been conducted.

That no distinction has been made between veterans and nonveterans in accepting enrollments at the participating institutions is borne out by a comparison of table 3, presenting the highest 10 courses in veterans' enrollment, with table 1, depicting the rank of the highest 10 courses in general enrollment. It is striking that the distribution of veterans in ESMWT courses so closely parallels that of general enrollments.

Table 3.—*Cumulative enrollment of veterans by specific types of course from July 1, 1944, through June 30, 1945*

Type of course	*Enrollment*	*Percent of total*
Mathematics (Basic Sciences for Engineers)	698	8.5
Engineering Drawing and Descriptive Geometry	571	6.9
Industrial Organization and Management	561	6.8
Electronics	550	6.7
Personnel Administration and Labor	523	6.4
Production Engineering	521	6.3
Communications	466	5.7
Safety	294	3.6
Accounting	292	3.6
Power Generation and Transmission	242	2.9
All other courses	3503	42.6
TOTAL	8221	100.0

Relationship to the War Manpower Commission.—This year ESMWT continued under the Federal Security Agency, U. S. Office

of Education. The requirement that types of courses to be offered in ESMWT be approved by the Chairman of WMC was also repeated. The Director of ESMWT has continued, in voluntary cooperation, the plan of operation adopted in the ESMWT–I program. The ESMWT regional representatives have remained on duty in each of the War Manpower regions, and all contacts in the field between ESMWT and WMC have been channeled through these representatives. Copies of course proposals, enrollment reports, and similar documents have been routed from the institutions within each WMC region to the appropriate ESMWT regional representative, who has supplied such information as was needed and requested to the WMC field staff.

Title to equipment and supplies purchased with ESMWT funds.—The act which appropriated funds to cover the liquidation of the ESMWT program provided that equipment and supplies purchased under approval of the Commissioner of Education with ESMWT funds by institutions participating in the program shall remain the property of the institution authorized to purchase them, provided "That no school or school system shall be required to surrender possession or use of any property or equipment which it is using in its educational or training program."

Summary of entire ESMWT program.—Table 4 presents a brief statistical summary of the five successive programs of college-level defense training courses which have been conducted under the auspices of the Office of Education. All enrollments are based on final enrollment reports from participating institutions, all of which had been received when this report was prepared.

Table 4.—*Enrollment in EDT, ESMDT, ESMWT I, ESMWT II, and ESMWT III courses from October 9, 1940, through June 30, 1945*

Item	EDT,[1] 1940–1941	ESMDT, 1941–1942	ESMWT I, 1942–1943	ESMWT II, 1943–1944	ESMWT III, 1944–1945	All programs, 1940–1945
1	2	3	4	5	6	7
Institutions which participated in program	143	194	214	195	172	[2]
Courses operated in:						
All fields	2,182	7,598	12,740	11,547	8,501	42,568
Engineering	2,182	6,174	9,527	7,859	5,723	31,465
Chemistry	---	220	480	437	296	1,433
Physics	---	132	231	270	238	871
Production supervision	---	1,072	2,502	2,981	2,244	8,799
Enrollment in:						
All fields	120,802	438,503	596,134	402,684	237,593	1,795,716
Engineering	120,802	350,564	443,938	265,366	156,555	1,337,225
Chemistry	---	7,914	13,929	10,664	6,331	38,838
Physics	---	5,813	11,998	8,620	5,984	32,415
Production supervision	---	74,212	126,269	118,034	68,723	387,238
Full-time courses	18,607	22,021	47,305	14,379	3,942	106,254
Enrollment of:						
Females	811	38,341	130,245	79,612	33,226	282,235
Negroes	849	3,265	10,539	7,574	2,931	25,158
Veterans	---	---	---	6,094	8,221	14,315

[1] Instruction began Dec. 9, 1940.
[2] 227 institutions participated in at least one of the five programs.

Student War Loans Program

In July 1942, the Congress appropriated $5,000,000 for loans to college students in the technical and professional fields of engineering, physics, chemistry, medicine (including veterinary), dentistry, and pharmacy. At that time it was apparent that there would be serious war-created shortages in these fields, and the loans were to enable students to accelerate their courses so as to be earlier available for the most effective services in the war effort.

During the 1943 fiscal year, loans were made in this program to 11,081 students in 286 colleges and universities amounting to a total of $2,910,506.93. For the 1944 fiscal year, the Congress reappropriated the unexpended balance of the original appropriation of $5,000,000, with the stipulation that during 1944 loans should be made only to students who had received loans the previous year. The aim was to make it possible for these students, as many of them as possible, to finish the accelerated program upon which they had embarked. Because of graduations and the entrance of student borrowers into the armed forces during 1944 the number of students eligible for the loans was reduced materially, so that only 1,572 of the 11,081 students to whom loans had been made in 1943 were assisted in 1944. These students received $417,094.39. Thus, in the 2 years in which the program was in effect, the total amount loaned was $3,327,601.32. The following table shows the distribution among the seven accelerated fields of the loans made in 1943.

Field	*Number of loans*	*Amount*	*Percent of total*
Medicine	3,867	$1,150,072.47	39.5
Engineering	4,066	933,208.28	32.1
Dentistry	1,217	343,225.14	11.8
Chemistry	835	205,443.46	7.1
Pharmacy	438	114,104.01	3.9
Veterinary	394	106,820.53	3.7
Physics	264	57,633.04	1.9
	11,081	2,910,506.93	100.0

The law provides for repayment of the loans in four equal annual payments of principal, with accrued interest, beginning 1 year after graduation or separation for other purposes. Further provisions are made for cancellation of the unpaid balance of the loan when the borrower is inducted into the military services, before graduation, through the Selective Training and Service Act, and for deferment of interest payments and repayments of principal during military service of the borrower. The work of the program, since June 30, 1944, has been concerned with the administration of these two provisions, and with the fiscal services related to collections.

Although most of the borrowers are in the military services, with their payments deferred, collections amounted to $410,682.71 as of June 30, 1945, and about 9 percent of all loans had been paid in full.

Vocational Education

Following is a report of activities of the federally aided program of the Vocational Division carried on by the States under the Smith-Hughes and George-Deen Acts and administered through the U. S. Office of Education, as well as of the Vocational Training for War Production Workers and Food Production War Training Programs conducted under Public Law 373.

Enrollments in all vocational schools and classes for the year 1944, the latest for which complete statistics are available, totaled 2,001,153. This total includes 469,959 persons enrolled in vocational agriculture classes; 543,080 in trade and industrial education classes; 806,605 in home economics courses; and 181,509 in distributive education. Preliminary statistical reports for 1945 indicate a total enrollment of 2,002,467. In addition to that total there were 1,152,986 persons enrolled in Food Production War Training and 1,037,213 enrolled in the program of Vocational Training for War Production Workers.

Agricultural Education, Including Food Production War Training

The total number of departments of vocational agriculture remained about the same as last year—approximately 7,000.

Supervised Farming

An encouraging feature of the supervised farming activities conducted by students of vocational agriculture has been the attractive prices they received for their farm products. Financial returns reached an all-time high in net profits. The staff assisted the States in maintaining interest in supervised farming activities and in improving this phase of the program through conference work conducted with members of State staffs and State-wide gatherings of teachers of vocational agriculture. Special emphasis has been placed on the importance of encouraging students in the better selection of their supervised farming programs so that production goals might be attained. Attention was given to the stimulation of greater activity in the economical production and use of feed for livestock.

It is impossible to measure the assistance given farmers and farm youth in helping them to achieve wartime production goals set for the production of vitally needed food and fiber crops, as well as meat,

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poultry, and dairy products; however, teachers of vocational agriculture throughout the United States unquestionably contributed to the total war effort which resulted in the greatest agricultural production of farm commodities that this country has ever witnessed.

Educational Services

Special emphasis was given by regional agents, particularly at the time they held their regional or district conferences of supervisors and teacher trainers, to the development of programs for the training of veterans who are interested in returning to farming occupations. Conferences were also held with representatives of the Veterans Administration, the American Legion, and other interested groups. As a result, most of the States have developed specific plans for education and training programs in agriculture for returning veterans. Many of these training programs are now in operation and others will be established as rapidly as military personnel are demobilized.

Many of the staff served as technical specialists for the Division of Visual Aids for War Training in the production of 16-mm. sound motion pictures, film strips, and manuals. These agricultural films have been used in the regular classes in vocational agriculture as well as in the emergency food production war training classes. Assistance was given to the Georgia State Board for Vocational Education in the prepartion of a special bulletin, *School Community Canning Plants—Location, Construction, and Equipment.*

Research Projects

The major project of this year was an appraisal of the Food Production War Training Program, based on a study of all State programs, 359 local programs, and 4,586 interviews with enrollees. The report was completed and published in condensed form in the June 4, 1945, issue of *Education for Victory.*

During the last part of the year, work was resumed on tabulating and summarizing 400 evaluations of local programs of vocational education in agriculture.

Farm Youth Organizations

The Future Farmers of America and New Farmers of America, integral parts of the vocational agricultural program, have continued to provide valuable training and experience to students of vocational agriculture.

The Future Farmers of America normally holds a national convention at Kansas City, Mo., in October or November of each year, at the time of the American Royal Livestock Show. Because of wartime restrictions on travel, attendance at the FFA conventions has been reduced from the usual 7,000 or more to around 400 delegates at the 1944 event. These conventions have been an important and

vital factor in keeping the organization intact and in providing incentive for the further promotion and development of special wartime activities for which the organization received national recognition. Citations have been awarded the Future Farmers of America by the War Production Board for meritorious service in the collecting and salvaging of scrap materials, and by the United States Treasury for activity in the purchasing of and promoting of the sales of war bonds and stamps.

Future Farmers of America Foundation

The Future Farmers of America Foundation was organized during the year: (*a*) To give financial assistance to deserving students of vocational agriculture and to young farmers in becoming satisfactorily established in farming occupations; (*b*) to promote and stimulate agricultural leadership among students; (*c*) to promote and develop interest in vocational agriculture and the activities of the Future Farmers of America and New Farmers of America; and (*d*) to provide awards to deserving students.

The Foundation is financed exclusively through voluntary contributions from business concerns, corporations, farm and civic organizations, and individuals. It is believed that the greatest good will accrue to the greatest number if the Foundation has the financial support and good will of a relatively large number of donors. Hence, no maximum or minimum limitation of contributions has been established. However, the Foundation reserves the right at any time to reject the contribution from any donor or potential donor.

Contributions to the Foundation are made without reservations, limitations, or restrictions by the donors. Donors will not be identified with any specific Foundation prizes, awards, or activities. Under this plan a much better balanced program of activities sponsored by the Foundation can be maintained than would be true if specific types of projects, contests, or activities were selected by Foundation donors with which they would be identified. Through the pooling of funds in the Foundation, more adequate awards can be made with less administrative detail and, in addition, each donor will receive recognition for all Foundation awards rather than for one specific project or activity.

Subject-Matter Materials

Expansion of vocational programs in agriculture during the postwar years necessarily will result in the construction of many new buildings and farm shops. To meet this expansion, a series of recommendations for the construction of such buildings have been drawn up and floor plans for one-teacher and two-teacher agricultural units developed. These recommendations and suggested floor plans have been distributed widely throughout the United States and should be of great value to local communities. Additional subject-matter materials have

been gathered and are in the process of preparation that deal with subjects such as: "The Repair and Maintenance of Roofs for Farm Buildings" and "The Repair and Maintenance of Walls, Floors, Windows, and Doors on Farm Buildings."

A handbook or guide for vocational agriculture and home economics teachers to follow in organizing and conducting better educational programs in housing for Negroes in those States where separate schools are maintained has been prepared cooperatively by the Agricultural and Home Economics Education Services and agricultural and home economics teacher trainers.

Teacher Training

Anticipating the return of teachers from the armed services and from war industries, and the resumption of undergraduate or preemployment programs, emphasis has been given to reestablishment of teacher-training programs. Regional meetings, sectional meetings, and visits to States have provided opportunity for replanning teacher-training programs in a manner not attempted since the early years of the program. Recommendations developed as a guide for the resumption of teacher training as an outcome of meetings and conferences include:

1. Establishing active recruiting programs to insure an adequate supply of qualified beginning teachers.

2. Developing functioning guidance and selection programs in teacher-training institutions to eliminate the many persons who enter training but do not, or should not, go into teaching.

3. Developing proper and adequate placement procedures to insure longer tenure of teachers and to reduce teacher changes from community to community.

4. Developing refresher and retraining programs to meet the need of many former teachers of agriculture who will reenter the field of teaching after 1 or more years in the armed services or in other types of war activity.

5. Working with State Boards and teacher-training institutions to replan postwar training programs giving greater consideration to the demands made upon the teacher of vocational agriculture.

6. Redeveloping facilities for directed observation and directed teaching, using only departments having complete programs of all-day, part-time, and evening class instruction, and active chapters of FFA or NFA.

7. Expanding facilities for in-service type of teacher training designed to assist the teacher in solving specific problems of the community and groups he serves.

8. Making provision for itinerant teacher training and the follow-up of beginning teachers.

9. Making provision for resident teacher trainers to visit schools of the State in order that they may become better acquainted with actual teacher situations.

Food Production War Training

The Food Production War Training Program was continued for the fifth consecutive year. Public Law 373 provided $10,500,000 together with the unobligated balance of the appropriation for this purpose for the fiscal year 1944, making available a total of $14,600,000 for the operation of the program during the 1945 fiscal year. The program included courses of less than college grade in farm machinery repair, food production, food processing, and training farm workers. A large percent of the enrollment was in farm machinery repair and food processing courses. (See table 5.) This was due to the need on the part of farmers to repair farm machinery as a result of the scarcity of trained mechanics, new machinery and machine parts, and the necessity for the preservation of food for home use during the period of heavy demand for food by the armed forces, war workers, and our Allies.

Upon termination of hostilities in Europe, the Congress recommended that the Food Production War Training Program be closed immediately. Consequently, all courses were closed on or before May 31, 1945, and the State boards for vocational education were directed to liquidate their respective programs.

The continuation of a critical food situation influenced the War Food Administration to transfer a working fund of $1,670,000 to the Office of Education for the operation of school community canneries, during the 1945 canning season. By June 30, 1945, State boards for vocational education had approved and put into operation 3,121 such programs.

Table 5.—*Enrollment in food production war training courses to May 31, 1945*

Items	*Cumulative enrollment from December 1, 1940*	*Cumulative enrollment from July 1, 1944*
All courses	4, 188, 552	1, 152, 986
Shop courses	820, 058	20, 729
Farm machinery repair	1, 215, 939	430, 767
Food production	534, 122	100, 730
Food processing	1, 514, 093	564, 351
Training farm workers	104, 340	36. 409
Female	1, 366, 570	487, 264
Negro	771, 203	154, 186
Urban	402, 114	63, 076
In-school	85, 235	36, 529

Business Education

Functions of the Business Education Service are of a threefold nature—advisory, research, and administrative. They include giving of professional assistance to State and local boards, colleges and universities, and other groups; planning and conducting research; assisting in employment-opportunity surveys and in adaptation of their uses; making job analyses; preparing instructional materials and cooperating with State boards for vocational education in a wide range of activity.

Teacher Training

The Business Education Service during the year assisted boards of education and teacher-training institutions in developing and carrying on a Nation-wide training program for the preparation and professional growth of teachers, coordinators, and supervisors of business education.

Regional agents through field activity, correspondence, and the development of training materials, assisted State and local supervisors in organizing and conducting teacher-training conferences and institutes designed to facilitate professional improvement of full-time teachers, coordinators, and supervisors. Professional training on the job was given to part-time teachers of adult extension classes.

Field representatives of the Service, in cooperation with supervisors and coordinators of distributive education and with the assistance of representatives of distributive businesses, developed and conducted courses in job instructor training, job relations training, and conference leadership training for the purpose of helping supervisory personnel of merchandising and sales organizations to develop and improve skill in (1) on-the-job methods of teaching an employee how to perform his work correctly and efficiently, (2) methods of handling job relations problems, and (3) methods of conducting a group conference.

Assistance was also given to colleges and universities in the development and improvement of pre-service teacher-training programs needed for the preparation of teachers, coordinators, and supervisors. The Service encouraged the organization of pre-service teacher training on a cooperative basis in which occupational experience is supplemented by general education and adequate technical and professional training. The Service also encouraged in-service teachers and coordinators to accept business employment periodically on a temporary or part-time basis for the purpose of maintaining continuous first-hand contact with practical business problems.

Research Activities

Members of the staff gave professional advice and assistance to individuals and groups in the planning and conducting of research studies

dealing with or having a direct bearing on specific problems of training business workers.

The Service initiated a study to determine what should be the nature and scope of a course in the principles of selecting, organizing, and managing small business enterprises. The course is being prepared to meet the training needs of returning servicemen, workers in war industries, and others who wish to establish or reopen small businesses of their own.

The instructional materials for this course are being developed with the cooperation and advice of trade association executives, wholesalers, retailers, and representatives of State boards for vocational education and the U. S. Department of Commerce. Results of this study will be made available to boards of education and other agencies engaged in the administration of training programs for persons starting a small business and for owners and managers of small businesses already in operation.

Initial steps were taken in the planning of a series of job analyses studies in cooperation with the Personnel Group of the National Retail Dry Goods Association and the Education Committee of the National Restaurant Association. The purposes of these studies are to determine specific subject-matter content, to indicate relative weight of instructional topics, to establish profiles of various jobs in retail organizations, and to provide a relatively scientific approach to pupil selection for cooperative part-time retailing classes.

Another study involving preparation of instructional materials and the organization of a training program for a specific group was the preparation of a teacher's manual for use in training paint salesmen and painting contractors. This study is being made in cooperation with the National Paint, Varnish, and Lacquer Association. Results of the study will be made available for use in vocational classes conducted by or under the auspices of State and local boards of education.

Outlines for supervisory training courses in job instructor training, job relations training, and conference leadership training were completed or revised in accordance with results of studies relating to (1) on-the-job methods of teaching an employee how to do his work, (2) methods of handling job relations problems, and (3) methods of conducting a group conference.

A comprehensive study to determine adequate and appropriate content of a guide or handbook setting forth practical and successful methods of organizing, supervising, and teaching business education was begun during the year with the assistance of a special advisory committee consisting of educators, trade and professional association representatives, and businessmen. A printed report of this study, when completed, is expected to be made available to teachers, coor-

dinators, department heads, supervisors, school administrators, and others engaged in or directly interested in the training of workers for store and office occupations.

Student Clubs

Members of the staff participated in and encouraged the promotion of student organizations devoted to out-of-class activities related to business problems and practices. Assistance was given in the writing of State and local club constitutions, in preparing a manual for use in organizing local clubs, and in planning club projects, meetings, conferences, and other activities.

Student organizations known as Distributors Clubs have developed extensively in the southern region. Clubs known as Future Retailers or Future Merchants have developed to some extent in other sections of the country. State meetings of delegates from local clubs have been held in Tennessee, North Carolina, South Carolina, Virginia, Georgia, Oklahoma, Ohio, Louisiana, Kentucky, and Puerto Rico.

Further growth and increased effectiveness of the Future Business Leaders of America, a national organization of student clubs, was encouraged as an integral part of the business education program. Organized in 1942 under the sponsorship of the National Council for Business Education, the Future Business Leaders of America provides through local clubs many opportunities for business students to participate in community business activities that develop competent and aggressive leadership.

These various organizations of business students have made contributions to: Individual student development, increased interest in the field of business, closer cooperation between the community and the school, and a mutual understanding between the youth and adults of the community as to their responsibilities to each other and to their community life.

Wartime Courses for Retailers

The Service assisted State boards for vocational education in developing and administering programs related to training problems and needs resulting from wartime conditions. Three special programs—wartime training of new store workers, wartime training of experienced salespersons, and wartime training for store supervisors and department heads—organized in 1942 to meet the wartime training needs of retailers, were continued during the year. Emphasis was placed on training supervisory personnel to assist them in on-the-job training of new store workers and in developing good everyday relationships between supervisors and employees, between employees and customers, and among employees themselves. Staff members assisted in organizing and conducting institutes to train leaders for the supervisory training courses.

Retailers, wholesalers, and the sales department of manufacturing concerns lost to the armed services and war industries many of their trained and experienced sales personnel. They are now faced with the task of rebuilding their sales organization. To meet this problem, the Service assisted State boards for vocational education in planning and conducting Institutes for Sales Executives. Extending over a period of 5 days, the Institute seeks solutions to problems of analyzing the sales job, selecting and supervising salesmen, evaluating training materials, and developing definite sales training programs.

Postwar Planning

The Business Education Service encouraged trade and professional associations and State boards of education to study postwar training needs and to plan training programs to meet these needs.

At various conferences participated in or conducted by staff members of the Service consideration was given to postwar training problems and to plans for peacetime expansion and improvement of various phases of business training. Such plans include the further development of cooperative part-time training; the employment of itinerant teachers to serve managers of businesses in small towns and their employees; the organization of courses in small business ownership and management for veterans and former war workers who plan to establish or reopen businesses of their own; promotion of training programs for supervisory personnel in sales and merchandising organizations; extension of business training to groups not heretofore adequately served; and the further development of teacher-training programs, both pre-service and in-service.

Cooperative Relationships With Other Agencies

Cooperative relations continued during the year with such organizations as the National Paint, Varnish, and Lacquer Association; the U. S. Department of Commerce; the American Marketing Association; the National Restaurant Association; the National Retail Dry Goods Association; and the National Office Management Association.

Conferences were held with members of the Joint Committee on Subject Matter in Retail Drug Training to plan the further development of instructional material for training in retail drug store operation and to plan the organization of classes for retail druggists and their employees. This subject-matter committee represents the National Association of Retail Druggists, the American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, and the American Pharmaceutical Association.

Plans were developed cooperatively with the National Shoe Retailers Association for the expansion of a training program in the

fitting and selling of shoes for the managers and employees of retail shoe stores.

Articles on business training written by staff members of the Business Education Service were carried in publications of various trade and professional organizations.

Home Economics Education

Emphasis was given during the year to program development, curriculum study, space and equipment for homemaking education, home economics clubs, and cooperative programs.

Program Development

In their work in the States, agents gave help in adjusting homemaking education programs to give greater service to pupils and families in dealing with wartime and postwar problems.

Regional Workshops

The Central Regional Conference in 1944 recommended that the regional agent arrange a special workshop for home economics education workers in the Central Region, with members of the staff acting as consultants. The workshop was held at the University of Minnesota in August 1944. Thirty-eight home economists from 11 States participated. Committee reports containing suggestions for program adjustments to meet wartime situations in the 11 States were distributed to members of the group by the Center for Continuation Study of the University.

A 2-week workshop for home economics education workers in the southern region was held in Montevallo, Ala., in January 1945. Three members of the Home Economics Service staff carried leadership responsibility. The 48 home economists who participated included State and district supervisors, heads of college home economics departments, teacher trainers, itinerant teacher trainers, city supervisors, and teachers. There were at least two representatives from each of the 12 States in the southern region and from Puerto Rico. Socio-economic problems of the South and implications for homemaking education programs were studied. Ways of helping families achieve the essentials of satisfactory living were recommended in reports on (*a*) curriculum, (*b*) guidance, (*c*) extension of home economics to groups and areas, (*d*) goals of in-service training, (*e*) democratic procedures, and (*f*) utilization of human and material resources. Plans were made for follow-up of the workshop in each State and in the region.

National Supervisors' Conference

A conference of State supervisors of home economics education was held in Chicago in February 1945, to consider problems of program development and administration. Forty-six supervisors from 45 States and Hawaii attended. Recommendations of the conference to the U. S. Office of Education included: (1) Organizing an advisory committee to the Home Economics Education Service; (2) calling of conferences or appointment of committees to clarify certain issues; (3) placing more emphasis on coordination of research in home economics education; (4) giving more service to city programs in homemaking education; (5) producing more materials which would aid in the development of homemaking education programs for adults and older youth; (6) giving more effort to the recruiting of homemaking teachers.

Service to Local Communities

The special administrative difficulties in providing a comprehensive program of homemaking education in cities received special attention. The agent for the central region made a cooperative study, with the State and city supervisors of home economics, the teachers, and school administrators in three cities. The analyses dealt with (a) activities for children in the elementary school; (*b*) education for homemaking for all who need it in the junior and senior high school; and (c) homemaking education for adults and older youth in the community.

Consultant service was given to a number of State and city supervisory staffs in the development of community-centered programs of family life education. To illustrate: In Colorado, as a part of a State-wide study of adult education, the consultant in family life education worked with teachers and community leaders in four cities.

Curriculum Study

In Colleges

There was continued interest on the part of college home economics staffs in examining their curricula to determine the extent to which student needs are being met. Members of the staff worked with colleges on curriculum problems through:

Intercollege conferences.—At the request of the Committee on Instruction in Home Economics of the Land-Grant College Association, an institute was held at the University of Chicago in August 1944, for 15 college teachers of family relationships. One member of the Home Economics Education Service staff participated.

A conference for college teachers of textiles and clothing in the eastern section of the country was held in New York City in November

1944, to work on problems of curriculum adjustment to meet wartime and postwar situations.

Following a similar conference of college textiles and clothing teachers in the Central States held earlier in Chicago, the agent for studies and research met with the Conference Planning Committee and the chairmen of subcommittees to help evaluate their progress and make plans for further committee work and for the next conference of the group.

An intercollege home economics curriculum conference was arranged and conducted by two staff members in Dallas, Tex. Representatives from 9 institutions in 4 States attended.

Consultation service to individual institutions.—Through conferences on 21 college campuses, agents studied with home economics staffs and administrators the needs of students and alumnae and ways in which the curriculum could be organized better to meet needs. At two other colleges, courses in family relations, child development, and effective living were studied.

State and City-wide Curriculum Study

Supervisors, teacher trainers, and State and city curriculum committees and groups of teachers were assisted with study programs through (1) evaluating the work of various study groups and planning workshop and leadership training conferences, in Indiana and New York; (2) planning a curriculum workshop and district conferences on evaluation, in Missouri; (3) determining goals for curriculum study and making plans by which all teachers could participate, in Louisiana and Massachusetts; (4) working on family recreation and revising materials on child development for use in the State curriculum guide, in Iowa; and (5) setting up a seminar for teachers interested in developing coordinated programs of family life education in the schools in which they teach, in Philadelphia. In West Virginia and Nebraska, special help was given on curriculum readjustment to aid families of returning war veterans.

Regional and National Curriculum Work

The regional agents for the Southern and Central Regions, in cooperation with representatives of vocational agriculture, worked with the joint home economics and agriculture committee of the Negro teacher-training conference in the development of materials on "An Educational Program for Improving Housing Conditions of Negro Farm Families." A draft of a proposed bulletin was distributed for experimental use by supervisors, teacher trainers, and teachers in the 17 States maintaining separate schools for Negroes.

In March 1944, the Home Economics Education Service held a conference in Washington, with the cooperation of the National Com-

mittee for Mental Hygiene, to consider ways in which teachers might be helped to understand better the family adjustment problems of homecoming servicemen. The recommendations of the conference were sent to home economics supervisors and teacher trainers as background for immediate work with teachers. Six of the leaflets planned by the conference have been published under the title *Family Contributions to War and Postwar Morale.*

In the three intra-regional conferences for home economics education leaders held in the central region, major emphasis was given to methods of teaching family and social relationships, with special consideration to famly problems created or aggravated by the war.

Space and Equipment

Plans under way for hundreds of new school buildings throughout the country have brought many requests for help with planning space and equipment for homemaking education. To get answers to some of the questions raised by educators and manufacturers, a conference was held in Washington which was attended by 12 home economists from different sections of the country who had special experience with space and equipment in homemaking education. Representatives from the family economics and the housing and household equipment divisions of the Bureau of Human Nutrition and Home Economics participated and representatives of companies manufacturing equipment for homemaking education departments took part in the discussion .

A brief report of this conference was distributed to 589 home economics education workers, together with a questionnaire asking for reactions to the recommendations. A group of those participating in the conference was organized into a consulting committee to the Home Economics Education Service on space and equipment for homemaking education.

Home Economics Clubs

During the year the Future Homemakers of America was developed as a national organization co-sponsored by the Home Economic Education Service and the American Home Economics Association. At the same time the Home Economics Education Service worked with State supervisors of home economics and Negro leaders in the 17 States which provide separate schools in the development of the New Homemakers of America. The purpose of these organizations is to provide avenues through which pupils in high-school home economics courses can gain valuable experience in working together toward certain broad social values related to the home.

By June there were over 100,000 members from 43 States in these new organizations. The regional agents and the chief of the Service participat actively in this development through helping in planning and conducting meetings of delegates, and through membership on the advisory boards of the two organizations.

Cooperative Programs

The Home Economics Education Service carried on a wide variety of cooperative activities with organizations and agencies, such as:

1. *Other fields of vocational education.*—Cooperated with (*a*) trade and industrial education on a curriculum committee for the training of practical nurses; (*b*) agricultural education in the development of a community canning program; (*c*) Occupational Information and Guidance Service in the preparation of two manuscripts; (*d*) Distributive Education Service and the Trade and Industrial Education Service in an experimental conference of State supervisors representing the three services on problems of employed women and the kinds of training programs vocational education could provide to meet such problems.
2. *Other fields of education.*—Cooperated with (*a*) other departments of the Office on nutrition, school lunch, and consumer education committees; (*b*) the Southern States Work Conference on School Administrative Problems in the study of the place of vocational education in the total education program; (*c*) other Office staff members in a study of the educational program at the Georgia School for the Deaf; (*d*) the representatives of extended school services and elementary education in the Office on a study of the extended school service program in Greensboro, N. C.
3. *Organizations.*—Cooperated with (*a*) the American Red Cross on the development of materials for the teaching of elementary, secondary, and college home nursing courses, and as a member of the National Council for the American Red Cross Home Nursing Service; (*b*) the National Safety Council as a member of its advisory committee; (*c*) the Girl Scouts of America as a member of the advisory committee on relations with the schools; (*d*) the Land-Grant Colleges Association through consultant service to the Committee on Instruction in Home Economics; (*e*) the Woman's Foundation on the preparation of materials for national program of emphasis on values in family living; (*f*) a workshop at the University of Arkansas under the direction of a regional committee on agriculture and home economics, the purpose of which was to translate into teaching material the Arkansas Valley report of the Regional Resources Planning Board; (*g*) the National Society for the Study of Education in the preparation of a chapter on adult education for

the 45th Yearbook; (*h*) the National Broadcasting Company in the preparation of the series of broadcasts "Home is What You Make It," by writing the chapter on "Cultural Influences in the Home" and helping with scripts; (*i*) the American Home Economics Association and the Home Economics Department of the National Education Association in the preparation of a leaflet on *Consumer Education and Home Economics in the Secondary Schools*, and advising on other manuscripts prepared by the Consumer Education Study staff of the Secondary School Principals Association; (*j*) the American Vocational Association through membership on the research committee and consultant service to the program planning and the coordinating committees; (*k*) the American Home Economics Association through membership on 5 committees, and one member of the staff also served as chairman of the Division of Family Relations and Child Development; and (*l*) the National Planning Association in the development of plans for a national conference on the family.

4. *Government agencies.*—Cooperated with (*a*) the Bureau of Human Nutrition and Home Economics, especially in connection with the conference on space and equipment and clothing and textiles; (*b*) the Federal Housing Authority on the development of homemaking education programs in housing projects; (*c*) the U. S. Public Health Service in programs of education for family health; (*d*) the Office of Price Administration, the War Production Board, the Office of War Information and the War Food Administration in the development of materials on consumer problems; and (*e*) seven divisions of the U. S. Department of Agriculture, other divisions of the U. S. Office of Education, the Children's Bureau, Social Security Board, American Red Cross, U. S. Public Health Service, Office of Price Administration, and National Congress of Parents and Teachers in the work of the Cooperating Committee on School Lunches.

The Service staff has analyzed some of these cooperative undertakings for the purpose of studying programs and accomplishments of each as a basis for future participation in such joint activities.

Trade and Industrial Education, Including Vocational Training for War Production Workers

Since the enactment of the first National Defense Training legislation, the Trade and Industrial Education Service has been responsible for the administration and supervision of two major programs: (1) To maintain the regular Trade and Industrial Education program through supervision, consultation, and assistance to State school authorities and the coordination of the work of trade schools with the needs of industry; and (2) to organize, maintain, and supervise the

War Production Training program through the same administrative channels, the same facilities and for the most part through the same personnel as that of the regular program.

So far as the functioning of the Service is concerned the difference between the regular program and the war training program is largely a matter of emphasis. In the regular program persons are trained in or for trade and industrial occupations with the major consideration being that of a service to the individual who is being trained. In the war training program persons were trained in or for trade and industrial occupations that were approved by the War Manpower Commission as war production occupations, usually operative jobs requiring short-term training to get the trainee on the production line of a war industry in the shortest possible time.

The Vocational Training for War Production Workers program stemmed from and was built upon the established or regular trade and industrial education program. The same methods, techniques, and procedures that were developed and used by this Office in the regular program for more than 20 years was found to apply and were used effectively in the operation of the War Production Training program. Accordingly, no attempt is made to differentiate specifically between the activities of the regular or war production training programs in this brief report.

When Congress determined that the Vocational Training for War Production Workers program had completed its task and should be discontinued, it became necessary to make plans for closing all war training courses and begin the task of liquidating the program immediately. In general, the program was closed on May 31. However, in particular instances where contracts or commitments had been entered into with military organizations the training of certain groups was continued to June 30.

The use of training councils or clearinghouses for information on manpower and training needs of war industries was encouraged. These councils were composed of administrators from the various divisions of the War Manpower Commission and all of the training agencies. They functioned on all levels of operation, namely, local, area, State, regional, and Federal. The councils proved a splendid device as they brought together the forces needed to deal with specific war training problems. They were invaluable in the transmission of information relative to training needs and a decided factor in obtaining quick action on any level of operation where a vocational training need existed. The participation of Vocational Training for War Production Workers' personnel on all levels was a major factor in the success of these councils.

A liaison was maintained with Army, Navy, and Air Forces through which more than 200,000 uniformed military personnel were trained

in special trade courses during the 5 years ending June 30, 1945. During the first 2 years this training was done entirely through the War Production Training Program, but as the military forces acquired their own training facilities, they gradually took over this training load and contracted with the vocational schools through the U. S. Office of Education for services they needed beyond their own facilities. The public vocational schools trained 4,933 uniformed persons during the past year. The military forces reimbursed the War Production Training program for the cost of the training.

National Refrigeration Service Council

A notable example of service rendered to a Nation-wide industry approved as a war industry by the War Manpower Commission was that rendered at the request of the National Refrigeration Service Council which reported a serious shortage in skilled refrigeration maintenance and repairmen. The National Refrigeration Service Council was given assistance in developing basic instructional material and with this material several thousand employees of refrigeration concerns were trained in public vocational schools throughout the country. The National Refrigeration Service Council was dissolved recently and at their last official meeting stated as a matter of record that the vocational schools had met the emergency adequately and they were satisfied these schools would be able to render any further vocational training service that might be needed by the industry in the future.

American Welding Society

During the month of June 1945, the American Welding Society issued the first of a series of standard codes outlining minimum requirements for instruction of welding operators. The publication is the result of more than 5 years' work of the Society during which time remarkable advances have been made in welding. This Office has maintained membership in the Society and assisted in the studies that were necessary in the development of the work. The series of codes is intended as a guide to vocational schools in determining minimum standards and procedures in planning and operating training courses in the various types of welding. The annotated bibliographies of publications relating to arc welding instructions in these codes were prepared largely by this Office.

Industrial Teacher Training

The most significant activity in this field during the past year has been the attempt to identify basic principles of industrial teacher training which stemmed from the established principles of vocational education, to obtain general acceptance of such principles, and to assist State boards for vocational education to work out practical

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applications of the principles which they recognize as applicable to their teacher-training problems. Beginning with the American Vocational Association Convention in December 1944 and continuing through group and individual conferences with State officials and among members of the Trade and Industrial staff in Washington, comparisons have been made between accepted principles of vocational education and parallel principles for industrial teacher training. From the latter, the minimum essentials for an effective program have been identified and assistance has been given to some States in applying the principles to their training activities. Plans have been made to continue this service.

Trade and Industrial Education for Girls and Women

In approaching the problem of labor turn-over in war industries that were employing large numbers of women workers a special effort was made to analyze the problem from the worker's standpoint and at the same time render assistance to industrial personnel departments in developing techniques and methods to cope with the problem of what in many cases was a new labor force.

From the standpoint of the worker it was found many were engaged in their first job other than homemaking and, in some cases, were caring for their families in addition to working in a plant. Analysis of the situation indicated that they needed assistance with both jobs. Marketing, preparation of meals, care of children, and other matters of the home needed reorganization and streamlining to conserve the time and energy of the homemaker who also worked in industry. On the other hand, instruction was needed to meet the new situations they faced as industrial workers. The noise and the strangeness of the plant, the use of power machines, the need for special clothes, and the problem of safety were some of the factors that required attention if these workers were to carry on effectively.

The staff worked on this dual problem in cooperation with State staffs and representatives of industry. Attention was given to the training of foremen and supervisors in dealing with women workers and in many cases industrial and vocational counselors were employed by industry to assist in the many problems of the worker. A series of conferences were conducted for the training of these counselors with gratifying results. Two processed documents of the U. S. Office of Education on the work of women counselors have had wide circulation, *The Job of the Industrial Counselor for Women*, issued in November 1944, and *The Training of Industrial Counselors*, issued September 1944. Although these bulletins were developed as a part of the War Training program they are valuable as guides to counselors in peacetime industries where women workers are employed.

Another publication which is nearing completion is the *Analysis of the Work of a Practical Nurse.* In preparing the bulletin this

Office has had the cooperation of professional nursing organizations, the American Red Cross, and the U. S. Public Health Service.

Instructional Materials Section

In addition to providing information to State directors of Vocational Training for War Production Workers and the Office of Education staff on available instructional material, and assisting in the development of instructional material for war production training, the staff engaged in the following service activities with other organizations and agencies in the interest of effective instruction in trade and industrial courses:

1. *American Automobile Association.*—In the interest of better training for school bus drivers, a cooperative project was completed with this organization which has resulted in the issuance of a bulletin, titled, *Training School Bus Drivers.*

2. *National Safety Council.*—(1) Assistance to the Council was provided in the planning and preparation of a program for industrial safety, in the postwar period. (2) Cooperation was maintained with the Council in planning and preparing a series of "School Shop Safe Practices Pamphlets."

3. *National Committee for the Conservation of Manpower in War Industries; A committee of the U. S. Department of Labor, Division of Labor Standards, Composed of Representatives of U. S. Government Departments Concerned with War Production.*—Cooperation with the Labor Department and this group was maintained and a 20-hour program of training in safety for supervisory personnel in war plants was organized and promoted through vocational trade and industrial schools. Several hundred thousand supervisors, foremen, and leadmen took advantage of these courses, and reports indicate that the accident rate was materially reduced in many plants as a result of the training.

4. *U. S. Government Agencies.*—Special services relating to job analyses, course outlines, and instructional materials were furnished Government agencies such as the War Department, Office of the Coordinator of Inter-American Affairs, Federal Public Housing Authority, Office of Defense Transportation, Apprentice-Training Service of the War Manpower Commission, and Department of Agriculture.

5. *State Programs of Supplementary Apprentice Training.*—Special programs for the development of instructional materials in accordance with a standard pattern to be used for instruction of apprentices in subjects related to their trades were initiated in six States through cooperation with State directors.

Regional Conferences

Anticipating the end of the war and the reconversion of industry to peacetime activities, the regional conferences were planned to assist

the States with the immediate problem of liquidating the war training program and preparing them to meet new situations that would inevitably arise as war industries closed or were converted to other work. The conferences stressed the need for surveys to be made by vocational school authorities as a preliminary step in the establishment of industrial training programs.

In addition to the four customary regional conferences, the second annual regional Conference of Negro Teacher Trainers and Assistant Supervisors of Trade and Industrial Education met in Nashville, Tenn., during April 1945. The conference dealt with the same general problems with emphasis on the up-grading of teachers on the job and special industrial educational problems involving Negroes in the reconversion period.

Conclusion

Some indication of things to come in the future of trade and industrial education was brought out in the discussions during the regional conferences. The problem of rendering service to inter-State industries such as the railroads, was given particular attention. In two of the regions, meetings were subsequently held with representatives of railroad management, the system federations, and the apprentice-training service. The purpose was to plan the organization of related instructional material for the apprentices of six railroad trades: Machinist, sheetmetal workers, carmen, electricians, blacksmiths, and boiler makers. The plans also involve the establishment of vocational training programs in certain designated centers to conduct extension courses for both apprentices and adult workers.

Table 6.—*Enrollment in preemployment and supplementary courses to June 30, 1945*

Item	Preemployment		Supplementary	
	Cumulative enrollment from July 1, 1940	Cumulative enrollment from July 1, 1944	Cumulative enrollment from July 1, 1940	Cumulative enrollment from July 1, 1944
TOTAL	2,667,449	104,439	4,802,057	932,774
Automotive services	70,698	6,242	99,164	19,531
Aviation services	655,856	12,914	1,161,806	192,497
Electrical services [1]	52,206	3,376	62,595	11,775
Forging [1]	7,802	146	3,861	1,324
Foundry	19,265	268	13,461	4,497
Machine shop [1]	764,056	21,607	456,709	63,740
Radio services [1]	83,473	14,715	171,785	29,621
Sheetmetal work [1]	74,217	755	24,797	2,401
Shipbuilding	436,930	16,149	970,056	246,326
Welding [1]	287,484	12,581	230,686	35,235
Other	211,462	15,686	1,607,137	325,827
Female	554,722	13,542	946,731	263,403
Negro	212,021	15,034	157,471	55,695
Veterans of World War II	[2] 2,961	2,169	[2] 15,830	12,408
Regular supplementary			2,149,110	248,306
Preparatory supplementary			1,523,315	485,541
Supervisory			922,633	193,994
Uniformed military personnel			206,999	4,933

[1] Does not include enrollments in courses specifically for aviation and shipbuilding. These are included in the aviation and shipbuilding totals, respectively.
[2] Cumulative from January 1, 1944.

Employee-Employer Relations

The Consultant prepared and distributed a digest of resolutions pertinent to education of the annual conventions of the American Federation of Labor and the Congress of Industrial Organizations to provide information regarding labor's position and attitude in connection with education. The information contained should serve as an aid in developing a better understanding of trends in the field of labor and a closer working relationship in the development of organizational and operational procedures for vocational education programs.

Continued emphasis has been placed on the use of representative advisory committees in planning and operating vocational training programs. Attention has been given to the utilization of such committees in connection with the regular long-term programs.

Public Service Training

The total enrollment in training for public-service occupations in the Nation as a whole for the year 1943–44 was 75,575. This figure, the latest available, was lower by 5,600 than the total for the previous year. Occupational groups in public employment receiving training through the facilities and staffs of State boards for vocational education included: Firemen, peace officers, building custodians, school bus drivers, water and sewage plant operators, power plant operators, inspectors for public health and safety, public works officials, correctional institution officials, and assessors.

The consultant advised with the States on the development and further improvement of training programs, conducted instructor-training schools to increase teaching personnel available in States, appeared on national and State fire programs, served as chairman of the National Fire Protection Association's Firemen's Training Committee, and assisted in the preparation of teaching material for training school bus drivers.

Close contact was maintained with various agencies interested in improving the efficiency of public employees; among these agencies were: The American Municipal Association, International Association of Fire Chiefs, International Association of Fire Fighters, National Fire Protection Association, Fire Department Instructors' Conference, Federal Fire Council, and the International Association of Chiefs of Police. Such groups were kept informed on developments in vocational education.

At the request of the Office of the Chief of Engineers, Army Service Forces, the consultant served as co-instructor in the first of a series of 30-hour regional fire training schools held at Lafayette, Ind., for instructors in the 5th and 6th Service Commands.

At the request of the Office of the Chief of Transportation, Army Service Forces, a program of fire instructor training was organized for ports of embarkation on both the Atlantic and Pacific Coasts. Three 80-hour schools were held in Oakland, Calif., and five 80-hour schools were held in New York City. A total of about 180 men were assembled for instruction at these points over a 4-month period. The actual training was done by representatives of the State Boards for Vocational Education in California and New York, respectively.

At the request of the Federal Public Housing Authority, arrangements were made through 26 State boards for vocational education to provide, on request, an average of 10 hours of basic firemen's training to designated personnel on 98 specified housing projects.

Occupational Information and Guidance

The Occupational Information and Guidance Service in the current year has been faced with new demands from the field. States providing specific supervision in Occupational Information and Guidance have increased to 41, as against 34 reported for the previous year. One national conference, participated in by 34 States, reexamined many aspects of the broad field of guidance and formulated statements of national significance as well as patterns of State action. A second national conference brought more than 50 teacher-training institutions together in a precedent-setting study of training in the guidance field. No fewer than four public and private agencies of national scope were furnished authorship services for publications in the guidance field printed at their own expense. Professional correspondence, consultations, and other participation continued at a high level, both as to quantity and as to importance of problems.

State Developments and Federal Relationships

The following States established supervision during the year: Idaho, Iowa, Kentucky, Minnesota, Nebraska, and New Jersey. The supervisors involved, and others new to their positions, look to this Service for help in the complex problems of beginning their duties. The single field consultant now available cannot meet them all in any 1 year in their own offices. The field consultant, however, visited 26 States, 77 cities, and 15 colleges. He participated in 3 national conferences, the organization of which he managed, and in 4 regional conferences. Other members of the staff also rendered field service of a kind compatible with their special assignments. In spite of this record, many urgent and legitimate requests had to be refused.

State Programs

Programs within the respective States show interesting differences, which deserve encouragement. On the other hand, the pooled experi-

ences of all States tend to reveal faulty practices and, at the same time, establish good procedures rather generally applicable. Two factors have operated this year to capitalize the benefits of a Nation-wide program. One is the inclusion for the first time of Section V in the Annual Descriptive Report from the States to the Assistant U. S. Commissioner for Vocational Education. The outline for this section, built around a general consensus as to the activities which a State supervisor should engage in, has the wholesome effect of calling attention to a well-rounded concept of a year's work, as well as encouraging factual and statistical evaluations of the supervisor's activities.

A second factor in this pooling of experiences was the Sixth National Conference held at Traverse City, Mich. This conference engaged two distinct groups of persons: (1) State supervisors and (2) others invited by them from their own States whose understanding, cooperation, and leadership were important to the development of their programs. The published reports of this conference are in two sections: One is a series of statements from general work committees of the conference on critical questions of principles and practices. The second is a workbook summarizing the supervisor's conception of the best practices in carrying on State programs.

Since the guidance program is essentially of a staff nature, expressing itself in services to the school as a whole and to the individuals enrolled rather than in new workers or additional students, growth is more difficult to express in statistics than for other aspects of education. State reports, however, are beginning to supply figures in such matters as numbers of schools supplying specific guidance services; number of schools, by type, employing full-time or part-time counselors; number of courses offered for counselor training and the enrollments; number of research projects, surveys, follow-up studies, and similar specific accomplishments. The value of a guidance program will continue, however, to lie in the quality of the service rendered, but this is no reason why statistical yardsticks should not be applied to measurable facts. Many States are supplying data showing growth, often of a substantial nature. National figures should soon be obtainable.

Professional Developments

One emphasis in the professional development of guidance work during the year was that on adult counseling. The community counseling experiments sponsored by this Service and reported in the last Annual Report were further developed. They were described in a publication written by the staff of the Service and given national circulation through publication by *Occupations* magazine, both as a special issue of that journal and as a separate pamphlet. These experiments, together with others of various sponsorships, were the forerunners dur-

ing the year, of thousands of local counseling centers with widely varying titles and programs, but with the same general purpose—the advisement of veterans and other adults as to reeducation, retraining, and employment, and such other problems as might appear in conjunction with them. This Service was not only indirectly connected with this development through leadership, but members of its staff also served as consultants to various public and private national agencies having more direct jurisdiction.

One inevitable outcome was a universal call for training for these counselors of adults. Outlines of training courses, with carefully selected bibliographies, were supplied for State and local use by this Service. Members of the staff conducted or participated in six training conferences of a week's duration each, and many more of shorter terms, in numbers of States.

It appears from all the evidence that the impetus given to the use of guidance practices in industrial and military circles during the war will carry over into the postwar era. This impetus will influence many communities to provide permanent counseling services for adults.

A second area of professional interest and activity stimulated by this Service is that of the content and method of training in guidance practices for teachers and counselors in in-school or college programs. A survey, conducted jointly by the Division of Higher Education and this Service, and issued as Miscellaneous 3162, entitled *Offerings in the Fields of Guidance and Personnel Work in Colleges and Universities, Summer 1945*, revealed the present state of training practice. The results indicated heterogeneous terminology, a lag between courses offered and the requirements for the qualifications of counselors by newer standards, and a general lack of professional agreement. This lack of agreement was obviously not based on desirable institutional freedom, but rather on insufficient job analysis of the modern demands on the counselor.

Inquiry among the States revealed that many State supervisors were able to interest their training institutions in these problems. As a result, this Service, in cooperation with the Division of Higher Education, sponsored two conferences, one in Chicago, Ill., and one in Raleigh, N. C., at which more than 50 institutions and 19 States, Puerto Rico, and the District of Columbia were represented. The resulting reports, available to the conferees in duplicated form, have been widely quoted and used. They suggest a required course for all teachers in preparation on the undergraduate level in the principles and practices of a guidance program. They also suggest in some detail the content of a year's graduate work devised to train coun-

selors. Reports from the field indicate that numbers of institutions, both of those represented at the conference and others, are reexamining their course offerings in the light of the findings of the conferees. Resolutions adopted included one requesting a similar conference the next year, and one requesting that the U. S. Commissioner of Education take steps to make a national survey of the present status and future direction of guidance work.

In line with this review of institutional training, the Service has promoted activities of many States in the in-service training of school staffs and supplied a staff leader in 10 or more State meetings. Many opportunities of this sort are being offered for the first time. One new device, successfully developed in Michigan, Pennsylvania, and Missouri, is the cooperative work-training summer course. By this plan, full-time, wage-earning industrial or retailing experience is combined with class work taught by college instructors, management, and labor. Those who finish these courses are no longer without first-hand experience at wage earning in factory or store in jobs comparable to those of the great majority of nonprofessional workers.

The Occupational Information and Guidance Service also has made a survey of the extent of certification requirements by the States for counselors and other guidance workers. During the year, this staff furnished consultant services to 6 States which were revising their present regulations in this respect.

A professional development of a different kind has to do with a growing interest as to the relation of the guidance program to the instructional program and to the administrative and supervisory aspects of the school. Evidence of this nature is noticeable in California, Michigan, Georgia, and North Carolina, among other States. The idea that the guidance program finishes its duty when it has supplied good counseling to individuals enrolled in a school is being questioned. Should a student be led to make up his mind wisely as a result of expert counsel to seek education and training on a certain level and for a certain purpose, and then be faced with school offerings in no way related to his abilities or his probable place in the community? Should a school remain unaffected, if facts revealed in the guidance program show that only 10 percent of its graduates go to college, although 80 percent of its courses are college preparatory? Should an administrator make up his schedule based on the courses tradition demands that he teach, after his guidance department has advised him of the individual differences of many of his pupils which make it clear they cannot or should not learn these courses? Should the guidance program of the school make pupils acutely aware of occupational facts,

and the school continue to train for jobs which do not exist or exist for only a small minority?

Questions such as these are appearing in various places with growing frequency. The professional inference is clear: Counseling the individual is one duty; adapting continuously the offerings of the school through action of the administrator and the teachers to make counseling results effective is a duty equally imperative. Can the guidance program function in such a way that the administrator and his staff may employ it to advantage in making the school fit better both student and community? What effect this question may have upon future preparation of all school personnel is a lively professional problem. It certainly enlarges the scope of investigation of guidance practices and their implications for curriculum development.

The Service as a National Resource in the Guidance Field

Many agencies which have guidance related projects in prospect turn to this Service for assistance. Perhaps the most important assistance given during the year was to the National League of Nursing Education, which, in conjunction with the principal professional nursing organizations and the U. S. Public Health Service, desired to stimulate and improve the guidance programs in schools of nursing which have already organized them, and to establish such programs in all other institutions. The request that a member of the staff of this Service write the bulletin involved, and the cooperation which developed among the many agencies and individuals as the project moved forward, would seem to be evidence of the value of such services.

Joint authorship was also developed with: the Bureau of Labor Statistics, U. S. Department of Labor; the Bureau of Training, War Manpower Commission; the National Vocational Guidance Association; and the Division of Higher Education of this Office.

Vocational Aspects of the Program

The relationship of this Service to the Vocational Division, and the inherent importance of occupational facts in guidance work, have resulted, both in general services to vocational education and in many special contributions.

Within the Office, every other vocational service has received some specific assistance, which included such items as the preparation of a bibliography, the writing of a chapter in a publication, consultation with staff, and participation in six or seven regional conferences. The American Vocational Association has called upon this Service to review manuscripts, to take part in its programs, and to aid in the development of its guidance activities. On the State level, supervisors have been encouraged and assisted in making their programs

function to help both the other State vocational services and local departments.

Perhaps the most notable service to vocational education of the year was the study resulting in Vocational Division Bulletin 232, *Selection of Students for Vocational Training.* With the cooperation of State directors of vocational education, 170 vocational schools in 34 States, Hawaii, Puerto Rico, and the District of Columbia provided material for a thorough study of methods of selection of vocational students, the relation of these methods to guidance practices, and potential improvements in selection based on guidance practices.

Miscellaneous Activities

A staff member spent a week with the Southern States Work Conference, and aided that group in producing a comprehensive statement on guidance. Again, a staff member was chairman of the guidance section of the week's conference called by the National Education Association, which issued an authoritative report on Educational Programs for Veterans. Continuous committee work was done with projects sponsored by the Retraining and Reemployment Administration, the Children's Bureau, and the District of Columbia Committee on Counseling for Veterans and War Workers. Permanent arrangements for close cooperation between the U. S. Employment Service and this Service were set up as the approaching postwar period gave evidence of new problems between schools and placement agencies when young people enter the labor market. Staff members have supplied many articles to magazines such as the *School Executive*, *Management Review*, *American Library Association Booklist*, and *Occupations.* One member supplied a chapter on "Educational and Vocational Information" for the *Annual Review of Educational Research.* Several wrote special articles for a forthcoming *Encyclopedia of Vocational Guidance.* Numerous bibliographies were issued.

Postwar Planning

The committee appointed to study vocational training problems in the postwar years concluded its work during the year and submitted a report which was examined by two large representative groups—a reviewing committee and a consulting committee. All comments, suggestions, and recommendations made by the members of these groups were considered at a 2-day meeting of the consulting committee held in Washington in the spring. As the fiscal year closed, the final report was in preparation for publication and will be off the press later under the title, *Vocational Education in the Years Ahead.*

Table 7.—*Funds available for allotment to States from Smith-Hughes and George-Deen Acts, fiscal year ending June 30, 1945*

Purpose	Smith-Hughes Act	George-Deen Act
TOTAL	[1] $7,285,122.03	[3] $14,483,000.00
Agricultural education	3,058,452.99	4,066,465.00
Trade and industrial education	[2] 3,111,913.15	4,056,857.50
Home economics education		4,051,677.50
Distributive occupations		1,254,000.00
Teacher training	1,114,755.89	1,054,000.00

[1] Includes appropriation for Hawaii and Puerto Rico under separate authorizing Acts. Total appropriation Smith-Hughes Act, $7,167,000; Hawaii, $30,000; Puerto Rico, $105,000.
[2] Allotment for home economics included in trade and industrial allotment, not to exceed 20 percent for home economics.
[3] Allotments to the States are made on the basis of this amount as authorized in the Act. Actual appropriation for fiscal year 1945, $14,200,000.

School Administration

THE EMPHASIS on war-connected activities of the staff in school administration continued throughout the year. Two members of the staff assisted State and local school officials in meeting war-created needs in the fields of pupil transportation and school facilities. In State school organization and administration the emphasis was reflected in the recognition of the need for and the encouragement of the creation of over-all State educational machinery to administer present and future Federal programs affecting education, such as the disposal of surplus war property by the Federal Government to educational institutions and possible Federal subsidies to States for general educational purposes.

State and national legislative activity, particularly heavy during the year, resulted in the passage of many acts affecting education. This activity brought increased calls on the Office for information and advice on pending legislation.

Staff members were assigned to maintain liaison with the Office of Defense Transportation on problems in pupil transportation services arising in connection with the conservation program; the Federal Works Agency on school administration and other problems in school systems in war areas; the War Production Board on the salvage drive in schools and on the effects of wartime restrictions and preference ratings; and the Surplus Property Board on problems of utilization and disposal of surplus property to educational institutions.

As members and chairmen of designated committees, the staff participated in:

1. Developing school furniture types and standards (with educational and manufacturing groups);

2. Formulating proposals for the utilization of surplus war property appropriate for educational use; and
3. Outlining designated problems for study during the current year by the Study Commission on State Educational Problems of the National Council of Chief State School Officers.

Consultative field services were provided upon request in 25 States on school administration problems. In addition, members of the staff attended or directed conferences of State and local school officials on problems in school administration in Washington, D. C., Lafayette, Ind.; Baltimore, Md.; New York, N. Y.; Philadelphia, Pa.; Nashville, Tenn.; and Williamsburg, Va. Regional conferences on school transportation were held in Birmingham, Ala.; Sacramento, Calif.; Denver, Colo.; Atlanta, Ga.; Boston, Mass.; St. Louis, Mo.; and St. Paul, Minn.

The staff contributed articles on school law, school buildings, and pupil transportation to a number of educational journals.

Studies completed during the year were: Federal Government Expenditures for Education, 1943–44 (Leaflet No. 76); School Finance (Good Reference Bibliography No. 75); and The Local Board of Education (Good Reference Bibliography No. 76).

The following studies were in progress: State Plans for Financing Education; Legal Provisions Affecting the International Exchange of Teachers; Summary of Legislation Enacted by the 79th Congress, First Session, Affecting Education; Codification and Improvement of State Laws Relating to Education; Planning the School Plant; and a Study of Pupil Transportation, covering State and local responsibility, legal basis, financing, records and reports, selection and training of school bus drivers, standards, ownership, insurance, bus maintenance, and purchasing procedures for bus equipment and supplies.

Considerable time of specialists was devoted to correspondence and personal interviews with State and local school officials, representatives of Federal agencies, and national associations and organizations on surplus property for educational institutions, school legislation, local school unit organization, pupil transportation, school facilities in war areas, problems of State educational organization, problems of local school board organization and functions, school plant problems, and school finance.

School Transportation in Wartime

The cooperative program between the Office of Education, the Office of Defense Transportation, and State departments of education concerned with conservation of school transportation was terminated at the close of the fiscal year 1945, when funds through the Office of Defense Transportation, for the employment of a specialist in school transportation, were no longer available.

As its part in the program during the 3-year period the Office rendered the following types of service:

1. Through a series of memoranda States were kept informed on the latest developments in connection with the transportation program, including orders and regulations of Federal agencies, shortages in transportation equipment and supplies, and various procedures developed, both by Federal agencies and by other State departments of education.
2. Consultative and advisory services were furnished State departments of education in connection with State transportation surveys, State plans and procedures for conservation of transportation equipment, and the interpretation of policies and regulations of Federal agencies. In this connection three series of regional conferences were called to discuss problems related to the program. An average of 75 persons representing an average of 40 States attended each of these series. In addition, approximately 65 visits were made to State departments of education by the Office specialist to discuss individual State problems.
3. Consultative and advisory services were provided to Federal agencies in connection with the development of policies and regulations that affected pupil transportation and supplied to them such information as was necessary to assist them in their efforts to provide and allot transportation equipment and supplies.

Following are some brief examples of progress in achieving conservation in school transportation: Only those States which were already effectively routing school busses failed to make a marked reduction in mileage, and even these were able to eliminate some mileage. Programs for the maintenance of equipment were so effective that only scattered cases of children being absent from school because of the failure of transportation equipment were reported. States prepared plans for the distribution of available new equipment to localities where it was urgently needed. Several States inaugurated programs for recruiting and training either or both school bus drivers and school bus mechanics. There is little doubt that the cooperative program, the need for which was recognized early in the war, prevented a serious breakdown in school transportation.

General Instructional Services

Among requests received for various kinds of services, a large percentage related to war problems or to proposals for changes in educational programs that were suggested by war conditions. For example, requests for services to improve programs in nutrition education, to improve opportunities for dental services to children, to change the trend in high-school enrollment from a decreasing one to an increasing one, to expand secondary school opportunities so as to serve a broader range of needs, to provide more generally opportunities for children under the age of 6, to provide an adequate supply of textbooks during the shortage of paper to meet the needs of school children, to

enlarge and improve instruction in the natural sciences for their application to present-day situations, to provide suitable school-work programs.

The work of the year, therefore, represents an attempt to maintain a balanced program that included consideration of problems immediately pressing and those that need regular and continuous attention in accordance with the fundamental purpose for which the Office was established.

Improvement of Instruction

Attendance and participation in workshops and conferences held considerable importance during the year. The specialist in elementary education was co-director and responsible for the preparation of a report of a workshop on nutrition education held at the Indiana State Teachers College, Terre Haute, Ind. This report, together with a picture-story summary, was given wide distribution. The specialist also conducted a conference on current problems in elementary education held by this Office in cooperation with the Wisconsin State Department of Education at Madison. The conference was composed of representatives from nine mid-western States. A conference report was published in EDUCATION FOR VICTORY, and was distributed to all State elementary school supervisors. Other conferences to which the elementary school specialists contributed included the National League College (representatives of classroom teachers from major cities) which was held at Pennsylvania State College, the Chicago Reading Conference for which two papers were submitted, the Gatlinburg Conference on Resource-Use Education attended by representatives from 12 southern States, conference on Elementary Education at Ohio University, a workshop on Elementary Education at Emory University, Atlanta, Ga., and a Statewide conference of elementary supervisors at the University of Alabama.

Workshops and institutes are one of the most effective means of in-service as well as pre-service training for the education of exceptional children. The specialist in this phase of education participated in five such institutes held at New Haven State Teachers College, New Haven, Conn.; Indiana State Teachers College, Terre Haute, Ind.; George Peabody College for Teachers, Nashville, Tenn.; Tennesse Agricultural and Industrial State College also in Nashville; and at Memphis State College, Memphis. Three manuscripts and eight articles relating to the education of exceptional children were completed for publication.

The specialist in rural education assisted in planning and organizing the White House Conference on Rural Education and in preparing for publication its findings and recommendations. This repre-

sented 272 pages of printed materials, issued by the National Education Association which sponsored the conference.

War conditions and apparent post-war situations present many problems in the improvement of instruction for Negroes. The specialist in this phase of education conducted a conference called by the Commissioner of Education in Washington on Educational Implications of Army Data and Experiences of Negro Veterans and War Workers. He prepared a report on this conference to serve as a guide for teachers, counselors, and others concerned with educational programs for Negro veterans and war workers. The report is to be published. The specialist also prepared a manuscript which was published this year on Education of Teachers for Improving Majority-Minority Relationships. This specialist also prepared for publication articles on Neglected Areas of Adult Education of Negroes, Teacher-Training Programs, and Office of Education Services for Negroes.

Expansion of School Services

The interruption of the educational program of many youth by war conditions has created a serious problem in the continuation of their education. It is apparent that this group will need some different types of both programs and organization of instruction from that which formerly has existed for pupils in the all-day high school. A study has been undertaken of Expanded School Services for Young People of Secondary-School Age and the Years Immediately Following. In carrying out this purpose a list was developed of apparent problems that schools would need to face in providing these young people with adequate and proper educational opportunities on the secondary school level. The Commissioner called together a small group of persons outstanding in the field of secondary education for the discussion of the problems listed and of ways and means for meeting them. Members from the staff, together with an Office committee for the purpose, developed the list of general problems into detailed specific problems, compiled much background information bearing upon the problems, and pointed out sound principles in education that should receive consideration in planning for such expanded school services. Copies of the material were sent to State departments of education, some teacher-training institutions, and a few persons in the field of secondary school administration. These persons have been asked to review and make suggestions on the mimeographed manuscript that will enable this Office to produce a publication on the subject.

The war has also emphasized the problem of expanding school arrangements to create a broader area of activities to be included for consideration in the development of educational programs. A special phase of such problems is to be found in opportunities provided by

schools for pupils to attend school part time and to work part time during school hours. The specialist in secondary education has collected information on a number of school-work programs and reported them in a series of articles in EDUCATION FOR VICTORY. From this stage the Office has gone forward with a joint study with the Children's Bureau, Department of Labor, of school-work programs as found in a number of cities. Visits have been made to a few cities for this purpose and more are planned for this year. It is the expectation that a joint publication of the two agencies concerned will be issued dealing with such questions as the various types of arrangements that are now in existence for releasing pupils from school to work part time, plans for supervising such programs, the extent of such programs, and essential features for the success of such school-work arrangements.

Wartime concern for the school-care of children below compulsory and permissive school ages has increased the number and variety of requests for information and counseling services, especially with respect to related State and Federal legislation and procedures for initiating, organizing, equipping, and safeguarding the standards for nursery schools and kindergartens. The specialist in nursery-kindergarten-primary education has rendered services and published materials upon the expansion of school facilities for younger children. Theses materials related to school organization, physical plants, instructional programs, innovations and developments in curriculum materials, and in-service teacher education. There is in preparation a study of the status of schools for children under 6 years of age.

Pupil Personnel Services

During the year a 200-page bulletin on School Census, Compulsory Education, Child Labor was published. This study gives in considerable detail State regulations relative to taking the school census, compilation of reports on the census, and the use made of the census. It provides a wealth of information relative to the forms used and the items included for the enumeration of children of school age in the various States. It also deals with legal and other State regulations relating to the compulsory attendance of pupils. It provides information on compulsory school age, the records that are kept on individual pupils, ways of securing attendance, the appointment of attendance officers, and the enforcement of compulsory school regulations. It is a handbook for those who are interested in the enumeration of school children, their school attendance, and prohibitions on their employment.

The specialist in tests and measurements prepared a report of a national committee, appoined by this Office, on cumulative records. The report was issued as a bulletin of this Office. The study presents on a national basis information on the extent of the use of cumulative

records and includes consideration of the types of records used and the use that can be made by schools of information on such records. Through an agreement with the War Department, the specialist in tests and measurements made arrangements for the adoption, duplication, and administration of 13 aptitude tests which were developed by the Army. As a result these tests were given to approximately 500 students in 6 different school systems of the country. The results of this experiment are now being compiled. From time to time the division has issued statements on the number of youth of school age not attending school. The specialist in rural education assisted in the preparation of material for publication on comparable statistics of urban and rural schools.

Cooperation With Other Agencies

During the year members of the staff have cooperated with numerous agencies for the furtherance of educational projects. The work of the specialist in nursery-kindergarten-primary education included cooperation with representatives of the following war agencies: United Nations Relief and Rehabilitation Association, Office of Civilian Defense, Office of War Information, and with the Federal Housing Administration; with representatives of the British and Canadian Information Services, and of several of the legations to whom materials were sent for their nationals. Services include assembling of materials related to principles of education, housing, equipment and program of schools, teacher education, community-school cooperation; assistance in planning school visiting itinera; assembling an exhibit of teaching materials for Mexico City, and the placing of visiting students from Australia and other American Republics. This specialist participated in the Duval County (Fla.) Education Conference and rendered consultative services to the members of the Association for Childhood Education of that county relative to the organization of a children's museum, and assisted elementary principals in planning for the organization of the primary-unit plan to eliminate pupil failure. The specialist prepared a report to the National Association for Childhood Education Committee on Terminology, concerned with the beginning grades of the public schools.

The specialist in Negro education participated in or served as consultant for the following: White House Conference on Rural Education; Commission on Higher Education of the Association of Colleges and Secondary Schools for Negroes; National Education Association Work-Conference on Educational Programs for Veterans; Children's Bureau Conference on Our Children Now and in the Post-War World; Hampton Institute Curriculum Organization.

The specialist in rural education planned and organized details of a conference called by the Commissioner to bring about greater unity

of understanding among various organizations sponsoring Federal legislation relating to education; served as a member of Cooperating Committee on School Lunches, and as a member of the Office Nutrition Education Committee.

The specialist in parent education rendered services to several national organizations which are concerned with more adequate provisions than now exist for young children and their families. Assistance was given in planning programs, in conducting joint projects, in committee work, and in providing materials and information on State and local programs for young children. Included among organizations to which services were rendered are: Association for Childhood Education, National Association for Nursery Education, Elementary School Principals Association of the National Education Association, American Association of University Women, National Congress of Parents and Teachers, Child Welfare League of America, Federation of Women's Clubs.

The specialist in secondary education continued his cooperation with the American Dental Association and the U. S. Public Health Service in bringing about improvement of dental health among high-school pupils. During the year a request was sent to chief State school officers for the names of schools and school systems that are outstanding in their dental programs. The canvass of these schools has resulted in the assembling of reports from 32 schools and school systems. Descriptive statements regarding them have been prepared and will be published in forthcoming issues of SCHOOL LIFE. In cooperation with OWI a description of typical high-school conditions was planned for circulation in foreign countries. Assistance was given during the year to the National Committee on Coordination in Secondary Education and the Cooperative Study of Secondary School Standards. As in earlier years the specialist in secondary education served as secretary of these two organizations.

The specialist in elementary education served on a committee to produce a chapter for the Yearbook of the Department of Elementary School Principals, the Inter-Agency Committee on School Lunches, and the Survey Committee for the Georgia School for the Deaf.

The Office of Education and the Children's Bureau jointly sponsored a Go-to-School Drive to secure the attendance at school either on a full- or part-time basis of youth of school age. The Commissioner called upon State and local superintendents of schools to stimulate a "Go-To-School" movement. Printed and other forms of appropriate materials for this purpose were issued.

The specialist in the education of exceptional children, at the request of the member for China of the UNRRA Council, drew up recommendations for the organization of centers in China for various types of exceptional children. This specialist also assisted the War

Relocation Authority in its consideration of plans for meeting the needs of handicapped pupils in its schools. At the request of the superintendent the Office specialist spent several days at the WRA center located at Rohwer (Ark.) and made recommendations to both the local superintendent and to the director of education of the WRA regarding modifications in their educational programs for this purpose. This specialist also directed an educational survey, in cooperation with certain State agencies, of the Georgia School for the Deaf, and a report is in preparation. At the request of the Public Health Service the specialist assisted in an educational survey of the Georgia Training School for Mental Defectives. Recommendations were made to the Georgia State Department of Public Welfare. The specialist rendered services as: National chairman of the Committee on the Exceptional Child of the National Congress of Parents and Teachers; member of the National Society for Crippled Children; International Council for Exceptional Children; American Association on Mental Deficiency; and the American Society for the Hard of Hearing.

The plight of school children in the occupied countries of Europe attracted widespread interest in the United States. In order to contribute toward the alleviation of this situation, the American Junior Red Cross decided to supply a limited amount of materials that would be of interest and use, and through the proper European agencies, distribute them when possible to these children. For this purpose the Junior Red Cross sought the cooperation of this Office. A memorandum of understanding was drawn in accordance with which the Commissioner issued an appeal to all State superintendents of schools to support the undertaking and calling their attention to the fact that the Junior Red Cross was in a unique position to carry on this type of work. Details of this plan were given wide publicity through EDUCATION FOR VICTORY.

Availability of textbooks to meet the need of school children required an investigation in order to provide information to guide the War Production Board in its allotments of paper to textbook publishers. At the request of that board an inquiry on this question was sent to all State departments of education and to a number of local school superintendents in different parts of the Nation. The returns were compiled and furnished the War Production Board and copies sent to the American Textbook Publishers Institute. Representatives of this Office on request of the War Production Board attended hearings on appeals of textbook publishers for additional allotments of paper.

At the request of the Special Devices Division of the Navy the Office of Education cooperated in a plan whereby the Navy, with the asistance of this Office, would prepare a bulletin on Terrain Model Building for use in schools. The Office arranged for the proposed

bulletin in manuscript form to be tried out experimentally in the Calvin Coolidge High School of Washington, D. C. This has been done and the manuscript is being issued as a joint publication of the Navy and the Office of Education.

A member of the staff served as chairman of the Committee on Industrial Arts to prepare a chapter on objectives and measurement techniques in that area of education for the Yearbook of the National Society for the Study of Education. This specialist also served as a member of: The Planning Committee, Division of Administration and Supervision, National Vocational Guidance Association; the Industrial Arts Policy and Planning Committee of the American Vocational Association, Inc.; the Committee on Standards of Attainment in Industrial Arts Teaching, also of the A. V. A.; Advisory Committee on School-Work Programs of the National Child Labor Committee.

Physical Education and Health Activities

The staff of the Division of Physical Education and Health Activities concentrated its efforts upon problems in the areas of health, physical education, social hygiene, and physical fitness. One specialist was assigned by the Committee on Physical Fitness of the Federal Security Agency, and one was assigned by the U. S. Public Health Service to work in this Division on programs for schools and colleges. These specialists supplemented the services of the regular health consultant of the Office. Only one member of this personnel was employed throughout the entire year. Three persons, serving a total of 25 months of duty, constituted the staff of the Division.

The members of the Division staff provided leadership and services for a total of 8 workshops and more than 35 conferences in a total of 34 States and the Dominion of Canada, and served on many national committees, aiding in the preparation of reports and recommendations for social hygiene, health, and physical education programs.

The Office of Education called a meeting of national leaders to study the problems of social hygiene education. This group prepared a conference report on present programs, needs, and recommendations for the future. In addition to the social hygiene conference report, the following documents were prepared by members of the staff: *More Firepower for Health Education*, Bulletin 1945, No. 2; "A Statement of the Health Needs for School-Age Children and Recommendations for Implementation," a subcommittee report of a governmental inter-agency committee on school health programs; bibliographies for teachers, pupils, and lay groups in social hygiene education; as well as articles published in professional journals.

A functional, cooperative arrangement to secure coordination of the health education activities carried on by Federal agencies was developed during the year. A subcommittee composed of representatives of the governmental agencies concerned prepared a report recommending that an official coordinating committee representative of the Children's Bureau of the U. S. Department of Labor, the U. S. Public Health Service, and the U. S. Office of Education be appointed. The recommendation was presented to the Chief of the Children's Bureau, the Surgeon General, and the Commissioner of Education; and the official coordinating committee has been appointed and is now functioning.

A representative of the staff served as a member of a team of nationally known leaders in public health and education to meet with State health and education leaders in a series of meetings—nine in six States—sponsored jointly by the American Public Health Association and State health education and welfare groups. Although these meetings were usually sponsored by members of the public health profession, the program emphasized health education in schools.

The Division has worked closely with the Children's Bureau, the U. S. Public Health Service, the War Production Board Committee on Physical Fitness, the Red Cross, the American Association for Health, Physical Education, and Recreation—a department of the National Education Association, and the American Public Health Association as well as with a large number of professional and lay organizations.

Statistics

The Statistical Division, with its small staff, cut its program to the basic periodic chapters of the Biennial Survey of Education, annual circulars, and certain war connected studies. It cooperated with the Education Committee of the House of Representatives in the study of the Effect of Certain War Activities Upon Colleges and Universities (79th Congress, 1st Session, House Report No. 214), and it again made a survey in October of the effects of the war upon public schools, which was published in EDUCATION FOR VICTORY.

Work was finished on the Biennial Survey of Education for 1940–42 and the Statistical Summary of Education completed for publication. The chapter on Statistics of City School Systems for 1939–40, previously held from printing due to insufficient printing funds, was combined with the similar chapter for 1941–42 within the pages usually taken for one chapter. The 1940–41 chapter on Nonpublic Elementary and Secondary Schools, also previously held for the same reason, was

sent to the printer. Because of war conditions none of the previously delayed studies was undertaken during this period. Materials for the State, city, and higher education chapters of the Biennial Survey of Education, 1942–44 were sent out, field work follow-up done in 38 States, and editing started on the report forms.

The annual studies of Expenditures Per Pupil in City Schools and Statistics of Land-Grant Colleges were processed in circular form. A much delayed but greatly needed study of College Salaries for 1941–42 was finished and issued in limited quantity—300 copies instead of the usual 2,500—due to wartime restrictions on the use of paper. The quadrennial summary of Statistics of Schools in Urban and Rural Areas for 1938–40 and 1940–42 was processed as a circular. The list of over 22,000 accredited secondary schools was revised and brought up to date.

In its function as a clearinghouse of information on basic educational statistics in all fields, especially on a national level, the Division continued to supply information by telephone, letters, and personal conference to other Government agencies, the educational profession, business, and the general public.

Work was begun in cooperation with the Bureau of the Budget, Bureau of Labor Statistics, and the Governments Division of the Bureau of the Census in adapting the scientific sample used for the Quarterly Survey of Public Employment to obtain data on school employment previously omitted from the Survey.

The Statistical Division was also included with similar divisions from a number of other interested Government offices in an interdepartmental committee studying the work of the Government Division of the Bureau of the Census under the leadership of the Bureau of the Budget.

The Library

Activities of the U. S. Office of Education library were directed toward serving its usual clientele of the Office specialists, research workers and other Government agencies. While major emphasis has been placed on acquiring materials on postwar planning, education of returning veterans, war training programs, and other war-related subjects, maintenance of an adequate collection in the usual fields of interest also received attention. Many war agencies in the Government made continuous use of the Library's resources and services. At the beginning of the war they recognized the significance of the collections of psychological and educational periodicals, college catalogs, courses of study, textbooks and documents, in expediting their research. Library resources in a modern war are truly military re-

sources and by making these publications readily available to the Army, Navy, and other war agencies, the Library has made a definite contribution to the war effort.

Acquisitions and Cataloging

The Library during the year received by purchase, gift, or exchange, some 10,000 publications. These included most of the current materials on general education, vocational education, and related subjects, as well as selected older items needed to complete the historical resources of the Library. Publishers gave many textbooks, and other professional, technical, and scientific works. Fewer foreign publications were received since, due to the war, many serial and monographic publications of foreign governments have been suspended or appear irregularly. Cataloging procedures were speeded up to make books available quickly; and subject headings and classification were kept up to date.

Three hundred ninety-five volumes of Office publications and educational periodicals were sent to the bindery at the close of the year. Because of wartime restrictions binding was suspended in 1943 and 1944 with the result that a large accumulation of publications awaits binding as soon as sufficient funds become available.

Reference and Loan Service

Work of the reference and loan service did not differ significantly from that of previous years. In March 1945, however, two new projects were developed that greatly stimulated circulation of books to the Office staff. They were the *New Book List* and the weekly book counter held in Temporary Building M. The *New Book List*, distributed twice a month, brings to the specialists' attention additions to the Library's collection. Located as it is in a building considerable distance from the Office headquarters in a temporary building, the Library has not been conveniently accessible and much time is consumed in transportation. The book counter represents another step towards helping the regular Office staff conserve time. The Library staff selects books in various fields of interest and one day each week it brings the book counter to the Office headquarters. It served from 75 to 100 staff members each book-counter day.

Bibliographical Services

The following annotated bibliographies were issued: *Planning for Post-War Education in the United States*, *Compulsory Military Training*, and quarterly contributions to *Post-War Problems: A Current List of U. S. Government Publications.* An annotated list of new books and pamphlets was compiled semimonthly for publication in Education for Victory and Higher Education. Bibliographical assistance was given through letters, telephone calls, and conferences.

Data were collected for the *Bibliography of Research Studies in Education.* Although publication was suspended for the duration, the material may be consulted by research workers. The Library received 365 theses from 72 institutions, making 6,474 theses available for loan. Curriculum materials were increased by the addition of 675 recent courses of study, which have been classified and indexed. Information about theses and courses of study was made available to research workers by compilation of special bibliographies and by listings in EDUCATION FOR VICTORY.

Administration

A more functional and effective grouping of related activities was achieved by transferring Acquisitions to the Catalog Division and placing all technical processing under the supervision of the head cataloger. For the same reason, maintenance of the Serial Record (including periodicals, Government documents and college catalogs) was included in the duties of the Acquisitions Section. The Public Library specialist acted as librarian for the first 6-month period; then, since a librarian still had not been appointed, the Assistant Commissioner assumed the executive duties of that position.

Service, 1944–45

Accessions (not including duplicates)	10,000
Volumes cataloged	6,415
Cards filed in card catalog	34,219
Volumes bound	395
Books loaned	9,962
Theses loaned	469
Interlibrary loans	2,710
Reading-room attendance	8,220
Books used in the reading room	26,149
Telephone reference calls	7,118

Service To Libraries

In considering the activities of the Library Service Division, it is well to keep in mind that (1) the unit is not a library, but an agency for assisting in the extension and improvement of library facilities throughout the Nation; and (2) it was established to serve all types of libraries—public, school, college, and special. Modern libraries, whether parts of schools or colleges or independent institutions such as most of the public library systems, are essential agencies in the educational program of the Nation, and it is the purpose of the Library Service Division to aid them at the Federal level in their performance of this function.

Consultative Services

Advisory service either in the form of consultations in the Office or participation in in-service training institutes in the field, constitutes an important method of assistance. As a part of this program, the specialist in school libraries assisted in the plans for a library in a school for returned veterans built by an industrial plant. The school is being studied by representatives of foreign governments for possible duplication in their own countries. Assistance was also given in planning the equipment and book stock for a modern vocational school for girls which will be used to demonstrate the importance of effective library service.

Advisory services on postwar library building plans were extended by the public library specialist as a consultant and correspondent of architects and trustees representing community libraries in several States, and of college authorities planning to expand campus library services.

The specialist in school libraries, in cooperation with the specialist in public libraries in New York State, conducted a 5-day library institute at Emporia, Kans., for the Kansas Library Association and the Kansas State Teachers College at Emporia. She also conducted regional meetings of Vermont librarians at St. Albans and at St. Johnsburg for the Vermont Free Public Library Commission.

State library leaders recognize the importance of in-service institutes for librarians and are anxious to obtain assistance from the Division in organizing and conducting this type of training. The present staff cannot care for the requests which are coming to the Division for this Service.

Assistance to Government Agencies

Typical of assistance to other Government agencies was that extended to the Department of State in its Nation-wide publicity on the United Nations Conference in San Francisco and to the War Food Administration in its information campaigns. In both instances public and school libraries served as major channels for the distribution of Government information, and the cooperation of State library agencies was secured to effect as complete local coverage as possible.

A member of the Division served on the Library Advisory Council of Joint Army and Navy Committee on Recreation and Welfare, appointed by the Secretary of War and the Secretary of the Navy. This council acts as an advisory group to the library services of the armed forces, when requested, on problems involving the development of library facilities and on plans for operation in the peacetime establishment.

Statistics on Libraries

The study, *Statistics of Public-School Libraries, 1941–42* was completed and sent to the printer, and the second Nation-wide collection of public library statistics in the new series developed by the Library Service Division was begun.

During the year, several important uses were reported of statistics compiled by the Library Service Division. These data furnished the basis for much of an extensive report on postwar planning for college and university libraries made by a national committee. They were also the foundation of a study of junior college libraries which appeared in the *Junior College Journal* for December 1944. The public-school library data have been used in several States in justification for the establishment of the position of State Supervisor of School Libraries.

Information to Libraries

The regular bi-weekly department of EDUCATION FOR VICTORY entitled "Libraries and the War," continued to serve as a clearinghouse of wartime news and activities of individual libraries and library organizations, and represented a responsibility of the public library specialist, assisted by other specialists in the Division. Throughout the war the column was based on data from official sources and material was chosen either for its significance as a pattern of wartime service for libraries in general, or for its importance as library news useful to teachers and librarians.

Latin-American Exhibit Project

The Latin-American exhibit project begun in 1941 by the Library Service Division with a grant from the Office of Inter-American Affairs concluded another year's service. Exhibits were used by approximately 2,000,000 students in more than 10,000 educational institutions during the period of the operation of the project, which is now being liquidated because further funds are not available.

Comments from the field indicate that the purpose of the exhibits, to promote a better understanding of the Americas through the effective presentation of teaching materials, has been realized. To quote some typical statements from the users of these exhibitions:

> The exhibits have been a great help to us. You will be glad to know that the interest and desire for further study of the countries south of us has resulted in a change of curriculum in the social studies set up for the school year 1945–46. For the first time since my teaching career our schools will study the above-mentioned countries for a semester and the European countries for a semester. Previous to this, Europe and Asia were studied during the year. (*From a teacher in an elementary public school in an Eastern State.*)

> I feel that the study of other countries in the schools where teachers have seen this exhibit will be enriched through securing a greater variety of materials. This exhibit has not only been a contribution in learning more about the manners and customs and people in the Latin-American countries but suggests enrichment for study of other countries. (*From a workshop for teacher-training in the South.*)

Surplus Property for Libraries

As the end of the war approached, the Library Service Division began to give increasing attention to the problem of surplus property for libraries. In the fall of 1944, the American Library Association was asked to send representatives to consider the general problem, and to assist the Commissioner in making recommendations to the Surplus Property Board regarding policies and procedures for the disposal of surplus property to libraries as educational institutions. Since that time the Division has represented library interests at numerous conferences to formulate policies and procedures.

Comparative Education

Providing Current Information

Through the section on "News from Abroad" in EDUCATION FOR VICTORY, the Comparative Education Division has continued its effort to give a current picture of significant developments in the field of international education. Among the articles prepared were reports on literacy and illiteracy in the various countries of the world, student and teacher exchanges between the United States and Great Britain, the International Bureau of Education and postwar reconstruction, and reviews of recent publications on education in other countries.

Preparing Basic Studies

The preparation of basic studies on education in Central and South American countries, begun in the fall of 1943 under the sponsorship of the Interdepartmental Committee on Cultural and Scientific Cooperation of the Department of State, has continued throughout the year. Four Office of Education specialists traveled in several Central and South American countries to gather data first-hand on the educational systems of these countries. During the year field work was completed in Paraguay, Colombia, Peru, Chile, Ecuador, Guatemala, and Brazil. The reports on education in each of these countries except Guatemala, and on education in the Dominican Republic, Uruguay, and Costa Rica, for which field work was completed last year, are in various stages of preparation ranging from that on *Education in Chile*, which is in the process of being printed, to that on *Education in Ecuador*, for which the first draft is being written.

Arranging Internships for Foreign Students

In collaboration with the Division of Cultural Cooperation of the Department of State two Chinese graduate students, one from the University of Pennsylvania, the other from Columbia University, served as internes in the Office of Education between 3 and 4 months each. Arrangements were made through the Office for one semester of internship in the public schools of Washington, D. C., for a student from the Commonwealth of the Philippines.

Closely connected with the internship program was a cooperative arrangement with the American Association of Teachers Colleges whereby a Filipino educator was sent to visit 15 teacher-training institutions in the United States. He spent approximately one week at each school interpreting Filipino life and culture to its students and faculty, and in turn learning from them about student life and teacher education in the United States.

As in the previous year, the Division assisted the Department of State in finding a number of United States teachers for Near Eastern countries, including Egypt, Turkey, and Lebanon.

Assisting in the Development of International Understanding

A series of four lectures on the peoples of Asia was sponsored by the Office in cooperation with Miner Teachers College, Wilson Teachers College, the Education Association of the District of Columbia, and the Columbian Educational Association, for the benefit of the public-school teachers of the District. The series included a lecture each on the people of Russia, the people of the Netherlands East Indies, the people of India, and the people of Korea.

Eight radio broadcasts, entitled *Introducing the Peoples of the Far East*, based on this lecture series and on that of last year, were made during the period from December 18, 1944 to April 23, 1945 over WMAL in cooperation with the Radio Committee of the Public Schools, Washington, D. C. Further, four 15-minute short wave broadcasts on Far Eastern Studies in the United States were made for the Office of War Information.

On request, consultative assistance was given to the Education Committee of the Commonwealth of the Philippines, Washington, D. C., in its planning for postwar educational reconstruction in the Philippines.

Preparing Instructional Materials

Out of tentative listings of materials helpful to teachers prepared in connection with the lectures on the peoples of Asia, lists of curriculum materials were developed on the Union of Soviet Socialist Republics, the Netherlands East Indies, India, and Korea. They include

annotated references to books, pamphlets, audio-visual material, maps, and units of study.

In connection with the 8 radio broadcasts on *Introducing the Peoples of the Far East* recordings for rebroadcasting were made which are available—50 for each of the 8 broadcasts—through the Radio and Script Division of the U. S. Office of Education.

Credential Evaluation for Foreign Students

Requests for the evaluation of foreign student credentials came from 178 colleges and universities and other institutions. In all, 909 cases were received representing 76 different countries, an increase of 96 cases over the previous year. In terms of world areas, 248 cases came from 26 European countries, 213 from the British Empire, 362 from Latin America, 51 from the Near East, and 35 from the Far East. This represents an increase of 72 cases from the British Empire, of 137 cases from Latin America, and of 31 cases from the Near East. With reference to European countries the number of cases declined by 81, while those from the Far East declined by 63. More than one-half of the cases came from 11 countries: Canada, Germany, Mexico, British West Indies, Panama, Colombia, India, China, Cuba, Costa Rica, and Peru. One-fifth came from 10 countries: Austria, Brazil, England, Iceland, Iran, Poland, Turkey, Venezuela, Chile, and Honduras. The remaining 236 cases came from 55 different countries.

Inter-American Educational Relations

The objective toward which this Division has continued to work during the year is the development of inter-American understanding and cooperation in the field of education. The programs carried on by the Division are cooperative, both with Governments, institutions, and individuals of the other American Republics, with other Government agencies, and with educational institutions, educators, and students in the United States. Most of the funds which enable the Division to carry on the programs outlined below are received by transfer from the Department of State in connection with the activities of the Interdepartmental Committee on Cultural and Scientific Cooperation under the budget entitled "Cooperation with the American Republics." In addition, the Division has continued to receive funds for certain programs from the Office of the Coordinator of Inter-American Affairs.

The following programs were carried on in the Division during the fiscal year 1945.

Exchange of Educational Personnel

This program includes the exchanges of fellows and professors under the Buenos Aires Convention, teacher trainees from the other American Republics, language teachers, and information on teaching positions in the other American Republics.

A total of 40 graduate students from 14 of the other American Republics were in the United States under the provision of the Buenos Aires Convention for the Promotion of Inter-American Cultural Relations. These students were enrolled in 23 universities and pursued programs of study in 22 different fields of specialization. Activities included assisting in the selection of candidates from the other American Republics, recommending appropriate institutions for study, providing orientation and assistance in making personal readjustments to a foreign country, assisting in registration and housing, providing continuous friendly counsel and evaluation of progress, and making arrangements for paying monthly allowance to the teacher trainees.

A program was inaugurated in August 1944, in cooperation with the Interdepartmental Committee on Cultural and Scientific Cooperation for the education in the United States of teachers from the other American Republics. Seven teachers from five of the other American Republics have come to this country during the fiscal year to pursue study in a particular field of education at an appropriate institution of higher education, to observe in our schools, and to confer with appropriate specialists and authorities in the field of specialization.

The Division again carried on the selection and notification of 112 teachers of Spanish from our schools who attended the Spanish Language Institute in Mexico City, D. F. Teachers of English from 6 of the other American Republics were brought to this country. Each became an active participant in the Spanish or Portuguese language teaching activities of a United States school or college, served as interpreter of the culture of his country before community groups, visited a number of schools en route, and attended a special course in the teaching of English at an outstanding institution of higher education.

The Division has maintained a file of persons interested in securing teaching positions in the other American Republics for the use of agencies of the Government and others interested in securing information of this type. Panels of applicants for positions in the other American Republics have been selected for the Inter-American School Service Bureau of the American Council on Education, the Department of State, and others. Assistance was also given the Department

of State in securing professors to go to universities in the other American Republics.

The Language Program

This program has been directed toward the fostering and improving of the teaching of English, Spanish, Portuguese, and French as foreign languages calling attention to the values of language study in developing international understanding and interpreting for visitors to the Office from the other American Republics. A large collection of textbooks and other teaching aids in English, Spanish, and Portuguese has been assembled for use of the Office of Education staff, visiting teachers, and personnel of other Government agencies.

Service to teachers of English as a foreign, or second, language has been continued by giving assistance to a large number of visitors from the other American Republics interested in this problem, by visiting institutions of higher education in this country, and by preparing and distributing articles and bibliographies. A library of several hundred volumes has been established as a source of information and materials related to the teaching of English as a second language. A collection of texts and other teaching aids has been assembled to be sent to United States cultural institutes in the other American Republics where English is being taught to Spanish, French, or Portuguese-speaking people.

Services to Spanish teachers have included answering requests for information and material on a wide variety of subjects pertaining to the teaching of Spanish at all grade levels from approximately 2,600 teachers of Spanish representing every State and Puerto Rico and from many educators in the other American Republics. Four packets of loan materials were organized—Spanish in the Elementary School, Spanish for Beginners in High School, Intermediate Spanish, and the Education of Spanish-speaking Children—and have been circulated on a loan basis to a large number of institutions in which Spanish is taught. Cooperative planning of teacher-education programs has been carried out with teachers of Spanish in city school systems, concerning the use of Spanish-speaking intern teachers, and with officials of the National University of Mexico and the Mexican Ministry of Public Education, concerning plans for the second Spanish Language Institute. Through the Division, 112 teachers of Spanish from 35 States and the District of Columbia were selected and registered for the Spanish Language Institute held June 25 to August 15, 1945 in Mexico, D. F. Consultant service on methods and materials for language study were provided to a large number of teacher-education institutions throughout the country; to teachers, school administrators, and visitors from the other American Republics who called at the Office; and to agencies of the Federal and State Government concerning programs

of language instruction. Speakers were provided for conferences on the teaching of Spanish and Portuguese held in conjunction with several State teachers association meetings and regional associations. Regular contributions were made to *Hispania*, the journal of the American Association of Teachers of Spanish and Portuguese; a chapter was written for the *Handbook on the Teaching of Spanish and Portuguese;* and an article prepared for the report of the National Education Association on "The Teaching of Spanish and Portuguese," and translations made of manuscripts proposed for publication by this Office.

In response to individual requests, the Division has provided materials to aid in the teaching of Portuguese and French. Bibliographies have been prepared for teachers of Portuguese in school in the United States, and a loan packet on Brazil prepared for circulation to teachers. Correspondence between Portuguese and French students in the United States and those in other American Republics has been encouraged and facilitated.

Preparation and Exchange of Information on Education

This program may be considered in two parts: Activities related to the interpretation of education in the other American Republics to the United States, and the interpretation of education in the United States to the other American Republics.

Scores of requests from other Government agencies, from educational institutions, and from individuals for specific information concerning education in the other American Republics have been answered. Published materials received from Government agencies and educational institutions abroad concerning education in the other American Republics were distributed, loaned, or made available to educators in this country. In cooperation with the Central Translating Division of the Department of State, the Division has continued to give assistance in the selection and revision of official publications on education in the United States, and a forthcoming publication of the Office, entitled, *Homemaking Education in the Secondary Schools of the United States*, is being prepared for translation into Spanish and Portuguese.

Several hundred requests concerning specific phases of education in the United States have been received directly from inquirers in other American Republics, or through the Department of State, Government agencies, and individuals throughout the country. Appropriate publications, materials and information have been transmitted to each.

Preparation, Exchange and Distribution of Teaching Materials

The Division has continued to operate the loan packet service to educational institutions in the United States, serving several hundred thousand institutions. During the fiscal year the loan packets have

been reorganized, brought up to date, and obsolete items replaced. The number of inter-American subjects for which packets are available has been increased from 15 to 18, and bibliographical lists of the contents of each packet were prepared for distribution to a wider audience than that receiving the packets. In addition, several thousand packets of teaching materials on inter-American subjects were individually selected and sent in response to requests from schools in this country. Over and above these packets of teaching materials, numbers 4 and 5 of the *Pan American Club News*, Pamphlet No. 97, *Inter-American Cooperation in the Schools: Student Clubs*, published by the Office during the year, and a considerable amount of other teaching materials have been sent to more than 3,000 Pan American Clubs in the United States, and to more than 300 similar groups in schools of the other American Republics.

The Division facilitated the exchange of student correspondence, scrapbooks, art work, exhibits and other teaching materials between schools in the United States and those in other American Republics. Several hundred items, including books, photographs, art work, exhibits, and souvenirs which were made available for distribution by the Missouri Federation of Women's Clubs, the Library of Congress, and other organizations, have been sent to educational institutions in the other American Republics.

Consultant service and teaching materials were provided to 10 teacher-education demonstration centers, and teaching materials developed in the centers were made available for a wider audience. A distinctive feature of this phase of the program has been the organization of a team of teachers at each Center which went to a number of schools in the area for the purpose of stimulating inter-American educational activities. In addition, 3 teacher-education institutions in the Southwest were assisted in developing intensive programs for improving the education of Spanish-speaking children in the schools of the area.

Speakers and consultants were provided for 50 teacher-education workshops on the inter-American subjects, and large packages of materials and complete sets of the loan packets were sent to 63 such workshops. In addition, speakers and consultants were provided for institutes, conferences, teachers' and faculty meetings throughout the United States which were devoted to inter-American education. *The Inter-American Workshop, Some Suggestions for Directors and Staff Members*, a 17-page multilithed publication, was prepared in the Division, with assistance from the Division of Education and Teacher Aids of the Office of Inter-American Affairs, and was distributed widely both in the United States and in other American Republics to those interested in teacher education for inter-American understanding.

Special Programs and Projects

Schools Services in War Areas

Federal funds for schools in war areas.—School building facilities and maintenance and operation of regular school services and of extended school services for children of working mothers were provided during the year 1944–45 to school administrative units in war areas through funds authorized by the Lanham Act and its amendments (PL 137 and PL 150).

The U. S. Office of Education, with funds made available by the Federal Works Agency, has had a staff of six regional consultants and one specialist in the Washington office to provide advisory services to State departments of Education on school service projects and to review and make recommendations on all school applications processed under Public Law 137. A staff member has been designated by the chief State school officer to carry responsibility for the extended school service program in 23 States.

School service projects.—Approximately 450 local school districts in war areas filed applications for Federal assistance under the provisions of the Act for maintenance and operation of regular school services.

Increasing need for the employment of women in industry and activities connected with the war effort resulted in about 650 local school districts in war areas requesting Federal assistance under the provisions of the Act for the maintenance and operation of nursery schools for preschool children and of before-and-after-school, holiday, and vacation programs for school-age children of working mothers.

Informational service and promotion of extended school service.—Resources of the Office have been available to assist State departments and local schools in promoting and building extended school service into the framework of the school program. The staff has collected and assembled information to answer requests, prepared articles, reviewed and distributed materials, given field service, and conferred with local and State officials in Washington and in the field.

A cooperative project with several local programs was the reporting of interesting program activities and features through photographs. This collection has been utilized in a pictorial report, *Open Doors for Young Children*, to suggest ways of strengthening programs in school-age centers. To meet the need for visual material a film was made of a *School-Age Program* in operation, as an aid in interpreting these services to parents, school personnel, and community leaders.

Early in the year a committee of representatives of State departments, local school authorities, and several national organizations

met to consider the adjustments of the wartime services for children which schools would be called on to make when the Nation began to shift to peacetime conditions. A statement was prepared by the conference group on "Services for Children in the Reconversion and Post-War Years" and published in EDUCATION FOR VICTORY.

School Lunch

Efforts were made to achieve the following objectives: (1) secure the writing and approval of a law providing sound and permanent Federal aid to school lunches; (2) prepare statistics and other materials indicating not only the need for such legislation but the various provisions written into the proposed bills; and (3) cooperate with other Federal agencies and with organizations interested in sound school lunch legislation, as well as with the general public.

Supplementary to these activities, this Office also provided the following services: (1) prepared data on nutrition education through school lunches for the use of a committee on this problem appointed jointly by the labor unions and certain Government departments; (2) prepared statistics to show school-lunch developments in school districts of various types; (3) prepared estimates to be used by the Surplus Property Board in determining the need of the schools for school-lunch equipment; (4) prepared a brief history of school-lunch development in the United States; and (5) continued to cooperate with other departments of the Government in improving the school-lunch program through the Coordinating Committee on School Lunches appointed by the Commissioner several years ago.

Public Relations Services

In response to requests for guidance and information concerned with national, State, and local needs and progress in education, especially from women's clubs, civic clubs, and similar organizations and agencies, a series of study guides and discussion outlines, packets containing free materials, and especially requested materials on selected topics, were prepared and distributed during the year. The type of assistance varied according to the requests and needs of the agencies serviced. For example, for the National Committee on Recreation of the General Federation of Women's Clubs, a program for State and local clubs was formulated consisting of outlines for study groups, free materials, bibliographies, etc. Among other agencies served were the National Grange, which requested educational programs and legislative material; The Associated Women of the American Farm Bureau Federation, interested in educational legislation; The Junior Leagues of America, material for study groups and for its annual publication; the Women's Joint Legislative Committee, bulletins and informational packets.

Similar relationships, including individual and group conferences, correspondence. and bibliographical services were maintained with the National Conference of Christians and Jews, the Congress of Industrial Organizations, the National Congress of Parents and Teachers.

Program Planning in Education

The Office has endeavored to keep an up-to-date file of current information about long-range planning in education and to furnish advisory service to agencies, both educational and public service, interested in long-range planning. A bibliography on postwar planning was issued and the results of an investigation of educational planning activities for the year 1944 were compiled and published in EDUCATION FOR VICTORY. Three leaflets in the series *Planning Schools for Tomorrow* came from the press.

Services to Special Professional Groups and on Special Problems

Services designed to assist all children to participate fully in the offerings of school programs were continued by the Consultant on Educational Services. Included in these services were preparation of a series of articles for EDUCATION FOR VICTORY; visits to school systems maintaining visiting teacher services; conferences with officials concerned with such services; preparation of information and suggestions in response to requests for assistance, such as on the organization of State and city programs. The Office continued to cooperate with the National Association of School Social Workers in the effort to improve and extend visiting teacher services to more systems and children. At the call of the Commissioner of Education, a conference of national leaders in education and social work was planned and held in the Office on problems concerned with visiting teacher services in State and city school systems. Small conference committees reported on the most immediate and important of the problems discussed. An account of the conference and its discussions was prepared for SCHOOL LIFE. A questionnaire study of visiting teacher services in cities of 10,000 population and above was made for the purpose of obtaining preliminary information on visiting teacher services in the cities indicated. Results of the study were published and discussed in Bulletin 1945, No. 6, *The Place of Visiting Teacher Services in the School Program.*

Other special services included cooperation with school officials and organizations in furthering various educational projects. Among these may be mentioned continuation of relationships with the National Association of Training Schools, including committee membership, consultative services, and the preparation of an article for the Association magazine; with the institutions interested in the education of Spanish-speaking children in the Southwest; with the

American Educational Research Association as its representative on the Liaison Committee on International Education; with the White House Conference on Rural Education on Intergroup Problems; and with the superintendent of schools of the Virgin Islands on curricular and other problems.

Brief studies were made and published concerned with State laws for the certification of visiting teachers, and with State departments of education and school recreation programs, and a series of articles from nine countries written by the respective ministers of education, was edited and published as Bulletin 1945, No. 3, *Education Under Enemy Occupation.*

Services for the Blind

The administrative unit known as the Services for the Blind was created in the U. S. Office of Education following the passage of the Randolph-Sheppard Act in 1936. The act was designed to improve the economic conditions of blind persons, authorize blind persons to operate vending stands in Federal and other buildings, and provide for the making of industrial surveys throughout the United States with a view to obtaining information that will assist blind persons in obtaining employment.

There are now 44 State agencies designated to issue licenses to blind persons to operate vending stands in Federal buildings. On April 1, 1945, there were 350 such stands being operated in Federal buildings throughout the country, 52 of them in the District of Columbia. In addition to the stands in Federal buildings there are approximately 625 stands operated by blind persons in State, county, municipal, and private buildings. These stands have been established for the most part since the passage of the Randolph-Sheppard Act. Therefore, their establishment in other than Federal buildings is due largely to the impetus given to this type of employment provided by the passage of the act. In addition to the regular operators there are employed as assistants approximately 150 other blind persons, making an estimated total of 1,127 blind persons employed in the vending stand programs.

Sales and Earnings

The 298 stands in Federal buildings outside of the District of Columbia had gross sales during the fiscal year of more than $3,116,400 with an average net income to each of the operators of $1,644. The stands in the District of Columbia, of which there are 60, including the 52 stands in Federal buildings, had gross sales of $1,430,393 with the stand operators averaging $3,235 in net annual earnings.

The 150 blind assistants earned approximately $135,000 making a grand total for the country of net earnings to blind persons in vending stands to be more than $1,787,000.

It is further estimated that the 941 stands being operated by blind persons sold over $9,500,000 worth of merchandise during the past fiscal year.

Although much progress has been made by the various agencies for the blind in developing stand programs, there is a possibility of providing employment to hundreds of additional blind persons through this type of employment. The present stands represent only a small fraction of the potential stand opportunities in the country.

Sound Business Principles Necessary

Agencies for the blind are becoming increasingly aware of the possibilities for providing employment to blind persons through the medium of vending stands. They also realize that if their vending stand programs are to be successful they must be established on sound business principle. Requests for assistance from our Services for the Blind are increasingly numerous. The staff gives aid to the States in designing equipment, accounting methods, merchandising, display, supervision, and in solving any other problems of program administration. It has been demonstrated clearly that where the programs are well organized, proper attractive equipment is installed and competent assistance is given to the blind operators, their earnings are increased substantially.

Staff members have given training in all phases of stand program operation to the personnel employed by the State agencies. Many workers for the blind believe that the vending stand programs in addition to providing excellent income to blind persons form the best demonstration to the general public of the ability of blind persons to become self-supporting.

Industrial Employment Programs

The Services for the Blind has provided leadership in developing industrial employment programs for blind persons in industry.

One staff member, the specialist in industrial placement, has participated in the training of several placement agents and has made surveys of industrial establishments to ascertain processes and jobs which can be performed successfully by blind persons. As this agent, himself, is without sight, he demonstrates most of the processes and jobs discovered and, as a result of such demonstrations, the States have been able to place a number of blind people. It is estimated that approximately 4,000 blind persons are employed successfully now in

industry, and reports indicate that their production is usually equal to and in many instances surpasses that of their sighted associates.

Visual Aids for War Training

The Division of Visual Aids for War Training, in accordance with Congressional directive, completed the production of all visual aids, i. e., motion pictures and film strips, and continued the distribution of these visual aids to schools and industry engaged in war training.

The total Office of Education visual aids production program, for 4 years, consists of 457 sound motion pictures, 432 silent filmstrips accompanying individual motion pictures, and 457 instructor's manuals. It is estimated that 90 percent of these motion pictures and filmstrips will continue to be useful in American schools during peacetime. Subjects covered by the films include Machine Shop Work, 125; Aircraft Work, 77; Precision Wood Machining, 41; Shipbuilding Skills, 40; Electrical Work, 28; Engineering, 23; Problems of Supervision, 22; Automotive Operation and Maintenance, 19; Farm Work, 18; Refrigeration Service, 15; Nursing, 14; Foundry Practice, 14; Plastics, 10; Optical Craftsmanship, 6; and Welding, 5.

All Office of Education visual aids were selected and planned by technical and visual education specialists. The subjects were approved by the War Manpower Commission. Scripts were written and the films produced under contract by 36 commercial film producers in New York, Philadelphia, Pittsburgh, Detroit, Cleveland, Chicago, St. Paul, Kansas City, Dallas, Hollywood, and San Francisco. All motion picture production, from the original scrip outline to editing of the final picture, was supervised by a team of Office of Education specialists—one technical and vocational expert and one visual education specialist.

In addition, every Office of Education film was checked for technical accuracy by a Vocational Advisory Committee in the locality in which the film was produced. These committees included master machinists and tool makers, vocational teachers, training supervisors, and members of the armed forces.

All instructor's manuals, which are furnished without charge to users of Office of Education films, were checked for accuracy and edited by the Division of Visual Aids. During 1944–45, a total of 238 such manuals were written.

Distribution of completed Office of Education films was handled by a commercial company under a contract awarded by the Procurement Division, Treasury Department, to Castle Films, Inc., New York.

By June 30, 1945, a total of 34,718 Office of Education films and film strips has been purchased and used in the training of an esti-

mated 15,000,000 students, trainees, and war-workers. In addition, the Army and Navy have obtained approximately 20,000 prints, making a total of nearly 55,000 prints of Office of Education visual aids used in war training.

Sales during the fiscal year 1944–45 totaled 7,205 motion pictures and 5,511 film strips. Schools and colleges purchased approximately 50 percent of all prints.

Amortization of production costs through sales was required by the 78th Congress, and during the fiscal year 1944–45 a total of $50,581.15 was returned to the Government.

The Division of Visual Aids also continued the distribution (through Castle Films, Inc.) of approximately 200 motion pictures and film strips produced by the War and Navy Departments and released to the Office of Education for civilian use. During the year approximately 4,000 prints of these subjects were purchased by schools and education film libraries.

Educational Uses of Radio

In comparison with the 1944 fiscal year, the 1945 fiscal year marks an increase of nearly 20 percent in the volume of requests for program materials, informational and advisory assistance, and consultation services by the Educational Uses of Radio Unit, from the Nation's educational institutions and organizations. This, of course, tends to reflect the increased emphasis on the use of radio in education which characterizes postwar educational planning, generally. However, a noticeable increase in the specificity of the requests received would seem to indicate a somewhat sharpened awareness of the precise educational values of educational broadcasting, of the use of "live" and recorded instructional programs in the schools, and of new teaching methods built around the use of audiotronic devices such as the program-distribution system and the instantaneous recorder.

Script, Transcription, and Information Exchange Services

The acquisition of 100 new educational-program scripts, and transcription copies of 48 new recorded educational programs during the year has raised to well over 1,000 the total number of educational programs available for loan to educational institutions, and the total of recorded educational programs to 323. It should be noted, however, that borrower interest in about a hundred transcribed programs and an equal number of scripts which deal exclusively with topics of wartime significance declined steadily during the year, in direct proportion to increasing indications of the end of the present war. This, as would be expected, has been accompanied by a corresponding in-

crease in the number of requests for scripts and transcriptions of educational programs dealing with cultural, scientific, and vocational topics.

In response to the rapidly increasing demand for station-planning and progam-production assistance to schools, colleges, and State departments of education, the Educational Uses of Radio Unit has prepared, and made available for distribution on request, three new informational pamphlets, *FM for Education* (Misc. No. 7), a handbook on *State-Wide Educational FM Broadcast System Planning* (mimeographed), and a handbok entitled *Radio-Program Production Aids* (also mimeographed). Other informational publications dealing with specialized aspects of education by radio which were added, during the past year, to the list of those already available, include reprint copies of one of the Evaluation of School Broadcasts Project reports and published reports of two special studies which were undertaken jointly by the Federal Radio Education Committee and the U. S. Office of Education.

(The volume in which these distributive services were provided, on request, to educational institutions and organizations, is shown in the following table.)

Table 8.—*Services provided by the educational uses of radio unit, fiscal year 1944–45*

Materials or services provided on request	Volume for 1944–45	Volume for 1943–44	Grand total to date
SUPPLEMENTARY (INFORMATIONAL) MATERIALS:			
Radio Manual	114	740	22,474
Radio Glossary	45	25	18,237
Handbook of Sound Effects	45	800	15,120
Radio Bibliography (Now included in publication next listed)	0	125	7,565
Radio-Program Production Aids (Includes Bibliography)	1,332	----------	1,332
College Radio Courses (A directory of Courses for Teachers)	35	310	4,109
Technical publications (on loan)	227	356	6,284
FM for Education (Misc. No. 7)	2,975	----------	2,975
Standards for College Courses in Radio	2,200	----------	2,200
State-Wide Educational FM Broadcast System Planning	559	----------	559
TOTAL	7,532	2,356	80,855
CATALOGS:			
Fourth-Edition Script Catalog	35	393	9,935
Fourth-Edition Script Catalog Supplement	199	563	6,521
Scripts-for-Victory Catalog	1,406	2,419	8,939
OCD Script Catalog	464	891	1,355
Transcriptions-for-Victory Catalog	1,288	2,192	8,028
Transcriptions-for-Victory Catalog Supplement	599	----------	599
TOTAL	3,991	6,458	35,377
TEACHING KITS	40	108	421
TRANSCRIPTION CIRCULATION (Program loans)	2,604	1,898	10,579
SCRIPT CIRCULATION (Program loans)	8,989	11,191	346,057
FREC SERVICE BULLETIN (Total copies)	40,000	40,000	340,500
MISC.:			
Requests filled for technical advice	493	443	1,389
State Educational FM System Plans developed on request	----------	12	12
States given requested FM System planning assistance	14	4	18
Individual requests received for one or more services	17,159	14,451	103,239
Separate pieces of outgoing mail	39,826	45,322	(Unknown)

Federal Radio Education Committee Services

The services of the Federal Radio Education Committee have continued more or less as usual during the fiscal year ending June 30, 1945. By the close of the previous fiscal year, demand for copies of the monthly list of network educational broadcasts suitable for school listening had become so great that a special FREC (Federal Radio Education Committee) subcommittee (appointed under the chairmanship of Dabney S. Lancaster, Virginia State superintendent of public instruction, to study the extent to which schools are equipped for radio-program reception) recommended that the lists be printed in quantities sufficient for distribution, through State departments of education, direct to classroom teachers. However, the Board of the National Association of Broadcasters (on whom the FREC has depended for operating funds) felt that it would be contrary to established policy to supply funds for this project; so the FREC Educational Program Listing Service has continued on the same basis as before. This involves the auditioning, each month from September through June, of transcription copies of educational broadcasts submitted by the radio networks, by a panel of five school people acknowledged to be competent judges of the suitability of radio programs for school listening, and the subsequent distribution of the panel's recommended program listings, in mimeographed form, to State departments of education, to State teachers journals, to State librarians, and to selected school systems.

Publication of the FREC *Service Bulletin* has been continued throughout the year.

The report of the special FREC Subcommittee appointed a year ago to develop a set of suggested standards for college courses in radio was printed early in 1945, and has been given wide circulation among colleges and universities of the Nation. Many of them have endorsed it as a most useful document, and have indicated their intentions of adopting its suggestions.

A special subcommittee, under the chairmanship of Harold B. McCarty, director of University of Wisconsin's Radio Station WHA, was appointed at the November 1944 meeting of the FREC Executive Committee to investigate possible need of reorganization of the Committee membership, postwar activities in which the FREC might legitimately engage, and the possibility of broadening the basis for the Committee's financial support.

Advisory and Consultation Services

Advisory and consultation services provided, on request, by the Educational Uses of Radio Unit during the year were of three general

types: Providing requested information or advice, by correspondence, in relation to problems of individual school systems; invited participation in meetings and projects involving various aspects of the use of radio in education; and assistance to State departments of education, colleges and universities, and city school systems in relation to the planning of educational FM broadcast stations and program services.

Requested information or advice that was provided by correspondence ranged all the way from giving information as to where certain materials could be found, to the preparation of suggestive plans for the organization of school radio-drama workshops. Fortunately, many of these requests could be answered either by sending materials already available, or by referring the writer to existing sources of information. Others, however, necessitated the expenditure of hours of staff time in the preparation of suggested plans or procedures to fit specific situations. Of the 505 requests for such assistance, approximately one-third were of the latter type.

Requested participation, by the two members of the Educational Uses of Radio Unit's professional staff, in special meetings and projects involving the use of radio in education included such assistance as speaking before teacher groups and meetings of educational organizations; assisting the Washington, D. C., Chapter of the Association for Education by Radio in organizing and conducting a five-session radio-use workshop for teachers of the District of Columbia schools; meeting with the Radio Manufacturers Asosciation's Special Committee on School Radio-Equipment Standards; and serving on the Advisory Committees of professional radio-education organizations such as the Institute for Democratic Education (New York City) and the School Broadcast Conference (Chicago).

During the past fiscal year, the Educational Uses of Radio Unit has provided direct field assistance to State-wide educational FM broadcast planning committees in each of 5 States—Connecticut, Ohio, Maryland, Virginia, and Illinois. Through a combination of correspondence and of visits of representatives of FM planning committees to the Educational Uses of Radio Unit headquarters in Washington, educational FM station planning assistance has been provided to planning groups in each of 9 other States. As of June 30, 1945, requests for educational FM station planning assistance had been received from a total of 29 different States.

Liaison Services

The Educational Uses of Radio Unit has had opportunity to work with educators, commercial broadcasters and radio trade-groups, radio manufacturers, and radio-regulatory agencies representative of both

Government and industry, as a liaison agency for promoting mutual understanding of interests, needs, and problems concerned with the production, broadcasting, reception, and use of educational radio program. Liaison relationships during the past year have included the following:

1. Continuing promotion of mutual understanding (of problems, motives, and needs) between educators and broadcasters, through the medium of the Federal Radio Education Committee.
2. Direct liaison with the National Association of Broadcasters and Frequency Modulation Broadcasters, Incorporated, aimed at keeping professional and trade associations of commercial broadcasters continuously informed of developing trends in the use of radio in education.
3. Direct liaison with the Association for Education by Radio, the National Association of Educational Broadcasters, the National Education Association, and other professional groups or organizations of educators concerned with the use of radio as an educational medium.
4. Direct liaison with the Federal Communications Commission in relation to keeping that body continuously informed of the status of planning for noncommercial broadcasting by educational institutions and State departments of education, and in relation to making sure that the Commission fully understands the needs, problems, and motives of existing and prospective educational station licensees.
5. Direct liaison with the Radio Technical Planning Board and with the Radio Manufacturers Association, aimed at promoting a clearer comprehension, by radio manufacturers, of specific educational applications and conditions of operation for which they need to provide in the design and construction of equipment items they produce for the school market.
6. Direct liaison with the Institute of Radio Engineers and with professional radio consulting firms, aimed at continuous accumulation of NEW technical information pertinent to the planning and use of radio and related audiotronic devices in the schools.
7. Direct liaison with the Surplus Property Board and other Federal surplus disposal agencies, aimed at keeping these agencies fully informed as to the needs of schools for communications and electronic equipment items.
8. Direct liaison with service and professional organizations and groups interested in the production and/or use of educational radio programs and transcriptions. (Groups of this kind with which close working relationships have been maintained during the past year include the Community Radio Council of Winston-Salem, N. C.; the Peabody Awards Committee for the District of Columbia; the Association of Women Directors of the National Association of Broadcasters; the Association of Junior Leagues of America; the Girl Scouts; the WMCA; and Town Hall, Inc.

Joint RMA–Office of Education School Radio Equipment Standards Study

In response to repeated requests from leading radio-equipment manufacturers for advice concerning the design of their postwar equipment lines for the school market, the Educational Uses of Radio

Unit and the Radio Manufacturers Association jointly sponsored a 2-day school radio equipment standards conference, held in the Cleveland Board of Education's Station WBOE studios last summer. The conferees, composed of manufacturers' engineers and educators familiar with the operation and use of all types of audiotronic instructional devices in common use, made tentative recommendations of standards for each of five types of school equipment: Classroom receiving sets, central program distribution systems, speech-input units, portable transcription players, and recorders.

The Radio Manufacturers Association then appointed a special committee of design and production engineers to make a thorough study of the Cleveland Conference recommendations in order to determine their technical soundness and economic practicability, with the understanding that, on completion of their study, they would report their conclusion to a special committee of three educational representatives, to be selected for their experience in school audiotronic-equipment use research by the U. S. Office of Education.

Accordingly, the Office of Education's special committee of three met with the RMA special committee, on June 15, 1945, in Highland Park, Ill., to review its conclusions and recommendations. Interestingly enough, it was found that the RMA committee had approved substantially all of the Cleveland Conference recommendations. This will mean that manufacturers who agree to cooperate with the standards-committee recommendations will offer to the school market equipment items which are correctly designed to serve their intended applications. It still remains for the two special committees to devise procedures for publicizing these recommended standards, and for certifying equipment items which meet them.

Publications

Office of Education publications during the final war year continued to focus attention upon education to help bring victory—and eventual peace.

More than 56 documents for bulletins, pamphlets, leaflets, etc., and 35 different issues of periodicals were published during the year. All types of printing brought the total number of printing and binding requisitions for the Office to 295.

The periodical Education for Victory continued throughout the year and beginning in January 1945, the Office issued a 12-page semimonthly periodical devoted exclusively to Higher Education fields. The annual *Educational Directory* was also published.

The following is a list of U. S. Office of Education publications which came from the press during the fiscal year 1945:

List of New Publications

Accredited Higher Institutions, 1944. (Bulletin 1944, No. 3) 5 cents.
Accredited Secondary Schools in the United States, 1944. (Bulletin 1944, No. 4) 30 cents.
Data for State-wide Planning of Veterans' Education. (Bulletin 1945, No. 4) 15 cents.
Education of Teachers for Improving Majority-Minority Relationships. (Bulletin 1944, No. 2) 15 cents.
Education Under Enemy Occupation. (Bulletin 1945, No. 3) 15 cents.
Handbook of Cumulative Records. (Bulletin 1944, No. 5) 20 cents.
Inter-American Cooperation in the Schools: Student Clubs. (Pamphlet No. 97) 10 cents.
Osteopathy. (Leaflet No. 23) Rev. 5 cents.
Pharmacy. (Leaflet No. 14) Rev. 10 cents.
Planning Schools for Tomorrow: Needs of Exceptional Children. (Leaflet No. 74) 10 cents.
Planning Schools for Tomorrow: Pupil Personnel Services for All Children. (Leaflet No. 72) 10 cents.
Planning Schools for Tomorrow: The Schools and Recreation Services. (Leaflet No. 73) 10 cents.
School Finance. (Bibliography No. 75) Free.

Biennial Surveys of Education, 1938–40 and 1940–42

School Plant: Trends, Present Situation, and Needs. (Vol. I, Ch. IX) 15 cents.
Statistical Summary of Education, 1941–42. (Vol. II, Ch. II) 10 cents.
Statistics of City School Systems, 1939–40 and 1941–42. (Vol. II, Ch. VII) 20 cents.
Statistics of Higher Education, 1939–40 and 1941–42. (Vol. II, Ch. IV) 45 cents.
Statistics of Nonpublic Elementary and Secondary Schools, 1940–41. (Vol. II, Ch. IX) 10 cents.
Statistics of State School Systems, 1939–40 and 1941–42. (Vol. II, Ch. III) 20 cents.

Educational Directory, 1944–45

City School Officers. (Part II) 15 cents.
Colleges and Universities. (Part III) 20 cents.
Educational Associations and Directories. (Part IV) 10 cents.
Federal, State, and County Education Officers. (Part I) 10 cents.

Family Contributions to War and Postwar Morale

Home on Furlough. (No. 2) 5 cents.
Suggestions for Using the Series. (No. 1) 5 cents.
They Also Serve. (No. 3) 5 cents.

Nutrition Education Series

A Study of Methods of Changing Food Habits of Rural Children in Dakota County, Minn. (Pamphlet No. 5) 10 cents.
A Yardstick for School Lunches. (Pamphlet No. 4) 10 cents.

Miscellaneous

Annual Report of the U. S. Office of Education, 1944. 25 cents.
Expenditures Per Pupil in City School Systems, 1942–43. (Circular No. 230) Free.

FM for Education. (Misc. No. 7) 20 cents.
Index, EDUCATION FOR VICTORY, Volume I. Free.
Index, SCHOOL LIFE, Volume XXVII. Free.
Job Training for Victory. Chart. 5 cents.
Offerings in the Fields of Guidance and Personnel Work in Colleges and Universities. Free.
An Open Letter to My Newly Blinded Friend. 10 cents.

Vocational Education

Digest of Annual Reports of State Boards for Vocational Education to the U. S. Office of Education, Vocational Division, Fiscal Year Ended June 30, 1944. Free.
Matching Men and Farms. (Vocational Division Bulletin No. 229) 10 cents.
Social Leadership. (Vocational Division Bulletin No. 231) 10 cents.
Vocational Technical Training for Industrial Occupations. (Vocational Division Bulletin No. 228) 40 cents.

Periodicals

EDUCATION FOR VICTORY, (discontinued June 30, 1945; SCHOOL LIFE, monthly prewar journal, resumed). $1 a year.
HIGHER EDUCATION (semimonthly). 75 cents a year.

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Annual Report
of the
Federal Security Agency

SECTION
TWO

U. S. Office of Education

1946

FEDERAL SECURITY AGENCY - Watson B. Miller, Administrator
U. S. Office of Education - - - John W. Studebaker, Commissioner

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U. S. Office of Education

FOR THE FISCAL YEAR

1946

LETTER OF TRANSMITTAL

FEDERAL SECURITY AGENCY,
U. S. OFFICE OF EDUCATION,
Washington 25, D. C., October 1, 1946.

The Honorable WATSON B. MILLER,
Federal Security Administrator.

SIR: I herewith submit the annual report embracing the activities of the U. S. Office of Education for the fiscal year ending June 30, 1946.

Respectfully,

JOHN W. STUDEBAKER,
U. S. Commissioner of Education.

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Section Two

OFFICE OF EDUCATION

INTRODUCTION

This report is the first to be made under the plan set forth 2 years ago "to improve the services of the United States Office of Education."

During the 1946 fiscal year the eight [1] divisions that were contemplated in that plan were organized and each has been functioning for a part of the year at least. It is therefore a privilege to present the following division reports showing the initial services and activities as summarized by the respective division heads.

Appreciation is expressed for the continuing helpful cooperation and interest of the many educational and lay groups, as well as other Government agencies, that assisted in the development of "a plan of organization to improve the services of the Office to American education."

The progress achieved during the initial year of the new organization of the Office has seemed to me to lay the foundation for increasingly effective services to American education in the years ahead.

As a quick glimpse of the far-reaching challenges for the coming years, the following statements related to each new division are set forth.

Elementary Education

The elementary program is America's greatest undertaking in democratic education. It involves more than 180,000 schools with an enrollment of 20,000,000 children who are taught by 600,000 teachers. These schools require the expenditure of more than $1,500,000,000 annually. The elementary school reaches virtually all of the vast number of children within the legal and compulsory school ages. For many of these, education will terminate when they finish their grade school courses.

It is during the elementary school experiences that foundations of knowledge, skills, attitudes, and appreciations are established.

[1] In addition there was established a Division of Surplus Property Utilization, a temporary division.

Habits of work are formulated, and skill in social adjustments begin during these formative years. The effectiveness of this foundation profoundly influences the extent to which children come to realize the ultimate goal of effective citizenship, the maximum individual competence and a full realization of their potentialities.

Secondary Education

The people of the United States desire broad educational opportunities for all youth. It is increasingly evident that they regard a secondary-school education as the minimum opportunity for all. With less, but a steadily growing, understanding they recognize the wide variability in abilities, capacities, interests, and needs of youth and properly expect that the secondary-school program shall be effectively designed to serve individual students accordingly. Moreover, there is a growing conviction of the paramount importance of those learnings and experiences which in a democratic society all must have in common. To develop a citizenry which is competent in the skills of the democratic culture and procedures, with common ideals and a dynamic faith in the American way, is the overriding assignment which the American people have given to the secondary school.

Vocational Education

To justify membership in American economic society, every American citizen must perform some work or render some service. Education for purposeful work is recognized by Congress as an objective of national concern in the form of the national vocational education acts.

It is now clearly evident that readjustments following World War II are bringing about such vast changes in the occupational life of our people that vocational education programs for youth and adults must be reoriented toward new frontiers of service.

Programs of vocational education in the States have been developed to serve the occupational fields of agriculture, business, trades and industries, and homemaking. They are supplemented by programs of occupational information and guidance. It is the function of the Vocational Division of the Office of Education to serve these State programs.

Higher Education

In scope and extent, higher education is one of the greatest public activities in our country. The 1,700 colleges and universities in the United States are engaged each year in the preparation of two-thirds of a million students for a score of professions; of three-fourths of a million undergraduate students studying the arts and sciences; and of 55,000 advanced students studying in graduate work

for leadership in teaching, in research, in industry, and in government. More than 110,000 teachers are engaged in giving instruction to these students. Higher education institutions spend more than a half billion dollars annually, operate physical properties valued at nearly 3 billion dollars, and manage endowment funds exceeding 1⅔ billion dollars.

Higher education is on the threshold of a tremendous expansion. The outstanding educational development of the past 25 years has been the expansion of the secondary-school program to its present status. It is conceivable that the next 25 years will bring a comparable expansion to the field of higher education. Among factors which will contribute to this expansion are the increased numbers of secondary-school graduates who are applying for admission to higher institutions; the increased demands of business, industry, and agriculture for individuals with college training; the increased need of our country for professional people; the broadening of the base of higher education through the junior college; and the influence of the provision of a college education for hundreds of thousands of young people through the Servicemen's Readjustment Act of 1944.

Central Services

The Division of Central Services consists of four sections: (1) Research and Statistical Service, (2) Information and Publications, (3) Office of Education Library, and (4) Administrative Management and Services. The four service sections perform functions which facilitate the operations of the other divisions within the Office of Education.

The grouping of these four sections into a single division makes it possible to unify and coordinate the administrative and professional services involved in their relationships to the other divisions and sections of the Office. In addition to providing the necessary services within the Office, the Research and Statistical Service, the Information and Publications Service, and the Library render significant services to their corresponding professional areas in education in the States and in institutions.

International Educational Relations

Through the years educational leadership in the United States has constantly made use of the basic research and the best administrative and instructional practices found in professional education in other countries. The patterns of university graduate training, preschool and primary education, and manual training, developed in England and in the continental countries, have been influences in United States education in more or less measure. Conversely in recent years the United States secondary school and its goal of a nonselective education for all have influenced the programs of other countries. From the

creation of the Office of Education, studies of foreign educational systems have been carried on. In 1917, a separate division for this purpose was established. The Division of International Educational Relations now carries forward the work of the former Division of Comparative Education.

Changed conditions have brought enlarged functions to the division. Splendid growth in effectiveness of United States technical and professional education, coupled with the devastation and debilitation wrought upon these programs in other countries by two wars within a quarter of a century, have made the educational institutions in the United States a mecca for foreign students.

The need for assistance in the rehabilitation of the educational systems of the devastated countries has strongly challenged educational leaders in the United States. Furthermore, the desirability of using the best educational thought and leadership in reorienting the educational systems of Germany and Japan has evoked a serious response. At a time, therefore, when the United States is dedicated to the making of a strong contribution to peace and understanding among peoples, the Division of International Educational Relations is trying to facilitate worth-while contributing relationships between United States education and education in other countries. The strategic position which education occupies in all countries cannot but act to enlarge these relationships to the inculcation of a more effective understanding among peoples.

Auxiliary Services

The Division of Auxiliary Services groups together six sections representing various functions and areas of educational service. These sections are: (1) Service to libraries; (2) administration of school and college health services; (3) school-community recreation; (4) problems of school lunchroom management; (5) educational uses of radio; (6) visual aids to education.

These sections are mutually related by the fact that they are regarded by educators as specialized auxiliary services to the administrative and professional programs in school systems and higher institutions. The work of each of these sections cuts across and involves the area of interest of other divisions and sections of the Office and requires, therefore, careful coordination with the work of the other divisions. Through the organization of the services of the specialists in these auxiliary areas into the six sections of the Division of Auxiliary Services rather than through assignment to the several divisions, greater economy and efficiency are attained and duplication of staff and services avoided.

School Administration

Effective national educational leadership and support, such as was demonstrated during the war emergency, must be characteristic of the continuing and increasing national concern for the total educational enterprise in peacetime years henceforth.

No system or program of education is likely to advance far beyond the vision, imaginative leadership, the genius for organization, or the resources of technical skill and knowledge which its principal effective and supervisory leadership can bring to bear upon its administration. The future of education in America can be evaluated in terms of the quality of leadership in educational administration in the States and their local subdivisions throughout the country.

The unique and challenging function of the Division of School Administration is to make available an abundance of technical leadership resources which can be most effectively provided at the national level in order to insure rapid improvement in the quality of educational administration at all levels and thus to contribute to national strength, security, and prosperity.

The division reports follow.

John W. Studebaker
U. S. Commissioner of Education

ELEMENTARY EDUCATION

The Division of Elementary Education is designed to serve in four major areas: Organization and supervision; instructional services; exceptional children and youth; teacher education. In all of these, active work has been carried on, even though the organization of the division and the appointment of personnel, as ultimately planned, have not yet been completed.

In reporting and interpreting educational progress in these areas, as well as in giving advisory service for the development and improvement of school programs, the division's staff members have been concerned with both urban and rural schools; with children who are normal in their development and those who are exceptional in their rates of learning or who are handicapped by physical, mental, or emotional difficulties; with children varying widely in age, from the 2- or 3-year-old in nursery school or kindergarten to the 12- or 14-year-old who is ready for high school; and with parents, whose cooperation is increasingly recognized as essential to the best growth of their children in school. The magnitude of the problems involved is apparent when one considers that there are some 20,000,000 children in the elementary schools of the United States, each of whom must be treated as an individual and given an opportunity to grow in terms of his abilities.

The professional staff of the Division of Elementary Education available to work on such problems included, in addition to the Director, the following persons: (1) a consultant on educational problems, who served for a short time as chief of the section on organization and supervision, but whose major service was in relation to postwar planning programs, school social work or visiting teacher programs, associations of voluntary nature interested in promoting educational services, and other matters as they required attention; (2) one specialist on nursery-kindergarten-primary education; (3) one specialist for upper grades; (4) one specialist on extended school services; (5) one specialist in the education of exceptional children; and (6) one specialist for science and aviation (from March to June 1946).

Consultative Services in States and Communities

The field services rendered upon request by members of the division were limited in accordance with travel funds available. Yet, with the

financial cooperation of some of the agencies requesting services, it was possible to extend activities from Florida to California, up to New England, and to the North Central region. They involved work with State education departments, teacher-education institutions, local school systems, and lay organizations interested in the schools.

The specialist in nursery-kindergarten-primary education consulted with State educational leaders in Maryland, New Jersey, Tennessee, and other States on State plans for the extension of schools for children under 6 and on legislative matters relating to this problem.

The specialist for upper grades was a consultant in conferences on curriculum and on supervision sponsored by State education departments in Michigan and West Virginia, and participated as discussion leader, resource person, and speaker at conferences sponsored by teacher-education institutions in Georgia, Indiana, and Illinois. Requests for services of these types on all grade levels are constantly increasing and are an indication of the importance attached to the early years of a child's education.

The specialist for science and aviation (a newly established position) visited State education departments in Georgia, North Carolina, and South Carolina to assist in laying plans for the improvement of instruction and curriculum making in elementary school science. He also participated in a workshop for elementary teachers in Kentucky and held conferences with administrators and teachers in local school systems in Maryland, Delaware, and Pennsylvania. Teachers throughout the country feel the lack of background in science to teach children of elementary school age and are unfamiliar with the method of instruction in science at this level. The most apparent problems in this field are those concerned with the preparation of instructional materials and with the pre-service and in-service training of elementary teachers. It will be one of the major concerns of the specialist for science to give consultative service in relation to these problems.

Extended school services originated just before and during the war, when the need of before- and after-school guidance for children of employed mothers became a matter of major importance. The program has proved its worth to such an extent that, when the end of the war came and Federal funds for this purpose were withdrawn, approximately three-fourths of the States continued their services in one form or another. Six States employed staffs to supervise the programs; four States made appropriations to finance child care centers; and legislation was passed in a number of States authorizing local boards of education to establish kindergartens, nursery schools, and school-age centers, in some cases permission being given to use public school funds for this purpose. Workshops on extended school services, with sections on parent education, were held in teacher-education

institutions, and in two of these—namely, at the University of Tennessee and at Ohio University—the Office specialist in this field gave intensive assistance. The shortage of trained personnel is an ever-present problem, especially as colleges and universities are organizing new services for the children of veterans in attendance upon college courses.

Services for exceptional children and youth have demanded unprecedented attention since the conclusion of World War II. Never before has there been such obvious and widespread interest in the establishment of adequate facilities for handicapped children on a State-wide basis as well as in local school systems. The specialist in this field, who serves on both elementary and secondary levels, considered legislative and organizational problems with interested lay groups and with official educational agencies in Florida, California and Missouri. Increasingly emphasis is being placed upon the fact that the education of exceptional children cannot be limited to any one level of the school system. It must begin early and go with the child through his adolescent years until he has achieved optimum adjustment educationally, socially, and vocationally.

The division has been represented on policy-making and survey committees, notably the Southern States Work Conference and the Policies Committee planning a self-survey of George Peabody College for Teachers. It was represented at meetings of the State education association in Minnesota, the State Congress of Parents and Teachers in Connecticut, at an Institute for Family and Community Living at Vassar College, at a conference on reading at the University of Pittsburgh, at a workshop of the Virginia Elementary School Principals' Study Conference, and numerous other State meetings.

Services Through Working Conferences

Several important conferences were sponsored or planned by the division which have a close relation and in many cases contribute to the effectiveness of the field services rendered. A major project has been the further development of the program of the Association of State Directors and Supervisors of Elementary Education. Two meetings of representatives of this group were held—one in St. Louis, the other in Washington. At the latter basic principles of elementary-school supervision were enunciated and plans for study through committee groups were outlined. This association carries on a continuing program, and it is one of the vital forces for the improvement of elementary education in the States. Six committees of the organization are now at work, studying the following problems: (1) the characteristics of a good elementary school with regard to staff, grades included, size, program, organization, and criteria for evaluation;

(2) the coordination of school and community services for a 12-month developmental program for elementary-school children; (3) programs for children below 6 years of age; (4) techniques for the stimulation of curriculum development throughout a State, with fruitful participation by teachers, parents, other lay groups, and resource persons; (5) programs for the continuous professional education of teachers; (6) school housing and facilities for a desirable educational program.

A member of the division made plans with representatives of the Safety Research Institute and the National Fire Protection Association for a working conference in the Office designed to result in a curriculum guide for fire prevention in elementary schools. The resulting publication entitled, "A Curriculum Guide to Fire Safety," is now available.

A conference of visiting teachers and school social workers held in 1945 was followed up by the division. Its findings contributed materially to the establishment of policies for this important phase of educational service and were presented in an Office of Education leaflet under the title "Visiting Teacher Services: Report of a Conference."

Cooperation With Other Federal Agencies

The division has worked on a number of joint projects with staff members of other Federal agencies. The results have been (*a*) a growing coordination of Federal-State policies and programs relating to services for children, and (*b*) a strengthening of the services of the several agencies as they operate in the States and communities.

Staff members have consulted with the Federal Public Housing Authority on planning for the conversion of surplus buildings into public schools and for their equipment as schools. They have cooperated with the War Assets Administration in sending out announcements of equipment and buildings for nursery and kindergarten education available to institutions enrolling veterans for a continuation of their education. They have prepared material for the Attorney General's Conference on Juvenile Delinquency and participated in the panel discussions preparatory to the conference. They have cooperated with UNRRA on problems of the occupied countries. They have worked with the Children's Bureau in relation to the National Commission on Children in Wartime, problems of school social work, problems of cerebral palsied children, school adjustments for slow-learning adolescents seeking to leave school to go to work, and on an inter-agency committee on youth employment and education. The work of this last named committee resulted in a publication (issued by the Children's Bureau) entitled "Your Community and Its Young People."

The Director of the division was a member of the President's Highway Safety Conference and, as a member of the education subcommittee, helped to prepare a handbook on traffic safety education to be presented to the conference.

Cooperation With Voluntary Professional and Public Service Organizations

Members of the staff have likewise worked in close association with voluntary professional and public service agencies of national or regional scope. The Director of the division is president of the Association for Supervision and Curriculum Development. A staff member is secretary of the Association of State Directors and Supervisors of Elementary Education. Another is a vice president of the American Association on Mental Deficiency and the national chairman of the Committee on the Exceptional Child of the National Congress of Parents and Teachers.

They all have served on various committees or have otherwise given consultative service to many organizations well known for their constructive services for children, including the following: Association for Childhood Education, National Association for Nursery Education, American Association of University Women, Child Welfare League of America, Women's Joint Congressional Committee, General Federation of Women's Clubs, American Association of School Social Workers, National Council of Teachers of English, National Society for the Study of Education, National Education Association, Educational Policies Commission, National Society for Crippled Children and Adults, Inc., International Council for Exceptional Children, American Camping Association, Girl Scouts of America, National Fire Protection Association, American Automobile Association, National Planning Association, farm organizations, and labor organizations. In view of the wide dissemination which these agencies can give to professional findings and in view of their influence upon public opinion, the Office of Education is enabled greatly to strengthen its services to people at large.

Consultation on International and Intercultural Problems

At the request of the Division of International Educational Relations, representatives of embassies and legations, UNRRA, and the State Department, the division has cooperated in helping to meet the varied problems of persons from abroad who have come in increasing numbers either to study intensively in the United States or to familiarize themselves with the general nature of our educational system. There have been many conferences with individual student visitors. For those wishing to study elementary education in general or special education for exceptional children and youth, the division staff

members have suggested teacher-education institutions at which they might carry on their chosen work.

Such service has applied to persons coming from the other American republics, from Poland, France, Australia, India, Denmark, China, Canada, England, and other countries. A group of 5 Chinese women visiting the United States under the auspices of UNRRA spent several days in conference with members of the division, who helped them plan their study programs while in this country. Samples of educational toys and equipment were selected and purchased with funds granted by China Relief and shipped to Chinese UNRRA for reproduction by Chinese in need of employment. Packets of printed materials and book lists were made up and sent to various countries, including Japan and Germany.

One of the Division's staff members has supervised a project of teacher education for teachers of Spanish-speaking children. Another has been a member of an Office committee to write a chapter for the 1946 Yearbook of the Department of Elementary School Principals on "Building World Good Will," and is also a consultant to a committee of representatives of Chief State School Officers working on a bulletin entitled "World Relations in State Educational Programs."

Research and Production

It became increasingly evident during the war years that school programs must face unexpected adjustments and be prepared to meet the challenge of planning for a vastly changed world. The importance of long-time planning became a conviction of those who saw the new role of the schools in helping to build a permanent structure of peace.

During these years the Office was a clearing house of information concerning the many postwar planning activities carried on by State and local school systems, educational organizations, and community groups. At the close of the war, a final study was made by the division of some results brought about by such planning on the State level. The findings were published under the title "State Postwar Planning in Education: Some Results."

Other publications permitted by the available printing fund, which represented intensive study and research and which have not already been mentioned, are as follows:

How to Build a Unit of Work.—This is designed to be of help to teachers who wish to improve their instructional procedures through the use of units of experience. It is not easy to build a unit of work in teaching fundamental skills and concepts, that make optimum and coordinated use of the child's experiences. It was in response to numerous requests for assistance that this bulletin was prepared.

Curriculum Adjustment for Gifted Children.—This was the outgrowth of several years of study on the part of a number of cooperating

educators interested in the education of gifted children. An Office specialist acted as coordinator of the study. Under the title as indicated, fundamental principles and current school practices are presented in relation to children of exceptional ability, with emphasis upon the tremendous importance of helping gifted and talented pupils to achieve their greatest potentialities both in self-realization and in service to society.

Follow-up Report of the Terre Haute Workshop for Nutrition Education.—This is a publication growing out of the workshop on nutrition education held at Terre Haute State Teachers College in 1945. The importance of work in nutrition education is emphasized, and suggestions made for its successful operation on the elementary level.

Education in Residential Schools for Delinquent Youth.—In cooperation with the National Association of Training Schools, the Office had for several years been making a study of educational programs in institutions for juvenile delinquents. This publication is the outgrowth of the study. It presents (1) principles that should be applied to the development of the educational program; and (2) suggestions for study by the faculty of a training school to evaluate and improve its own program.

Schools for Children Under Six.—This is one of a series of periodic studies to show the current status of nursery schools and kindergartens. Schools for children under 6 years of age are assuming increasing importance as the result of a growing recognition that adequate behavior guidance and health protection in early childhood is an economy, as well as of an appreciation of the wartime nursery school service provided for children of women employed outside the home. The development of these schools has been followed by the Office of Education for a number of years, with attention given to increasing State legislative provisions, essential standards of operation, cooperative parent-school relationships, and the inclusion of nursery schools and kindergartens in the primary unit of the elementary school.

Members of the staff have contributed 28 articles to professional journals, a chapter for the 1947 Yearbook of the National Society for the Study of Education on Recent History and Present Status of Education for Young Children, and another for the Yearbook of the National Association of Science Teachers on Time for Science Teaching in the Elementary School. They have also contributed to bulletins and handbooks issued by the Association for Childhood Education, the International Council of Religious Education, the Northern Baptist Convention, the Child Welfare League of America, and the National Association for Nursery Education. They have pre-

pared many reference lists in the different fields of their specialties, as well as lists of materials and apparatus, to be used in answering requests for information. A film on Extended School Services has been produced to be available for loan.

Collections of materials for loan or exhibit purposes might well be considered a part of the production activities of the Division. Such collections include samples of report cards used by local school systems, loaned during the year to 54 committees in 19 States and Canada; packets containing copies of State laws relating to schools for children under 6; an exhibit of pamphlets issued by State and local school systems and by colleges to explain the purposes, operation, and values of nursery schools, kindergartens, and primary classes; a picture-story summary of the nutrition workshop (elementary level) held in Terre Haute, which has been loaned to 100 persons or committee groups in various parts of the country; and a folding chart depicting various avenues for home-school cooperation, which has been loaned for the use of elementary supervisors' conferences.

The division has become a clearing house through which State supervisors of elementary education, including supervisors of special education, may keep in touch with the material issued by other States in these fields. Packet service is carried on whereby copies of all State bulletins on elementary education or on special education made available to the Office are sent to the respective State officials. Thus a coordination of purposes and unity of effort among the States are encouraged.

Personal Service to Individuals

All services described involve a vast amount of conference and correspondence with individuals, primarily professional coworkers concerned with the particular project under way. There is another large group of individuals, however, to whom the division gives personal service in accordance with their immediate needs. Through conferences at the Office and through correspondence, staff members have made personal contacts with individual teachers, students, parents, and other citizens seeking information or advice.

Some of the problems on which information or advice has been sought are listed here in order to exemplify the types of individualized service which staff members are called upon to perform: What material can I get for the use of a parent-education group? Where can I get inexpensive equipment for science in the elementary school? To what school should I send my child who is mentally retarded? How should we plan the work of the visiting teacher in our school

system? What legislation should a laymen's group support in relation to education of young children? What should a teacher-education institution offer in the preparation of elementary teachers? Where can I get training for teaching the handicapped? How should our school system plan its program of extended school services? What preparation should a State supervisor of elementary education have?

These—and many others—are all-important questions to the person asking them. They are given the careful attention of the Office staff. Service to the individual inquirer, as in the larger realms of Office activities, is a definite contribution toward promotion of the cause of education.

Some Major Problems of Elementary Education

Throughout the year's work there have been evident certain major problems characterizing elementary education of today. One of the foremost questions to be answered is: How can the elementary schools help to prevent juvenile delinquency? With the mounting rates of delinquency that are reported from various sources, the responsibility of the schools in this matter also mounts. There can be no evasion of the problem. The Division of Elementary Education should be able to carry on research, compile information, and suggest ways and means of coping with it through the schools.

Closely related to this situation is the importance of developing a relationship between school and home that will reveal parents and teachers as partners in the program of education. There is a definite trend in this direction that needs to be strengthened materially, if child behavior is to be of a wholesome nature. Parent-teacher cooperation is being encouraged by the division.

It is not surprising that children who are ill-nourished or who have physical defects of one kind or another deviate from normal behavior patterns. Moreover, the physical examinations of draftees have left no room for doubt that, if such defects had been taken seriously in early childhood, a high proportion of the rejections could have been prevented. A functioning health program in the elementary schools becomes, therefore, a matter of great concern to the division.

With regard to teachers, we face one of the most critical situations ever encountered. Its increasing seriousness is evident from the fact that the number of emergency permits granted for teaching increased from 79,000 in 1945 to 108,000 in 1946. About three-fourths of these were in the elementary schools, where pupil progress and development are to so large an extent dependent upon the guidance of adequately prepared teachers. The recruitment of elementary school teachers and a well-balanced teacher education program that places emphasis upon functional values rather than upon the acquisition

of subject matter alone are matters of first importance. What can the division do to help meet these problems?

Closely related to this situation is the inadequacy of educational opportunity for children of migrants and for children in many rural and isolated areas. This is where the most crucial shortages of teachers occur, and where it is most difficult to plan and achieve vitally functioning educational programs. The division endeavors to advise on the kinds of educational opportunities children need under such circumstances. There has been great demand for materials that might serve as guides in this direction.

The increased birth rate over the past 6 years is manifesting itself in kindergarten and first grade. One city reported a net gain of 472 pupils in elementary schools, with several hundred children waiting to get into kindergarten. The 3- and 4-year olds, too, are appearing in increasing numbers for nursery-school admittance. The development of emergency educational programs for this age group is leading to widespread acceptance of them as a regular part of the school system. The Division of Elementary Education should have more adequate facilities for giving information, carrying on research, and serving in a consultative capacity in this entire field.

The development of the community school, with community auditoriums and meeting rooms, with game rooms and playgrounds, with community health facilities, as well as with more space, more laboratories, and more work rooms for the children, is emerging as a means of bringing about a closer working relationship between school and community, teacher and parent. Many problems present themselves in planning such a program, with its instructional and organizational factors. Moreover, there is a change of attitude toward the school schedule. Shall the school year cover 12 months instead of 9 or 10? If so, what type of program shall it offer? Again, the Division of Elementary Education has endeavored to assist with research and guidance.

So also there are urgent problems of public relations. of the structural organization of the elementary school in relation to junior high schools, of the type of program to be followed in extended school services, of optimum adjustments for handicapped children, of plans for continuous progress of children through the early grades, and of plans for reporting pupil progress. All of these—and others—are matters requiring intensive research, continuing study, and the necessary staff to carry on the work.

SECONDARY EDUCATION

Establishment of the Division

The plan for the improvement and expansion of the services of the Office of Education as outlined in the 1944 Annual Report provided for the establishment of a Division of Secondary Education, to be accomplished in the fiscal year 1946. This provision was in keeping with the act of Congress of 1867 creating the Office of Education and designating as its purpose (1) the collection of statistics and facts that show the condition and progress of education, and (2) the diffusion of such information respecting the organization and management of schools and school systems, and of methods of teaching as will aid the people of the United States in establishing and maintaining efficient school systems, and otherwise promote the cause of education throughout the country.

The plan for a Division of Secondary Education was especially pertinent to this purpose owing to the fact that the period since the creation of the Office is largely the period of the development of high schools on a Nation-wide basis. This development is a most significant one, not only in American education but in the history of education throughout the world. No other country has undertaken to provide, on the scale that has taken place in our land, free secondary education—following a program of elementary education of usually 8 years—for all youth. Every State has had on its statute books for many years provisions for public high schools.

The serious manner in which the American public has regarded this assumption is indicated by the growth in secondary-school enrollments. In 1890 there were 357,813 persons, out of a total general population of 62.6 millions, enrolled in secondary schools. During the half century following, secondary-school enrollment increased approximately 9 times as fast as did the general population and more than 20 times as fast as the population group 14–17 years of age. While much of this percentage increase occurred during the earlier decades of the great development of high schools, the decade from 1930 to 1940 shows that secondary-school enrollments increased 7 times as fast as did the general population and 10 times as fast as the population group 14–17 years of age.

This phenomenal development of public secondary education has occasioned a need, on a national basis, for more adequate information,

and other forms of services, than the Office has ever been equipped to supply. Information and services provided by the Federal Government to State and local governments operating secondary schools, and to other leaders in this phase of education, are needed for the improvement of secondary-school programs.

Organization of the Division

The Division of Secondary Education was organized in August 1945. Previous to that time there had been but one specialist in the office bearing a title in secondary education. This staff member was the only person working full time in this educational level. However, staff members representing functional areas such as vocational education, rural education, health education, and tests and measurements, served secondary education along with other levels for the respective functions their specialties represented. The organization of the division was effected with five professional persons, one serving as acting director, a divisional secretary, and three other clerical persons, all of whom were chosen from existing personnel. The 1946 budget provided for a director, three additional professional members, and one additional clerical person. The complement of the staff for the fiscal year was chosen during the next few months. The director entered upon his duties on November 30, 1945, and the other members during the next 5 months.

The division is organized for operating purposes as follows: Office of the Director, which includes the director, the secretary to the director, with supervisory responsibilities for the clerical staff, and the assistant director, who serves as acting director in the absence of the director; Section on Organization and Supervision, and Section on Instructional Problems. At the end of the fiscal year, June 30, 1946, the staff consisted of nine professional persons and five clerical persons.

The Office of Education is proceeding as funds are available to carry out the plan for the development of the division which ultimately calls for the employment of 74 professional persons. Provision has already been made for the addition by the end of the calendar year 1946 of five more members to the professional staff, each of whom will devote full-time service to one of the following phases of secondary education: Large high schools, general adult education, pupil personnel, nonreimbursable home economics, and educational research. The plan for the expansion of the division is in keeping with what has taken place in the development of secondary schools and with the need for meeting present problems arising out of new and changed social, civic, economic, and intellectual situations.

Activities

Upon establishment of the division by assignment of existing Office personnel, each professional person brought with him a program of ongoing projects. These, however, were not unrelated to the field of secondary education, as they were approved assignments carried over from the previous Division of General Instructional Services, which was not confined to any educational level, and from which all the personnel of the Division of Secondary Education was drawn. As specialists were able to undertake new activities, they were planned in accordance with the field of work to be served by the new division. In the case of each new staff member there were outlined and approved studies and other forms of activities in which he would engage during the year.

The Director received a large number of requests for field services, only a comparatively few of which could be accepted. He participated, for example, in the annual meeting of the College Entrance Examination Board held at New York; the meeting of the Sponsors of the Consumer Education Study undertaken by the National Association of Secondary-School Principals at New York; the State meeting of the Tennessee Association of Secondary-School Principals, Nashville; the meeting of the Commission on Accreditation of Service Experiences, American Council on Education, Chicago; the meeting of the Board of Trustees of the Educational Records Bureau, New York; the meeting of the Committees of the National Association of Secondary-School Principals on Curriculum Planning and Development, and Applied Economic-Core Curriculum; and the meeting of School Administrators, University of Pittsburgh.

Advisory Committee on Secondary Education

In accordance with the plan creating the division, there was appointed an Advisory Committee on Secondary Education. This is a continuing committee with rotating membership based upon a 3-year term. The function of the committee is to advise the Division of Secondary Education with respect to:

Types of services in which the division should engage.
Specific projects, studies, or undertakings which should occupy the time and attention of the division.
Facilities and procedures needed for carrying on the program.

The membership of the committee is as follows:

Francis L. Bacon, Principal, Evanston Township High School and Junior College, Evanston, Ill.
Clarence E. Blume Principal, Central High School, Minneapolis, Minn.
Roy L. Butterfield, Principal, Benjamin Franklin High School, Rochester, N. Y.

Frank W. Cyr, Teaches College, Columbia University, New York, N. Y.
Harl R. Douglass, University of Colorado, Boulder, Colo.
D. H. Eikenberry, Ohio State University, Columbus, Ohio.
Paul E. Elicker, Executive Secretary, National Association of Secondary-School Principals, Washington, D. C.
Will French, Teachers College, Columbia University, New York, N. Y.
E. H. Garinger, Assistant Superintendent of Schools, Charlotte, N. C.
E. D. Grizzell, University of Pennsylvania, Philadelphia, Pa.
Earl Hutchinson, Director of Secondary Education, State Department of Education, Augusta, Maine.
Lloyd N. Morrisett, University of California, Los Angeles, Calif.
Francis T. Spaulding, Commissioner of Education, State Education Department, Albany, N. Y.
Sophie A. Theilgaard, Principal, Flower Technical High School, Chicago, Ill.
Harry E. Wood, Director, Fine and Practical Arts and Vocational Education, Indianapolis Public Schools, Indianapolis, Ind.
Galen Jones, Director, Division of Secondary Education, served as chairman.

The committee was called by the Commissioner to meet at the Office of Education, Washington, D. C., in May 1946. At the first session the Commissioner, Director, and other staff members reviewed the organization and program as outlined to date for secondary education.

The first discussion of long-range plans revolved around the services in guidance. With no dissenting opinion the members made it clear that they favored a much broader intrepretation of guidance than is implied in occupational information and guidance or than is possible under a plan which ties guidance services to vocational education. Although agreeing that occupational information and guidance are important, the major concern of the members of the advisory committee was that guidance in the Office of Education should not stop there. Especially was it emphasized that much of the counseling service should issue from the classroom teacher, whether in English, social studies, science, or any of the other subjects. The discussion indicated that the members of the advisory committee desired to go on record regarding guidance service. Accordingly, the chairman appointed a committee to prepare a statement. The report included the following:

> The counseling of pupils in the secondary schools of the United States with respect to their educational and personal problems is one of the most neglected yet one of the most important functions of the school. Many schools recognize the importance of counseling, but because of lack of leadership and staff competency fail to come to grips with the vital problems of youth. In only a few of our States do State departments of education provide effective leadership.
>
> Because of these facts the Advisory Committee of the Division of Secondary Education believes that the Division should exercise vigorous leadership in this field both with respect to State departments of education and local schools and school systems.

The report was unanimously adopted as the judgment of the advisory committee.

Another fundamental concept on which the members of the advisory committee expressed themselves repeatedly was the need for coordination among the various subject areas. Mentioned were family life, health, recreation, consumer education, and other areas which would be served through more than one subject field. Coordination would need to be effected not only within the division but no less among the divisions of the Office. It was pointed out that, under the Commissioner's plan, coordination among divisions would be brought about through committee action and through section chiefs in the various divisions. Members of the advisory committee felt this was desirable, but that in addition there should be emphasis upon generalization as well as specialization in the organizational set-up.

A third topic that was canvassed at length was education in the thirteenth and fourteenth years. A subcommittee report which included the following was adopted:

> It is the belief of this committee that from the viewpoint of the pupils and also of the curricula, grades 13 and 14 are essentially a part of secondary education. Grades 13 and 14 in public-school systems, commonly characterized as the junior college, should be recognized as an integral part of secondary education.

The high point of the conference was reached with the consideration of what should be the program of the division in the months and years ahead. One after another of the advisory committee members spoke out in favor of having the Office of Education give an effective leadership to secondary education—not direction or control, but a leadership which would bring together the best thought and procedures and inspiration obtainable throughout the Nation.

Additional meetings of the advisory committee will be held during the 1947 fiscal year; and the deliberations of this group will continue to influence the program and services of the Division of Secondary Education. Two of the four members appointed for initial 1-year terms are being continued on the advisory committee. The new members are The Rev. M. J. McKeough, the Catholic University of America, Washington, D. C., and Bertie Backus, Principal, Alice Deal Junior High School, Washington, D. C.

Life Adjustment Training for the 60 Percent

Regardless of the cause, whether it is the lack of availability of schools, of proper and suitable instruction, of economic sufficiency, or any other reason, there has never been more than 73 percent of the persons of secondary-school age attending school. The peak high-school enrollment occurred in the school year 1940–41 when it reached

7¼ millions. However, for the graduating class of that year the survival rate for every thousand children who had entered in the fifth grade, in 1933–34, was 836 in the eighth grade, 792 in the first year of high school, 688 in the second year, 594 in the third year, 512 in the fourth year, and 462 graduates. During the war years high-school enrollment dropped almost a million and a quarter.

One of the crucial problems confronting any effort to increase the holding powers of the secondary schools is that of providing varied curricular offerings to meet the needs, interests, and abilities of youth of secondary-school age. Although economic necessity is frequently given as the reason for dropping out of the secondary school, experience indicates that the great majority leave school because they do not find activities which challenge them, because the learning experiences are not suited to their abilities, and because life inside the school does not seem as real as it does outside the school.

In an attempt to stimulate consideration of this problem, Dr. Charles A. Prosser, who in the summer of 1945 was attending a vocational conference in Washington, D. C., called to give final approval of a report on Vocational Education in the Years Ahead, introduced the following resolution:

> It is the belief of this conference that, with the aid of this report in final form, the vocational school of a community will be able better to prepare 20 percent of its youth of secondary-school age for entrance upon desirable skilled occupations; and that the high school will continue to prepare 20 percent of its students for entrance to college. We do not believe that the remaining 60 percent of our youth of secondary-school age will receive the life adjustment training they need and to which they are entitled as American citizens—unless and until the administrators of public education with the assistance of the vocational education leaders formulate a comparable program for this group.
>
> We, therefore, request the United States Commissioner of Education and the Assistant Commissioner for Vocational Education to call at some early date a conference or a series of regional conferences between an equal number of representatives of general and of vocational education—to consider this problem and to take such initial steps as may be found advisable for its solution.

The resolution was adopted and transmitted to the United States Commissioner of Education, who instructed the Divisions of Vocational Education and of Secondary Education to collaborate in the preparation of plans to carry into effect the Prosser resolution. As a result a 2-day pilot conference was held at the call of the Commissioner, in New York City, April 11 and 12, for the purpose of discussing and giving cousel relative to the agenda for regional conferences, the kind and number of such conferences that should be held, and the techniques and practices to be employed in conducting them.

The personnel of the conference was composed of leaders in general and vocational education from nearby States and of representatives of the Office. An agenda was approved for use at regional conferences, topics that should receive consideration were pointed out, and recommendations made as to the number of regional conferences that should be held and what regions should be included. A regional conference was held in Chicago on June 10 and 11, 1946. Twenty outstanding educators from both the public schools and universities in nearby States attended on invitation of the Commissioner. The conference gave strong endorsement of the proposal to stimulate consideration of better programs and expanded educational opportunities for the group of youth with whom the Prosser resolution deals. The present plan is for three more regional conferences to be followed by a national conference for making recommendations.

School Organization and Supervision

Organization

The Section on School Organization and Supervision was organized as a separate unit with the appointment in November 1945 of the Office specialist in secondary education as chief, and three other professional persons. All the members of this section were assigned from present personnel in the Office. Consequently the section came into existence with a going program of projects. As these were completed, others were outlined and approved, with due regard to the assigned functions of the section.

Veteran Education

The end of the war, coming within the fiscal year, profoundly affected the emphasis in activities under way and gave direction to many of the new undertakings. The education of veterans is a case in point. The significant service given to veteran education by the high schools of the Nation has largely gone unheralded. Still in some of the larger cities the enrollment of veterans runs to 4 or 5 percent, even as high as 8 percent, of the total enrollment in day and evening high schools. In several smaller systems the education of veterans has the characteristics of a major undertaking.

The division is endeavoring to keep abreast of this development both by studying its extent and by making special studies of those veteran programs which appear to have especial merit. A study of status was completed and published during the year and an investigation of outstanding veteran programs is in progress as the year closes.

Evaluation of High-School Credit

The return of veterans to high schools has brought with it many problems relative to granting of credit, issuance of high-school diplo-

mas, and the like. While the most urgent need for evaluation of credit concerns the returning veteran, the entire concept of granting credit for out-of-school as well as for in-school experiences has far-reaching significance which will be with our schools long after the veteran has departed.

State departments generally have established regulations or recommendations for procedures in evaluating training and experience gained in ways other than spending 120 clock-hours in a high-school classroom. Some of those procedures refer only to veterans; others are broader in their application. Some of the evaluations are accomplished through comparing certified descriptions of courses or experiences in the armed forces while others are made on the basis of examinations in specific subjects or in the general educational development tests—tests designed to measure mental maturity in several fields.

During the year a study of the use of examinations and out-of-school experiences for high-school credit was made. This study brings together the new provisions which States have developed recently on this subject. It is especially timely because of the number of veterans who desire high-school credits and diplomas in order to enter college. However, the study also reopens the whole question of what constitutes high-school credit and training.

Aptitude Tests

Just as the experiences with testing during World War I had important effects upon intelligence testing, so the widespread use of aptitude tests in World War II may have significant contributions to make to testing programs in the schools. The possible uses of some of these tests are being explored in a few high schools cooperating with the Office for that purpose. It is expected that reports on this project will become available during the coming school year. The project is a study of the new emphasis and direction for testing in secondary schools brought about by the research activities in measurement in the War Department.

Broadening the Services in Small High Schools

In the small schools, also, procedures are being tried out looking toward expanded services and new ways of providing effective education for youth in small towns and rural areas. One of the researches begun during the year has for its purpose the identification and study of small schools which have developed noteworthy extensions of their curriculum and other services.

In connection with this project, letters have been sent to 95 leaders in secondary and rural education in an effort (1) to determine the major factors which limit the services of small high schools to rural

youth, (2) to ascertain the most effective internal plans or procedures which have been devised for broadening such services, and (3) to secure lists and make studies of small high schools which have been exceptionally successful in providing effective services to their communities. The data supplied are being supplemented through documentary research. The plan is to report the findings of this study in one or more bulletins.

Public Relations for Rural and Village Teachers

One of the chief reasons why rural schools as a group inadequately serve their communities is that neither the teachers nor their supervisors have given much attention to the problem of explaining these schools to the people or of planning with the patrons the school's activities and organization.

In 1945 the Commissioner appointed a committee of outstanding rural-school and public-relations specialists, headed by Otis A. Crosby of Detroit, president of the School Public Relations Association, to consider this situation and to prepare an authoritative report on the subject. The result was a document published by the Office of Education (Bulletin 1946, No. 17). It is written in a popular style, addressed directly to the rural teachers. It also contains many suggestions on good public relations helpful to rural-school administrators and to those charged with the preparation of teachers for these schools.

School-Work Programs

During and after the war there has been a great deal of work performed in industry and business by high-school students who have entered on part-time employment while they were still enrolled in school. From a condition under which many young persons were unable to secure employment of any kind, youth of high-school age were by wartime demands suddenly catapulted into a situation in which their assistance was solicited by employers. So insistent were the urges of good wages and of doing their bit that many boys and girls were tempted to drop out of school and go to work full time.

Faced by this condition, many high schools developed plans under which pupils might be released from school during part of the day in order that they might accept part-time employment. A study of such combined school and work programs undertaken jointly by the Office of Education and the Children's Bureau of the Department of Labor was nearing completion at the end of the year.

School Census, Compulsory Education, and Child Labor

Somewhat related to problems encountered in programs involving attendance in school coupled with part-time employment is a publica-

tion entitled "School Census, Compulsory Education and Child Labor" (Bulletin 1945, No. 1). This study is a State-by-State account of the State laws on the school census, compulsory education, and child labor. The account is useful as background material for the reorientation necessary for a national reconsideration of school attendance problems.

Industrial Arts

Industrial arts departments in the public secondary schools are suffering an especially severe handicap as a result of war conditions. Teachers in this phase of work were in such demand as instructors in programs for the training of workers for war industries and as skilled and technical workers in such industries that their ranks were very much depleted. A comparatively large number of vacancies could not be filled and many others were filled only by waiving desirable standards for teachers. Furthermore, during and since the war, equipment and other facilities for instruction have been available only to a very limited degree. As a consequence, there exists a problem relative to providing adequate instruction in this area of education. As an aid to the solution of this problem, the Committee on Standards of Attainment of the American Vocational Association, on which the Office is represented, revised in accordance with present-day needs a previous publication and issued it during the present year as a bulletin entitled, "Improving Instruction in Industrial Arts."

School Lunch Legislation

For more than 10 years now Federal funds in varying amounts and under varying plans have been used to help State and local school districts to provide lunch services for their children at school. This fact, plus the growing distances between home and school, the employment of many mothers, and other developments in our economic and social life, has brought about rapid increases in the number of schools which have school lunch programs and the children participating in them.

Statistics on these developments indicate that about 55,000 schools, or about one of every four, now provide school lunches and that approximately 7,500,000 children, or about one of every three, participate in such lunches. The statistics also show that slightly more than half of the schools having lunch programs, and two-thirds of the children participating in them, do so with the assistance of Government funds. This means that despite the recent rapid growth of this movement only one of every eight of all of the schools in the United States, and only two of every nine of all of the children attending school, now receive noon lunches with the aid of the Federal Government.

During this year efforts were made by this Office (1) to study existing legislation relating to Federal school-lunch grants, (2) to cooperate with other Government agencies, with State and other school authorities, and with various organizations, in developing principles and plans for sound programs, (3) to compile necessary statistical and other factual data, (4) to analyze and assess outcomes of projected proposals, (5) to supply the most authentic information available on school-lunch developments to the press and to other information outlets, and (6) to assist in every way possible to put school lunch grants upon the soundest possible basis.

On June 4, 1946, Public Law 396 was finally enacted. This law achieves the following results: (1) Federal school-lunch subsidies are now placed upon a permanent basis, thus giving the schools definite assurance as to the financial assistance they can count on from the Government; (2) it provides financial assistance in equipping lunchrooms, thus making it possible for the smaller schools in the poorer school districts to install a lunch program; and (3) it places the responsibility for administering these funds jointly upon the United States Department of Agriculture and the State educational authorities. However, Law 396 does not provide help to enable the latter to do their work effectively, neither does it provide for the development and employment of a professionally trained personnel.

Statistics of Public High Schools

During the war years the high schools of the United States have shown decreasing enrollments, partly because the lower birth rate of the early 1930's was making itself felt, partly because of other factors, many of them related to wartime conditions. There are evidences through reports coming in from individual schools and school systems that this decline in the high-school enrollment curve is being arrested. Some school systems are even showing a slight rise in the curve, although it is yet too early to predict that this is the beginning of a reversal in trend.

The Office has through the years supplied basic statistics which have shown the trends in the numbers of schools, pupils, graduates, and teachers in the high schools of the Nation. A recurring publication giving such information has been a chapter in the Biennial Survey of Education entitled "Statistics of Public High Schools." With the coming on of the war the assembling of this information was interrupted. During the school year 1945–46 there was launched jointly by the Division of Secondary Education and the Research and Statistical Service a study which will bring up to date and on a comparable basis the fundamental facts regarding the statistical position of public secondary education in the United States.

Cooperation With Educational Organizations and Government Agencies

Inevitably the staff members of the Section on Organization and Supervision are called upon to serve as committee officers, committee members, or consultants for a variety of organizations and agencies both outside and within the Government. Frequently these cooperative arrangements involve program appearances; often they call for preparation of manuscript in the form of committee reports or memoranda; generally they result in magazine articles; always they require attendance at meetings or conferences. Among the more important such responsibilities discharged during the year were the following:

The National Child Labor Committee completed a field study of work-school programs in a small number of large cities. For this purpose, there was created a special advisory committee which aided in planning the program of study, reviewed the report, and gave approval of the manuscript for publication. The Office of Education cooperated in this undertaking by assigning, on request, one of its staff as a member of the advisory committee.

The Office continued to completion during the year its cooperation with the National Society for the Study of Education in the preparation of a manuscript on Industrial Arts. A staff member was chairman of the Committee selected for this purpose. The manuscript has now been published as a chapter in the yearbook of that society.

A member of the staff served as secretary-treasurer of the American Educational Research Association and as member of a committee of this agency on researches in education carried on in the armed forces.

Another staff member was secretary of the National Committee on Coordination in Secondary Education.

The Joint Committee on Rural Sanitation, a committee composed of representatives of various Government agencies, established a subcommittee for the development of a bulletin on Rural Food Sanitation. A member of the division is chairman of this subcommittee.

The Inter-Agency Committee on Migrant Labor selected a member of the division to be chairman of a work group to develop recommendations on how to provide educational opportunities for the children of migrant workers.

The Cooperative Study of Secondary School Standards has been building up its funds in anticipation of a major revision of its evaluative criteria and procedures which were released in 1940 and have been used by thousands of high schools since that time. The division continued assignment of one of its members as secretary-treasurer of this organization.

The division continued cooperation with the American Dental Association by designating one of its members as consultant to the Committee on Dental Health for Children and Youth. During the

year the committee prepared a manual on dental programs for young people in which schools cooperate.

Other cooperations in which members of the section on organization and supervision served were:

Consultant to the research committee of Phi Delta Kappa.
Membership on the Inter-Agency Committee on Educational Allowances.
Membership on a committee on teacher exchanges established jointly by the Department of State and the Office of Education of the Federal Security Agency.
Services on two committees of the American Vocational Association—one on industrial arts policy and planning committee, the other a committee on standards of attainment in industrial arts.
Service with the Rural Service Division of the National Education Association in developing an effective program for meeting postwar agricultural and economic problems of the Cotton Belt.

Instructional Problems

Organization

The Section on Instructional Problems became a reality in the latter part of the 1946 fiscal year with the appointment of a Chief, a Specialist for Social Sciences and Geography, and a Specialist for Science.

The Specialist for Health Instruction, Physical Education, and Athletics had been assigned to this section at the time the Division of Secondary Education was established. The Specialist for Social Sciences and Geography and the Specialist for Science began their duties on February 15, 1946; and the chief of the section entered upon his duties April 24, 1946.

On March 28, 1946, an Inter-Divisional Committee on Education in the Natural Sciences was appointed "to insure careful consideration throughout the Office of a program of studies and services by the Office of Education in the field of natural science." The Specialist for Science was named chairman of the inter-departmental committee. On April 22, 1946, an Inter-Divisional Committee on School and College Health Services· Health Instruction, Physical Education, and Athletics was established. The Specialist for Health Instruction, Physical Education, and Athletics was appointed chairman of this committee.

The fiscal year closed with four professional workers. The projected plans for the section call for specialists in each of the broad fields of learning, working as a unified team in assisting school districts and State systems to improve instruction in the secondary schools of the Nation.

Studies

The Specialist for Health Instruction, Physical Education, and Athletics conducted an informal study to determine the *Cooperative*

Arrangements Between Departments of Health and Education in the Various States. The results of the study were made available to State departments of health and State departments of education and other interested groups. There is also in process a study of the *Functional Status of State Health and Physical Education Programs.* The many changes in legal and other requirements regarding instruction in health and physical education in the various States have caused schools to develop significant improvements in their programs. This study will reveal the actual status of these developments. It is expected that the study will be published by the Office during the 1947 fiscal year.

A bibliography of secondary school science courses of study was published in School Life, November 1945. It consisted of a review of 43 annotated bibliographical citations for the secondary school level. There is under way an exploratory study to secure information from the various States and territories regarding in-service training programs provided for science teachers. This information will be of value to the many science departments which, due to war conditions, are staffed with teachers who possess but limited training and experience for their work.

The Specialist for Social Sciences and Geography made preliminary plans for a study to consist of an inquiry into the teaching of United States history. The inquiry, as planned, will reveal important characteristics of the nature and extent of these courses. The question has been raised as to whether or not American youth have proper and adequate opportunities to learn the history of their country. This study represents an effort to secure the facts. A preliminary schedule of information to be secured was prepared in the fiscal year 1946 and plans were developed for securing the cooperation of State departments of education in conducting the study.

The periodic report, issued by this Office, on subject enrollment in public high schools was interrupted by the war. Such studies reveal trends and developments in curricular offerings and are of much value not only to those working with curriculum development in this Office but also to curriculum planners in secondary schools, teacher training institutions, and State departments of education. In order to secure current data and to provide comparisons with previous years, there is under way, in cooperation with the section on Research and Statistics, plans for making a study to cover such data for the year 1946–47.

Consultative Services

The Specialist for Health Instruction, Physical Education, and Athletics served as the officially appointed consultant in health educa-

tion to the Health Education Section of the United States Public Health Service. He also provided leadership and consultative services in connection with a total of 6 workshops and 28 conferences through which hundreds of school workers in all parts of the Nation in the field of health, physical education, and athletics received opportunities to become more skillful and competent in their work. This specialist assisted a group of non-Federal agencies to develop effective programs of health services for employed groups. He provided consultative service for the Southern States Work Conference on Educational Problems covering 14 States. This conference prepared a document entitled *Suggestions for State and Local Studies of Health and Physical Education in the Southern Region.* He served as a consultant to the State department of education and the faculties of seven universities in California in the improvement of teacher training programs; and he worked with the State department of education and the State universities in North Carolina in the development of improved State health programs. He worked with the Midwest Physical Education Association and a number of State health and physical education associations in planning their programs of action.

The Specialist for Science served as a consultant to committees of teachers working for the improvement of science instruction in the States of North Carolina, South Carolina, and Georgia. He also served as chairman and consultant for the Western Area Science Leadership Training Institute held at Oakland, Calif. He consulted with leaders in State departments and public schools in Salt Lake City, Utah, Denver, Colo., Lincoln, Nebr., and Columbus, Ohio.

The Specialist for Social Sciences and Geography and the Specialist for Science served as members of the staff making the survey of the public schools of Delaware. After spending a week in school visitation, they prepared reports containing their findings and recommendations and submitted them to the chairman of the survey. The Specialist for Social Sciences served as a consultant to the committee working on social science courses for the agricultural and technical institutes of New York State. He acted as consultant to social studies curriculum committees in Cleveland, Milwaukee, Indianapolis, Cincinnati, as well as to similar committees from several communities in the State of Washington. He was a consultant to the Committee on World Relations in State Education Programs which had been appointed by the chief State school officers for the purpose of preparing a document to aid the States in this important work. This specialist acted as consultant to the Cooperative Test Service of the American Council on Education in the preparation of specifications for a new series of achievement examinations in history, and assisted with the preparation of specifications for a new history section on the graduate record examination test, American Council on Education.

The Chief of Instructional Problems served as consultant to the Bureau of Educational Research, College of Education, University of Alabama, in connection with the survey of the Mobile, Ala., public schools. A written report of the findings and recommendations resulting from this visitation and consultation was prepared for the use of the survey staff. He served as a consultant in the Maryland State Department of Education sponsored curriculum workshops at Towson State Teachers College and at Bowie State Teachers College for Negroes. Since the principal purpose of the workshops was to produce resource units for use in the rapidly developing junior high schools of the State, the personnel of the 11 working committees at each workshop represented careful selections from among the most able teachers and administrators in Maryland. During the 2-week period, 10 complete resource units and a manual for teachers were prepared.

Cooperative Services

The Specialist for Health Instruction, Physical Education, and Athletics served as chairman of an inter-agency committee which did the research for, prepared, and published a statement of the "Health Needs of School-Age Children and Recommendations for Implementation" (SCHOOL LIFE, vol. 28, No. 2). He was a member of a national committee on school health policies as well as several other important national committees working in the field of health, physical education, and athletics. Participation in the activities of these numerous committees involved the preparation of many bulletins and reports. This specialist assisted with the preparation of a yearbook to be published by the Department of Rural Education, National Education Association, dealing with health and physical education for rural schools. He also worked with a committee of the National Congress of Parents and Teachers in making plans for the national meeting of that organization in which emphasis was given to the health needs of school-age children. He represented the Office of Education on the National Conference for Cooperation in Health Education in connection with the work of preparing handbooks for school administrators, school physicians, and school nurses. In April 1946 he was named vice president of the American Association for Health, Physical Education, and Recreation, of the National Education Association.

Members of the section participated in the conferences of many State and national organizations of which the following are illustrative: American Association of School Administrators; American Political Science Association; National Education Association; American Association for Health, Physical Education, and Recreation; Association for Supervision and Curriculum Development; National Council for the Social Studies; National Science Teachers Association;

American Association for the Advancement of Science; Society of State Directors of Health and Physical Education; American Public Health Association; National Recreation Association; and various associations of the National Education Association.

Even though three of the four members of this section entered upon their duties late in the fiscal year, over 50 invitations to make public addresses were accepted. These addresses were made before audiences ranging in size from 50 persons to 600 persons and located in 26 States and the District of Columbia. They met extensive correspondence dealing with inquiries from teachers, administrators, and others seeking information on professional and related aspects of instruction in not only the subject matter fields represented by the existing specialists but also in all other fields at the secondary school level. Responses to such inquiries coming from every State in the Union have gone forward from this section in numbers averaging over 300 per month.

The Specialist for Science served as president of the National Science Teachers Association in which connection he worked with several committees of the association, some of which worked jointly with other organizations, such as the American Association for the Advancement of Science, the Department of State, the Consumer Education Study of the National Association of Secondary-School Principals, the National Better Business Bureau, the American Association of Teachers Colleges, the United States Soil Conservation Service, the United States Forestry Service, and the Bureau of Naval Personnel. Among the accomplishments of these committees were: (1) The preparation of a report on Science Course Content and Teaching Apparatus Used in Schools and Colleges of the United States, (2) the preparation of a report on Spectifications for Commercial Supplementary Teaching Materials for Science, (3) planning a report on minimum standards for science laboratories as a basis for accrediting training institutions for teachers, and (4) planning a report on the Preparation of High School Science and Mathematics Teachers.

Among services rendered to committees and organizations by the Specialist for Social Sciences and Geography were the following: (1) Member of a planning committee for the Institute on the Position of the United States in World Affairs, jointly sponsored by the Civic Education Press and American University, (2) representative of the National Council for the Social Studies on the Committee on International Relations appointed by the National Education Association, (3) membership on a committee appointed by the National Council for the Social Studies to cooperate with the Treasury Department in preparing a bulletin on inflation, (4) membership on an Office of Education committee to cooperate with the Department of Justice in planning a Conference on Juvenile Delinquency, (5) assistance to the

Navy Department by rating the National contest essays of high school students on the subject, "What the United States Navy Means to Me," and by reading for historical accuracy the manuscript on the United States Navy for use in the indoctrination program for enlisted men, and (6) cooperation with the National Education Association in the preparation of a bibliography for use by educational workers in Korea.

In addition to those already referred to, members of the section prepared the following articles: (1) A section on the metric system in science teaching for the current yearbook of the National Council for Teachers of Mathematics; (2) an article on cooperative efforts for the improvement of science teaching in secondary schools (this paper was read at the meeting of the Society for the Promotion of Engineering Education held in St. Louis, June 1946. The paper will be printed in a forthcoming issue of the journal of that society); and (3) coauthorship of chapter V, "The Measurement of Understanding in the Social Studies," 45th Yearbook of the National Society for the Study of Education, 1946.

VOCATIONAL EDUCATION

In addition to the responsibilities for administering the federally aided program of vocational education, the Vocational Division was concerned with three major activities during the fiscal year, namely: (1) closing of wartime interests and activities with the necessary adjustments thereto; (2) salvaging useful assets growing out of specific war training programs administered in cooperation with the States by the Vocational Division; and (3) helping the States to accomplish the objectives set up in the bulletin entitled "Vocational Education in the Years Ahead." This bulletin, published during the year, was the report of a committee appointed to study vocational training problems in the postwar years.

Enrollments in vocational classes for the fiscal years 1945 and 1946 are shown in table 1, by type of program. Figures for 1945 are the latest for which complete reports are available. Figures for 1946 are based upon preliminary reports from the States and may be revised.

TABLE 1.—*Enrollment in federally aided vocational classes by the type of program, fiscal years 1944–45 and 1945–46*

Type of program	Enrollment	
	1944–45	1945–46 [1]
Total	2,012,931	2,205,397
Agriculture	446,953	494,182
Distributive occupations	152,781	173,475
Home economics	890,464	911,592
Trade and industry	522,733	626,148

[1] Provisional figures, subject to final review of State reports.

Federal, State, and local funds expended for vocational education during the fiscal years 1945 and 1946 are shown in table 2 by type of program. Expenditures given for 1945 are the latest for which complete reports are available, while the expenditures reported for 1946 are based upon preliminary reports from the States.

Agricultural Education

At the beginning of the school year the total number of teachers of vocational agriculture was 6,547, which represented a loss of about 400 from the previous year. Although final figures are not yet available,

it is known that many teachers returned during the year from their war activities and that the total number of vocational agriculture teachers will likely be about the same as in 1945.

TABLE 2.—*Expenditure of Federal, State, and local funds for vocational education by type of program, fiscal years 1944–45 and 1945–46*

Source of funds	Expenditure by type of program				
	All programs	Agriculture	Distributive	Home economics	Trade and industry
1	2	3	4	5	6
1944–45					
Total	$65, 638, 689. 84	$19, 151, 605. 90	$1, 932, 776. 62	$18, 217, 859. 30	$26, 336, 448. 02
Federal	20, 004, 573. 38	7, 137, 391. 95	941, 836. 13	5, 097, 062. 60	6, 828, 282. 70
State	15, 344, 815. 44	4, 423, 239. 37	562, 281. 68	4, 396, 867. 48	5, 962, 426. 91
Local	30, 289, 301. 02	7, 590, 974. 58	428, 658. 81	8, 723, 929. 22	13, 545, 738. 41
1945–46 [1]					
Total	$67, 747, 985. 38	$19, 785, 998. 11	$2, 213, 907. 38	$18, 656, 047. 95	$27, 092, 031. 94
Federal	18, 561, 448. 11	6, 618, 216. 25	961, 224. 06	4, 425, 185. 27	6, 556, 822. 53
State	16, 451, 118. 45	4, 540, 336. 55	642, 997. 75	4, 833, 166. 94	6, 434, 617. 21
Local	32, 735, 418. 82	8, 627, 445. 31	609, 685. 57	9, 397, 695. 74	14, 100, 592. 20

[1] Provisional figures, subject to final audit of State reports.

Source: Digest of Annual Reports of State Boards for Vocational Education.

Special Programs

A special grant program in food preservation continued during the year until the end of December. In this program 429,061 persons were enrolled in approximately 3,200 food preservation centers. The number of quarts of fruits, vegetables, and meat canned amounted to 29,554,059, not including dehydrated and frozen food.

Just before the end of the fiscal year Congress appropriated $1,337,000 for a food conservation program extending from June 10, 1946, to June 30, 1947.

Program Planning

The central theme of regional conferences and presentations made by representatives of the Office before meetings and in consultations was pointed specifically to developments in agricultural education that appear desirable in the years ahead. Among the more striking features to receive consideration in the transition from war to peace are the establishment of area schools in several States where this form of expansion appears desirable in rendering more effective service to farm people, rebuilding and strengthening the basic features of the Future Farmers and New Farmers of America through resumption of many activities curtailed during the war period, and added emphasis to in-service training of employed teachers of voca-

tional agriculture for upgrading poorly qualified war emergency teachers and to enable former teachers, following prolonged service in the armed forces, to adapt new program features.

Typical of the need for emphasis directed to in-service training of employed teachers is the report of teacher turn-over in one State, revealing that 85 different teachers were employed in 17 positions during the 4 war years. Other postwar developments to receive emphasis are: The reopening of many hundreds of departments closed during the war due to a lack of teachers; special measures to acquaint school officials with the purposes of vocational agriculture in the public schools; the establishment of local advisory councils for agricultural education in many States; the systematic follow-up of all-day students to full establishment in farming through young farmer and adult farmer classes; the elimination of prorated teachers of vocational agriculture; the expansion of the program to many new centers to attain greater accessibility for instruction in agriculture; added emphasis on the preparation of teachers in the field of farm mechanics and agricultural engineering in order to meet the demands of an increasingly more highly mechanized agriculture; and in preemployment teacher training programs to increase the amount of time devoted to directed teaching and observation and to expand the participating experience of trainees to include all aspects of a complete program in agricultural education. Improving the program of vocational agriculture so as to more effectively serve all farm people is the goal in the years ahead.

Veterans' Training

Veterans' training in agriculture is organized and uniformly operated by the Veterans' Administration in cooperation with the United States Office of Education.

After the passage of Public Law 346, the Veterans' Administration took the position that the Agricultural Education Service of the United States Office of Education, through the same services in the various States, was in the best position to provide the type of farm training needed by veterans who expected to farm.

The representatives of the Veterans' Administration in Washington and the Veterans' Administration in the several States met in regional conferences with the regional agents in agricultural education for the purpose of developing uniform policies relating to the operation of the training program. Following these conferences, the agent in agricultural education, the State Veterans' Administration, and the State staffs in agricultural education met in conferences within the States for the purpose of developing a State plan for veterans' training in agriculture which represented the contract between the

State Veterans' Administration and the State Board for Vocational Education. Whenever the plan included the training of veterans under Public Law 16, the Veterans' Administration in Washington also approved the State plan.

After the training program had been under way in the States for several months, the Retraining and Reemployment Administration representatives met with representatives of the United States Office of Education for the purpose of determining the policies relative to farm training for veterans from the standpoint of on-the-job training and self-proprietorship training. The RRA, as a result of these conferences, assumed jurisdiction over the on-the-job farm training, and left the responsibility for institutional-on-farm training to the Agricultural Education Service. A document entitled "Recommended Criteria for Schools Offering Institutional-on-Farm Training of Less Than College Grade for Veterans" was issued for use in the States.

Teacher Training

The effects of the war on agriculture and the program of agricultural education, the training needs to be met, and the basic features of the program in vocational agriculture all need to be taken into account in redeveloping and improving the program of agricultural teacher training. Features which have been promoted in agricultural teacher training during the year through the medium of regional meetings, publications, cooperative surveys and conferences represent a continuation of the work of the preceding year.

In addition, a comprehensive study was initiated relating to the character of training provided beginning teachers of vocational agriculture in the field of farm mechanics and agricultural engineering. This study is being carried out in cooperation with the American Society of Agricultural Engineers. The A. S. A. E. national committee, in projecting its program for the improvement of training for teachers, held one session to initiate the formulation of course material designed to achieve the objectives of the first report of the committee. Two regional meetings of State supervisors and agricultural engineers have been held to forward the purposes and objectives stated in the report of the national committee of representatives of vocational agriculture and the American Society of Agricultural Engineers which was designed to improve the training of teachers in vocational agriculture. Corresponding meetings have been held in many of the States.

Negro Housing Project

Negro teacher trainers in agriculture and home economics prepared a bulletin entitled, "An Educational Program for Improving Housing

Conditions of Negro Farm Families," which was issued in mimeographed form and used experimentally in 98 centers in 17 States during the year.

Farm Youth Organizations

The Future Farmers of America and the New Farmers of America, integral parts of the vocational agriculture program, have continued to provide valuable training and experience to students of vocational agriculture. Both the FFA and NFA held a national convention in 1945. Although attendance was limited, plans were made to redirect the activities of these organizations so they can be of most service in our reconversion effort. One of the major war emergency achievements last year by these organizations was the production and canning of approximately 1,000,000 cans of food for war relief. Membership in both of these farm boy organizations increased during the year and there was also an increase in the number of local chapters.

Research

The major project this year was the completion of the report of the Committee on Standards for Vocational Education in Agriculture. This report is based on an evaluation of 400 local programs and the findings have an important bearing on the forthcoming revision of the policy bulletin and the State plans.

Subject Matter

The service resumed its subject matter activities during the year. An agent in the service has been assigned to consult with specialists in the United States Department of Agriculture so that supervisors and teachers may be kept informed about new and other appropriate subject matter.

Business Education

In making the adjustment from a wartime to a peacetime program, constructive help was given to States in rebuilding supervisory staffs, expanding teacher-training programs, building long-term occupational training programs, developing cooperative relations with trade, professional, and educational associations, and planning cooperative programs of research.

Supervision

During the war there was a 95 percent turn-over of State supervisors. At the beginning of the fiscal year 16 States were without the services of a State supervisor for the distributive phase of business education and approximately 30 of the States did not employ a supervisor who was responsible for both the office training and distrib-

utive phases of business education. In accordance with the recommendation in Vocational Division Bulletin No. 234, *Vocational Education in the Years Ahead*, the Service has encouraged the employment of qualified head supervisors of business education who would give leadership and direction to all phases of business education.

Teacher Training

The inevitable de-emphasis of preservice teacher training during the war, particularly as it related to the training of teachers and coordinators of the distributive phase of business education; the serious shortage of qualified teachers, coordinators, and supervisors in every phase of business education; the rapid turn-over of teaching and supervisory personnel; and the need for greatly expanded local programs for youth and adults made it necessary that major emphasis be given to the rebuilding and expansion of teacher-training programs on both a preservice and in-service basis.

Assistance was given by professional staff members to the States and teacher-training institutions in developing adequate preservice teacher-training programs. The service promoted the organization of such preservice training on a cooperative basis in which adequate technical and professional training supplements occupational experience.

During the year the service in cooperation with a representative group of supervisors, teacher-trainers, and businessmen began the development of an in-service or graduate course in business teacher-training that combines work-experience, job analysis, and curriculum building to insure a proper balance and integration of technical training, professional training, and business experience; and to provide for the continuous improvement of teachers and supervisors by keeping their training and business experience current and adjusted to constantly changing needs.

Staff members conducted or participated in area and State conferences of supervisors, teachers, and coordinators. Assistance was given in local program planning and in the improvement of methods of promoting, organizing, and conducting classes for employed adults. Staff members also conducted institutes for the training of conference leaders and teachers of the supervisory courses in job-instruction training, human-relations training, and job-methods training. The demand for supervisory courses comes from department heads, supervisors, junior executives, personnel directors, training directors, and managers in a great variety of business establishments and organizations.

Cooperation With Government and Non-Government Agencies

The service extended its cooperative relations with the United States Department of Commerce, various trade associations in the fields of

distribution and office management, and with professional and educational associations. Cooperative relations were maintained with these agencies in the interest of mutual understanding, cooperative research and planning, and for the development of instructional materials and Nation-wide training programs.

Program Planning

As the war-born emergencies affecting both personnel and training programs began to disappear, it became possible to rebuild and enlarge the program on State and local levels. Emphasis was placed during the year on helping the States to determine and identify training needs and in planning a well-balanced, comprehensive, and long-range training program to meet these needs. Assistance was given in developing a program which would include such elements as appropriate training for youth and adults; supervisory training for managers, department heads, and other supervisory personnel in business establishments; courses for the training and upgrading of owners and managers of small businesses; veteran training programs for the business occupations; and collegiate technical training in business administration, particularly distribution.

Research Activities

The service assisted teachers and supervisors, students of education, and professional organizations in planning and conducting studies and investigations dealing with or having a direct bearing on specific problems involved in establishing and operating classes and programs for various business occupations.

For returning servicemen and others wishing to establish or reopen small businesses of their own, an instructor's manual was developed for a course in the principles of selecting, organizing, and managing small business enterprises. The content of the manual was based on results of a study carried on in cooperation with trade-association executives, wholesalers, retailers, representatives of State boards for vocational education, and the Department of Commerce. The manual was made available to boards of education and other agencies carrying on training programs for persons starting small business enterprises and for owners and managers of small businesses already in operation.

A comprehensive study of practical and successful methods of organizing, supervising, and teaching business education was continued during the year with the assistance of a special advisory committee of educators, trade and professional association representatives, and businessmen.

Initial steps were taken in the development of a series of suggested research studies in cooperation with Delta Pi Epsilon, national

honorary research fraternity in business education. The purpose of this project is to determine and report the areas of business education for which findings of studies and investigations are inadequate or nonexistent though urgently needed. In this connection a conference of representative businessmen, educators, and research specialists was held in Washington for the purpose of sharing with the staff their experiences with reference to needed research.

Research activities also include the completion of a series of job analyses carried on in cooperation with the personnel group of the National Retail Dry Goods Association and the education committee of the National Restaurant Association. The purpose of these studies was to determine specific subject matter content, to indicate the relative importance of instructional topics, to establish profiles of various jobs in retail organizations, and to provide a scientific approach to the selection of students for cooperative part-time retailing classes.

Initial steps were taken in planning and coordinating a series of State conferences of teacher trainers, local school administrators, and State school officials to consider what research is most urgently needed in teacher training and how teacher-training institutions can contribute to the improvement of research. The first of this series of conferences was held in Kentucky.

Cooperative research relations were initiated with New York University, whereby the business-teacher-training department of that institution made available to this Office, without cost, a member of its staff for a period of time for the purpose of assisting the Business Education Service in carrying on a research project.

Home Economics Education

During the war, home economics education workers at Federal and State levels and teachers throughout the country assisted with (1) the national nutrition program, including nutrition education and school lunches; (2) the war food production and conservation programs; (3) the food-rationing and price-control program; (4) homemaking and family relationship problems in housing developments and in industrial centers; (5) the planned spending and saving campaigns of the Treasury and the Office of War Information; and (6) the work of the American Red Cross in home nursing, first aid, nutrition, and sewing.

For home economists in education there can be no definite closing of interests and activities affecting homes and families because of the transition from a wartime to a peacetime basis. Nutrition education; conservation of food, clothing, household furnishings and equipment; management of the home and constructive use of all resources avail-

able; home care of the sick; and child care and human relationships are equally important in peacetime and continue to be stressed in all home economics instruction.

Assistance to the States

In program planning—Perhaps the most important contribution made to the program planning by the staff during the year was the preparation of the chapter on Homemaking Education in the bulletin, *Vocational Education in the Years Ahead.*

The central theme of the four regional conferences held during the spring of 1946 was program planning. The Central Regional Conference dealt entirely with homemaking education for adults as a part of program planning. In these conferences a total of 461 home economics education workers—State and city supervisors, teacher trainers, and heads of college home economics departments—considered together problems involved in regional and State planning.

The consultant for family life education visited three of the four experimental centers and gave consultant service in planning community-wide programs of family life education in nine other centers. With the assistance of a regional agent she also gave consultant services in the initiating of a city-wide program of homemaking education for adults.

In the North Atlantic region a working conference for city supervisors of home economics was attended by 56 persons—city supervisors, State supervisors, and conference consultants. Emphasis was on plans for the development in cities of expanded programs of home economics and for space and equipment.

A member of the staff served as school lunch consultant for the Southern States Work Conference at Daytona Beach, participated in the workshop for school lunch supervisors and managers at Teachers College, Columbia University, and helped to prepare lists of equipment for school lunches for the Surplus Property Board. A publication, Planning and Equipping School Lunches, was prepared in cooperation with the Inter-Departmental Cooperating Committee on School Lunches.

A bulletin, Opportunities in Home Economics for Girls—A Guidance Aid, was prepared for use by school administrators, counselors, and teachers in advising high-school pupils on the place of homemaking education in their program of studies.

Planning space and equipment for homemaking instruction is one phase of State and local program planning. Revision of the bulletin on Space and Equipment for Homemaking Instruction progressed. Two staff members worked in five States on recommendations for space and equipment for the teaching of child development and in nine other States on equipment for home economics.

In curriculum study and revision.—Staff members worked with home economics faculties on curricula in 27 of the 106 reimbursed teacher-training institutions. The length of time given to concentrated work at institutions with one exception ranged from 1 to 10 days. One staff member spent three weeks in Hawaii giving special assistance in the study of the curriculum at the university.

A staff member carried a large share of the responsibility for (1) a conference on evaluation of textiles and clothing work which was attended by 50 representatives from colleges and universities in the Central region—a follow-up of the textiles and clothing conference held in 1944, and (2) a conference on teacher-training and curriculum. Two staff members directed a 2-week workshop of college teachers of family relationships from 14 institutions.

Regional agents worked with entire State supervisory and teacher-training staffs in six States on problems of adjustments in curricula and revision of study guides and courses of study. Cooperative studies of city programs of home economics education were made in two cities, and follow-ups were made of cooperative studies in two other cities. In two city systems, assistance was given to supervisors in planning changes in curricula for junior and senior high schools. Consultant service was given in a State conference of city supervisors of home economics in which problems of curriculum in home economics in city schools were considered.

One regional agent worked with representatives of a State teachers college in planning a workshop for supervisors and school administrators on the organization and administration of homemaking education programs for adults. Another assisted directly in the planning of workshops for teachers in three States.

In the in-service training of supervisors and teachers.—A conference in the Pacific region on State supervision, led by a staff member, was attended by 18 State and assistant State supervisors from 11 States. Other staff members participated in workshops or State conferences for teachers in five States.

The regional agents for the Southern and North Atlantic regions conducted the annual interregional home economics teacher-training conference for Negroes. The main theme was planning ahead in education for home and family living.

A staff member worked with supervisors and teachers in five States on problems in connection with the teaching of child development at the secondary-school level.

In stimulating and making studies and investigations.—A staff member served as consultant to the home economics research committee of the American Vocational Association in drawing up plans for and carrying on a national study of factors affecting the supply of home economics teachers; made a compilation of abstracts of dis-

sertations and professional studies in home economics since 1942; and worked in five States with persons directing or engaged in home economics education research.

In the development of two national youth organizations—The staff gave assistance to the national adviser and to State supervisors and State advisers in the further development of the Future Homemakers of America and the New Homemakers of America, both of which were organized in 1945.

At the end of the fiscal year the Future Homemakers of America had 168,057 members in 4,332 chapters in 45 States, Puerto Rico, and Hawaii, and the New Homemakers of America had 19,762 members in 579 chapters in 15 States, representing a gain for the former of over 73,000 members and for the latter of over 9,800 members during the year.

In interpreting the homemaking education program of the schools.—A staff member interviewed all persons from other countries who came to the Office for advice on home economics programs, provided them with home economics teaching materials and bibliographies, helped plan their itineraries, made necessary contacts with State personnel to assure the visitors an opportunity of seeing the type programs in which they were most interested, and advised on selection of college departments in which to study.

Homemaking Education in the Secondary Schools, a bulletin designed to answer requests from agencies, national organizations, and visitors from other countries for information on how the homemaking education program is organized, what it includes, and the methods of teaching used, was completed.

Cooperative Work With Other Agencies and Organizations

The staff worked with other divisions and sections within the Office on practical nursing education, better housing for Negro farm families, and services to visitors from other countries who were interested in home economics education. Assistance was given to 14 national organizations on various problems and projects related to home and family living; and cooperative work was done with 13 divisions of five Government agencies.

Trade and Industrial Education

The termination of the war production training program did not necessarily mean that either the representatives of the United States Office of Education or State authorities in trade and industrial education were involved in radical reconversion problems. Most States have continued their regular Smith-Hughes and George-Deen programs through the war period. The representatives of the United

States Office of Education had consistently followed the policy, beginning with the national defense training program in 1940, of advising State boards for vocational education not only to continue the regular program but to maintain standards as well.

Some of the contributions which the war production training program made to the regular program in trade and industrial education follow:

1. The widespread cooperation between the school authorities and private governmental agencies and groups during the war established trade and industrial education on a more solid basis.
2. The speed with which it was necessary to train military personnel and war workers necessitated the development of highly effective teaching methods. This experience has resulted in a greater effort on the part of teachers and supervisors in trade and industrial education to improve instructional materials and teaching methods.
3. The large amount of equipment purchased for the war production training program has reverted to the States for peacetime use.
4. Many trade-training programs established in new areas during the war are being continued on a permanent basis.

An especial effort was made during 1946 to cooperate with the States in the improvement of instruction in trade and industrial education. In pursuance of this purpose, the Office of Education assigned the four regional agents to study the work being done in the development of instructional materials and teaching methods in the industrial educational curriculum center for New York City and environs. After completing this task the agents immediately visited certain selected States to encourage and assist in the organization of similar projects.

The representatives of the Office cooperated with several groups during the year, as follows:

1. The National Association of State Supervisors and Teacher Trainers in making a study of the functions required in the operation of a local program of trade and industrial education, with special emphasis on the problems of instructional methods and content.
2. The National Safety Council in preparing a school shop safe practice pamphlet and in revising their bulletin entitled, "Safety in School Shops."
3. The National Safety Council Committee in devising methods for the improvement of safety education in schools and colleges.
4. The Army and Navy in providing basic information regarding instructional materials for job training.
5. The National Housing Authority in formulating plans for apprentice training in the building trades.
6. The representatives of the New York Central, the Union Pacific railroads, State officials in trade and industrial education and the Apprentice Training Service in planning and organizing a program of training for apprentices in six trades for the railroad industries.
7. State officials in trade and industrial education in numerous States in training teachers, coordinators, local supervisors, and directors, and

in developing instructional materials particularly for the building trades.

The study entitled *Vocational Education in the Years Ahead* contributed to the progress in trade and industrial education during the year in many ways. Probably the most immediate and direct value growing out of the work on the publication resulted from the numerous conferences held with State officials throughout the Nation. Postwar problems received serious and extended consideration at these meetings in so far as it was possible to determine them. The bulletin proved particularly useful as supplementary material for conferences and summer-school courses. Part I, which deals with the broader aspects of the social and economic problems affecting the Nation, has been a source of information for State boards for vocational education in their efforts to plan training programs for the future.

One of the most significant outcomes of the meetings conducted to determine the content of the bulletin grew out of the fact that the discussions emphasized the inadequacy of the public schools in meeting the major needs of all youth. In light of available data, the members of the conference were of the opinion that the college preparatory and vocational programs were probably serving with a reasonable degree of effectiveness not more than 40 percent of young people in so far as occupational needs are concerned. Therefore, almost two-thirds of the youths are not provided a comparative opportunity. A committee representing both general and vocational education was appointed to deal with this problem. A number of meetings were held during the year for the purpose of determining the chief factors involved as a basis for recommendations regarding the type of program that should be organized to meet the needs of these young people.

Aid was given foreign school representatives who were seeking information concerning the program of trade and industrial education in the United States. These persons were not only given advice and counsel regarding the organization and administration of trade and industrial education, but were provided bulletins dealing with training methods and content materials. In some instances itineraries were planned to enable them to study trade and industrial educatinal programs in operation.

Employee-Employer Relations

Improved relations and a clearer understanding of vocational education on the part of organized, interested groups, including labor and management, have resulted from the wartime vocational training activities. Many of the States and local communities are continuing the use of representative advisory committees set up for the war training programs in order to maintain labor and management coopera-

tive participation in the transition from wartime activities to the regular long-term vocational education programs. Counsel and advice from such committees has been especially helpful in veterans' training programs conducted by the public schools.

In addition to his work of promoting better employee-employer relations, the employee-employer relations consultant, at the request of the Governor of the Panama Canal Zone, assisted in the conduct of a survey of training needs and in making a report which included recommendations for the improvement and further development of the vocational education program in the Panama Canal Zone.

Public Service Training

With the close of World War II and the gradual shift of emphasis back to the regular program of vocational education, more attention has been given to improving the efficiency of publicly employed personnel.

The public service training consultant assisted representatives of State boards for vocational education in connection with plans for organizing, maintaining and improving programs of training for public servants; conducted demonstration instructor-training courses and conferences to increase teaching personnel in States; appeared on national and State fire-training programs; prepared instructional materials; maintained working relationships with the various agencies and organizations concerned with improving the efficiency of public employees such as the American Municipal Association and the Federal Bureau of Investigation; and also served as chairman of the National Fire Protection Association's Committee on Firemen's Training.

Continued from the previous fiscal year was a project carried out with the Office of the Chief of Engineers, Army Service Forces, War Department, in which the consultant served as coinstructor in a series of three 30-hour fire instructor training schools held at Denver, Colo., Memphis, Tenn., and New York City. Some 75 men of designated service commands received instructor training.

Occupational Information and Guidance

Forty-two States are now providing specific supervision in occupational information and guidance. To serve these at the Federal level, the Occupational Information and Guidance Service during the year has been engaged in stimulating an understanding of technical skills; developing clear patterns of administrative relationships from State supervision to a program in a small school; developing the analysis of the knowledges and skills involved which require training not now available in many areas; and promoting and suggesting patterns for

this training, both pre-service and in-service; serving as liaison among national public and private agencies, organizations, and institutions which are engaged in guidance work. Another activity has been that of serving as a central agency to answer those requests related to guidance work which any student, professional person, or citizen may make.

Program Developments

The staff of the Occupational Information and Guidance Service assisted in many phases of program developments. The field specialist visited 27 States, 56 cities, and 17 colleges. He participated in 1 national conference, 2 regional conferences, and 12 State conferences. Other members of the staff rendered field service in areas of work in keeping with their special assignments. The following are representative types of assistance given to States in program planning:

Training activities.—The pre-service and in-service training of counselors has been accepted as a major responsibility by most States Much of the work of the Service this year was in the nature of a follow-up of two regional conferences held in April 1945 of colleges and universities engaged in the professional preparation of guidance workers in an effort to encourage them to develop and improve facilities for providing training in guidance work for teachers and counselors. Developing plans for the organization of in-service training was carried on in such work conferences as those held by Nebraska and other States. Michigan, West Virginia, Georgia, and other States were given assistance through their State staffs or colleges in their in-service training work, usually organized on a local or county basis.

Promotional work.—Some of the common types of promotional work occupying the attention of the States in which staff members of this Service have rendered assistance are as follows:

1. Visiting, with State officials, local schools and participating in conferences arranged for guidance workers, and in many instances for the entire staff.
2. Issuing publications and other material at the national level; stimulating research, and the preparation of bulletins and other sorts of publications at the State level; acting as a reviewing agent for State material.
3. Participation of staff members in the States with State personnel in meetings of professional organizations.

Cooperation with other services of the Vocational Division.—Another phase of program building has been the cooperation of the Service with other units of the Vocational Division and the State Supervisors of Occupational Information and Guidance in developing material, practices, and procedures useful to vocational teachers and students. Some of the activities were the results of follow-up on practices and techniques outlined in the bulletin entitled "Selection

of Students for Vocational Training." Professional assistance has been rendered to many States in the development and publication of bibliographies for counseling with vocational students. These revealed sources, kinds, and uses of occupational information. Directories of training opportunities with particular reference to training opportunities available for veterans and adults were included. State school officials were aided both by this Service and their own State supervisors in the supplying of needed information in the curriculum studies. Two staff members from this Service worked in the State-wide survey of vocational education in one State.

Research projects.—The Occupational Information and Guidance Service, in cooperation with the Division of Higher Education, made a Nation-wide study of the offerings in the fields of guidance and personnel work in colleges and universities, which is useful to personnel workers, administrators, teachers, counselors, and college staffs. Another research project at the national level was determining the number of schools providing organized instruction in a course in occupational information, whether or not it was prescribed, and at what grade or achievement level. Stimulation and assistance to the States have been offered in the making of surveys of guidance practices in the States, the number of personnel assigned to specific phases of guidance work, and the amount and content of the training which guidance workers had.

Development of basic concepts through various types of conferences.—Program planning with the States included the development of certain basic concepts, such as the understanding that guidance is a responsibility of the school and that each staff member has a contribution to make. Much time and effort have gone into this type of work through field visits, correspondence, national and regional conferences. The instigation of studies and the preparation of material at the State level were encouraged. Local conferences to which school administrators were invited were a common means of work.

A national conference of State supervisors of occupational information and guidance was held in Denver, Colo., to consider problems of program development and administration. Fifty State supervisors of occupational information and guidance, counselor trainers, and State school officials from 33 States devoted an entire week to a working conference. Such problems as State administration, local administration, in-service training and local supervision, techniques, occupational information, and services from the Federal office were on the agenda. Eight working committees previously set up gave specific reports on the following topics: In-service training, the certification of guidance workers, occupational information, evaluation of guidance programs, administrative provisions for guidance programs in small schools, school-leaving record, and terminology. The reports of these

committees have been distributed. Some of the reports are significant of new trends in guidance work and should develop into further exploration. Standing committees with an expanded membership have been organized for each topic and it is expected that the work of these committees will result in further reports at a later date.

Service as a national resource in the guidance field.—In spite of the handicap of being short two staff members, considerable assistance was given to agencies which have guidance-related projects. Active cooperation has taken place with the following agencies: The Department of Labor, National Vocational Guidance Association, Public Health Service, National League of Nursing Education, the Retraining and Reemployment Administration, the Southern States Work Conference, professional associations requiring editorial or writing services on occupational briefs, the Council of Guidance and Personnel Association, the Council of Social Agencies, the American Vocational Association, and others. Cooperative ventures have or will eventuate in joint publications and should be useful to students, guidance workers, and school officials.

Miscellaneous activities.—Members of the staff participated in various conferences and workshops interested in problems related to guidance work. Particular significance is attached to participation in group work involving public school and college administrators. Problems included patterns of guidance services for different types of administrative units, surveying the best practices for establishing on-campus guidance programs, and extension of training opportunities for guidance workers. Continuing close cooperation between the United States Employment Service and this Service eventually will affect publications of both agencies and result in relationships beneficial to students at time of entering permanent employment. Staff members have supplied many articles to magazines and professional journals. Several manuscripts are awaiting printing. Many short mimeographed releases have been prepared.

TABLE 3.—*Funds available for allotment to States from Smith-Hughes and George-Deen Acts, fiscal year ending June 30, 1946*

Purpose	Smith-Hughes Act	George-Deen Act
Total	[1] $7,285,122.03	[2] $14,483,000.00
Agricultural education	3,058,452.99	4,066,465.00
Trade and industrial education	[3] 3,111,913.15	4,056,857.50
Home economics education		4,051,677.50
Distributive occupations		1,254,000.00
Teacher training	1,114,755.89	1,054,000.00

[1] Includes appropriation for Hawaii and Puerto Rico under separate authorizing acts. Total appropriation Smith-Hughes Act, $7,167,000; Hawaii, $30,000; Puerto Rico, $105,000.

[2] Allotments to the States are made on the basis of this amount as authorized in the act. Actual appropriation for fiscal year 1946, $14,200,000

[3] Allotment for home economics included in trade and industrial allotment, not to exceed 20 percent for home economics.

HIGHER EDUCATION

The transition period of war demobilization and reconversion brought demands for peacetime services by institutions of higher education that are probably unprecedented in the history of America.

During 1946, national leadership in higher education was in constant demand and that demand continues to increase. Gigantic war training and production programs have been discontinued, and their lessons for the future should be interpreted and recorded before they are forgotten. Perhaps the greatest peacetime educational undertaking of any national Government in all history was initiated in the passage of the Servicemen's Readjustment Act of 1944 and related legislation, which provided higher, secondary, and vocational education for veterans. The shortage of teachers and prospective teachers has continued undiminished in both colleges and schools. Accompanying a marked shortage of qualified staff members in higher education was a serious shortage of college housing and other plant facilities. These shortages have developed at a time when more than a half million veterans and a backed-up flow of tens of thousands of young war workers are returning to the schools.

During the year, there was renewed interest in the field of curriculum and course revision. Such interest is intensified by the growing consciousness of the new role of America in international affairs, of the need for more effective civic instruction, of new applications of the physical sciences, and of new developments in health, transportation, construction, and other fields. Important new instructional elements are insistently demanded in the entire postwar pattern of knowledge, ideas, and attitudes which constitute the subject matter of higher education.

Changes in personnel during the year included the retirement of the Director, Dr. Fred J. Kelly, at the end of 15 years of distinguished service, and the appointment of Dr. John Dale Russell as his successor. A specialist in engineering education was added to the staff of the division, the Office's specialist in Negro education was transferred to it, and the specialist in the education of school administrators, who had returned from Army service, was transferred to another division of the Office.

Study of Vocational Education of College Grade

The investigation of vocational education of college grade which was initiated during the previous year was completed. The report was

prepared through cooperative action of the staff and it is titled, Bulletin 1946, No. 18, Vocational Education of College Grade. The report describes the evolving program of intermediate education covering the indeterminate area between the work of the trade school and the professional school. Such intermediate work, including certain essential elements of general subject matter necessary to meet broad educational objectives in addition to purely vocational instruction, is increasingly in demand by veterans and others who desire college training that will prepare them for life and a job in less than 4 years. This and related types of college preparation, customarily given in community colleges, technical institutes, college lower division terminal curriculums, and similar institutions and units, are assuming an importance which must increasingly be taken into account by school men, Government authorities, and the general public.

Teacher Shortage and Its Remedies

The shortage of teachers, which was one of the most serious of all wartime problems in education, continued through the year with little or no improvement either in the schools or in the colleges. The number of emergency permits issued to public school teachers increased from 79,000 to 108,000, and many colleges reported unfilled vacancies on their staffs. Enrollments in teacher-preparation institutions continued to lag, amounting in October 1945 to less than two-thirds of the enrollments in 1940-41.

To meet the nationally recognized need for more and better qualified teachers, the specialist for teacher education devoted considerable time to the preparation and dissemination of materials useful in the placement, recruitment, certification, and employment of teachers. Divisional staff members participated in national conferences on teacher personnel problems, the most important being the National Emergency Conference on Teacher Preparation and Supply, which was organized by the National Education Association, and attended by approximately 300 representatives from practically all States.

Progress during the year in the improvement of teachers' salaries and working conditions was continuous, although rather slow. To regain the quality and extent even of prewar educational services may require from 2 to 5 years. Progress during the coming year will depend to a considerable extent upon the effectiveness of current efforts to inform the public accurately and fully concerning the nature and extent of current public school and college teacher shortages and the means required to remedy them.

Services in Preservice Teacher Education

An example of staff participation in national conferences devoted to the improvement of teacher education is afforded by the work of a

staff member in the Third School for Executives, held at Chautauqua Lake, New York, June 17 to 27. This work conference on teacher-preparation problems was sponsored by the American Association of Teachers Colleges and affiliated groups. It was attended by approximately 175 presidents, deans, and other executives and staff members of teachers colleges and of colleges, as well as representatives of various schools, school systems, and educational organizations.

Most of the States were represented. Eight major and a few minor working groups were organized to discuss problems proposed by those attending, several addresses by prominent educators and others were delivered, and a number of processed reports were prepared on current educational areas of interest. Since the problems studied were decided upon by vote of the widely diversified membership of the group, the subject matter of the reports indicate some of the aspects of teacher education that were of greatest interest in the country during 1946: Teacher recruitment and selection; leading the professional growth of faculties; faculty organization and administration; general education; child development and improvement of direct experience of prospective teachers; regional general college work; college self-evaluation; and development of international understanding.

The nature of the problems in teacher education to which the staff gave attention in 1946 is further illustrated by the fields of inquiry of primary concern in the meeting of the Eastern States Association of Professional Schools for Teachers in New York City, which was attended by more than 1,000 students and faculty members, and in which the divisional staff was represented. These topics included: Revision of teacher-preparation curricula to meet the needs of the postwar world, teachers and international understandings, real life appraisal of teacher-education problems, needs and interests of students, improvement of teacher certification, and development of students in the power to think through the solutions to educational problems on their own initiative.

Staff members of the Office completed their work in a State-wide investigation of teacher education in State supported institutions, as a part of the Mississippi Study of Higher Education, initiated the preceding year.

Periodical Publication

The periodical, Higher Education, publication of which began in January 1945, was continued. Volume 2 was started with the issue of September 1, 1945, and closed with the issue of May 15, 1946. Eighteen issues were published.

In accordance with basic purposes of the Office of Education, the publication includes information concerning Federal policies and activities related to higher education, reports of studies made by staff

members of the Office, and materials from colleges, universities, and educational organizations and associations. The purpose is to aid the people of the Nation, and particularly those who formulate and execute policies for higher education, in establishing and maintaining efficient schools, colleges, and universities. The periodical is also a means whereby people of other nations may learn about higher education in the United States.

HIGHER EDUCATION is sent free to college and university presidents, deans of most of the schools in higher institutions, and a limited number of other officials, and to a number of public libraries. Others may receive it, at a subscription rate of 75 cents a year, from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Land-Grant Colleges and Universities

The Office carried on the usual reporting and certification activities relating to the land-grant colleges and universities. During the year 1944–45 these 69 institutions enrolled 154,425 civilian and 38,890 military students in residence, a total of 193,315. This number was smaller than the enrollment in 1940–41 by 79,077. A total of 25,952 degrees were conferred, of which number 3,151 were graduate degrees.

The income of the land-grant colleges and universities for general and educational purposes for the year 1944–45 was $278,121,756, of which $115,429,772, or 42 percent, was from Federal sources. An additional amount of $5,920,933 was received for physical plant and $11,643,441 for additions to endowment. These figures may be compared with similar data for 1940–41, in which year the total income for educational and general purposes was $172,186,672, about 18 percent of it from Federal sources. The amount received by the land-grant colleges and universities for the year 1944–45 in accordance with the Second Morrill Act, the Nelson amendment, and the Bankhead-Jones Act (title II, sec. 22) was $5,030,000.

Visits of 1 to 3 days' duration were made to 3 land-grant colleges and universities for the purpose of studying their programs and learning about new developments in their organization and activities. A member of the staff attended the annual meeting of the Association of Land-Grant Colleges and Universities.

During the fiscal year 1946 the Division, in cooperation with a committee appointed by the executive committee of the Association of Land-Grant Colleges and Universities, began a study of curricula of less than degree length in the land-grant colleges and universities. Such curricula have been offered for years in these institutions. Currently there is a renewed interest in them. The study is being made to provide some guidance for institutions now offering or planning to offer curricula of this type.

Howard University

During the fiscal year 1946, the seventy-ninth in the history of Howard University, the institution operated 12 schools and colleges, enrolled approximately 5,130 students, and employed a teaching staff of 334 persons—209 on a full-time basis and 125 on a part-time basis. The total expenditures for the year, exclusive of auxiliary enterprises and scholarships, was approximately $1,779,100, of which amount $1,117,527 was from the Federal Government.

During the year Dr. George A. Works conducted an educational survey of Howard University under the auspices of the Administrator, Federal Security Agency. The Division of Higher Education served as staff headquarters for the survey. Two members of the staff rendered extensive professional service to the project; one made a study of certain factors which influence the demand for graduate and professional instruction of Negroes, and the other made a study of the educational program of the University. The survey was aimed at making an evaluation of certain programs and needs of the University, and it was intended particularly to consider the relationship of the Federal Government to the institution.

Dental Education and Research

The Office maintains a cooperative relationship with dental education and research, which is carried on by a member of the Division. He serves as: (1) the chairman of the standing Committee on Teaching of the American Association of Dental Schools; (2) a member of the Committee on Research of the American College of Dentists; and (3) a member of the Committee on Research in Examinations of the National Association of Dental Examiners.

The Committee on Teaching of the American Association of Dental Schools is engaged in a project to improve dental teaching. During the fiscal year 1946 two committees of dental teachers—one for histology and one for oral diagnosis—appointed by the Committee on Teaching made reports which were published in the Journal of Dental Education and considered in some detail at the annual meeting of the Association. Committees have been appointed for physiological chemistry, orthodontics, and radiography, and they are now preparing reports on these subjects.

The Committee on Research of the American College of Dentists awards grants-in-aid for research on dental problems, most of which is carried on in dental schools.

The Committee on Research in Examinations of the National Association of Dental Examiners is undertaking to prepare extensive lists of examination questions for use by boards of dental examiners.

Post-War Reconversion in Higher Education

Colleges and universities have been engaged in the task of adjusting staffs, programs, and physical facilities to meet the demands for education that have followed in the wake of World War II. As a continuation of activities reported in the 1944 and 1945 Annual Reports, the staff of the Division has devoted a major portion of its time in responding to requests from college officials for counsel and assistance on the immediate tasks of taking action on postwar plans that had been devised to provide education for veterans and others. These postwar plans did not call for a mere reconversion to prewar college practices; they were calculated to meet the life needs of the much larger number and greater variety of our population that was expected to be in college through the provisions of the Servicemen's Readjustment Act.

Due to heavy enrollment of veterans most colleges and universities have an acute shortage of residence and instructional housing and equipment. The staff of the Division has provided information and services to institutions on how to qualify and secure from government surplus the facilities for which they have or expect an acute shortage. These activities included cooperation with the program for providing student housing for veterans through the Federal Public Housing Authority; the formulation of criteria for the use of the Civilian Production Administration in granting priorities to colleges for the use of scarce construction materials, and the screening for certification of cases that did not clearly meet the criteria adopted by CPA; and the evaluation of requests by colleges to the Federal Housing Agency for priority materials for the construction of faculty housing.

As the fiscal year 1946 came to a close the Division was delegated the responsibility placed on the Commissioner of Education by Public Law 697 of making a finding of need for educational facilities, other than residence housing, which are to be supplied by the Federal Works Agency from Government surplus.

Staff members of the Division assisted in developing plans for the operation of a clearing house through which individuals and agencies responsible for referring veterans for admission to college could direct prospective students to institutions where vacancies in desired programs existed. This service was operated by the Division of Central Services. In connection with this project, the Division of Higher Education cooperated with the Veterans' Administration, the Office of War Mobilization and Reconversion, and two voluntary organizations in the field of higher education in making studies of the actual and potential impact of veterans on college programs, and on the extent to which veterans were likely to overcrowd or fail to make

full use of schools of technology, liberal arts colleges, teachers colleges, junior colleges, and other types of colleges and universities.

Recruiting and securing the return of former college teachers to active duty was another area of college administration in which the Division assisted colleges. Through service on the Interagency Committee on Manpower Shortages of the Office of War Mobilization and Reconversion a staff member of the Division helped to formulate criteria by which the War and Navy Departments agreed to release members of the armed services for duty as college teachers, when they had been certified as eligible by the United States Office of Education. More than 800 requests for evaluation have been made by college officials and in excess of 500 men and women have been certified as eligible for release from military duty to help colleges provide instruction for the rapidly increasing enrollment of veterans. As the year comes to a close the Office has been authorized by the National Selective Service System to provide a related service to colleges through certifying for deferment college teachers deemed essential to the provision of education for veterans and others.

Graduate Study

The Division has continued a program for stimulating and giving direction to graduate study in American universities. In addition to giving addresses before general meetings of three associations of graduate school officials and working with their committees which are developing plans for accrediting graduate study, one member of the staff had published by the American Council on Education a study, Toward Improving Ph. D. Programs, which had been prepared for the Council's Commission on Teacher Education. He also served during the year as a consultant to numerous graduate school officials.

State Surveys of Higher Education

Three members of the staff participated as consultants in studies or surveys of the tax-supported colleges of Arizona and of South Carolina. It was expected that these surveys would provide a plan of articulation and coordination whereby unnecessary duplication and gaps in the program would be reduced, to the end that the several colleges would operate more largely as a unified State-wide system of higher education.

Educational Directory

The annual directory of institutions of higher education (part III of the 1945–46 Educational Directory) was published. In addition to listing the 1,700 institutions, the directory classifies them according to type of work offered; gives an outline of the organization of each

institution, with the names of the officers currently in charge of the main divisions; and indicates the control, the accredited status, and the type of student body—whether composed of men, or women, or both. It also lists the names of the institutions added to, and those dropped from the lists because of having closed, merged, or discontinued college work.

The service to various Government agencies, to institutions of higher education, and to students, in providing information on the accredited status of colleges and universities continued. In addition to furnishing information on the accreditation of institutions by means of the Educational Directory, answers are made daily to a large number of inquiries concerning the accreditation of individual institutions. The expanded relations between the Government and the colleges and universities existing over the past 5 years have resulted in a constant and ever-increasing flow of these inquiries.

Inquiries from Individual College Staff Members and the General Public

An important part of the work of the Division is to supply information on a wide variety of topics in higher education to individual inquirers through correspondence, wire service, office or field conferences, and other means. Thousands of such inquiries are handled annually. In 1946, the number increased markedly. They came from practically every State, and from many foreign countries. Many letters on educational topics were referred to the Office from other Federal agencies.

Education of Negroes

In addition to the general services rendered to Negroes by each of the units of the Division of Higher Education, special services have been rendered through the following projects:

Problems involved in improving the postwar education of Negroes and in assisting educational institutions to prepare to meet the needs of returning veterans were considered at a conference held in the Office last year, and reported in a bulletin published this year entitled Postwar Education of Negroes: Educational Implications of Army Data and Experiences of Negro Veterans and War Workers. The Julius Rosenwald Fund financed the first two printings of the bulletin. The third printing was financed and distributed by the National Association for the Advancement of Colored People and the United Service Organization. The demand for this publication still exists although the supply has been exhausted for months. Articles based on the findings reported in this bulletin appeared in Higher Education and in Occupations.

An annotated list of sources of instructional materials on Negroes, originally issued as a mimeographed leaflet by the Office, was revised and printed through the cooperation of the Commission for the Defense of Democracy through Education and the Joint Committee of the National Education Association and the American Teachers Association. From the increasing number of requests received this pamphlet seems to be meeting a growing need for materials on intercultural and intergroup relationships. In order to meet this growing need, the agencies mentioned above also ordered a reprinting of Office of Education Bulletin 1944, No. 2, Education of Teachers for Improving Majority-Minority Relationships.

In order to answer a growing number of requests about the manner in which the Federal Government promotes the education of Negroes, an article, published in School Life under the caption, A Decade and a Half of Progress in Negro Education, discussed the special programs and activities of the Office of Education in behalf of Negroes during the period from 1930 to 1945. This article supplemented a previous one which discussed the same subject covering the period from 1867 to 1930 and another one which treated special services during the period of World War II.

As a part of a survey of Howard University sponsored by the Federal Security Agency, a section was prepared on Certain Factors Conditioning the Demand for Graduate and Professional Instruction of Negroes.

Adult education of Negroes.—A conference held in the Office during December 1944 brought out and discussed the problem of functional illiteracy among Negroes. It was shown that 41 percent or two out of every five Negroes in the United States had not advanced beyond the fourth grade, and that proportionately eight times as many Negro selectees as whites were placed in classes IV and V (functionally illiterate). After a consideration of these and other facts reported in Postwar Education of Negroes, in other publications, and by Army and Selective Service officials, the Office invited the cooperation of the American Association for Adult Education, the National Conference on Adult Education and the Negro, and the Carnegie Corporation of New York in sponsoring a comprehensive project to prepare teachers and materials for adult illiterates.

The project has five phases. The first was a conference held in the Office of Education for the purpose of defining the problem, indicating the way it had been attacked or is now being attacked, both by civilian agencies and the Armed Forces; and suggesting implications for future action. Participants in the conference comprised 61 persons representing colleges in four selected areas, governmental agen-

cies, city and State departments of education, and educational, civic, and social welfare organizations. The second phase of the project, which was planned this year, is an adult education institute, the purposes of which are to (1) prepare personnel for the training and supervision of teachers of adults in the tool subjects; (2) demonstrate the effectiveness for civilian use of certain educational techniques developed by the armed forces; (3) collect, consider, and evaluate resource materials for the teaching of adults; (4) identify and classify the major problems of Negroes that are amenable to adult education on the elementary level; and (5) formulate a tentative instructional guide, work books, and readers for the teaching of adult illiterates.

The third and fourth phases of the project will be concerned with testing, appraising, revising, and publishing the materials produced in the Institute; and the fifth phase comprises a series of regional institutes in selected areas during the summer of 1947. It is expected that at the close of this special demonstration project sufficient progress will have been made in the preparation of teachers and materials to begin a general attack on illiteracy throughout the country.

Consultative and advisory services.—Consultative and advisory services were continued as in previous years, the following organizations, agencies, or institutions being typical of those served: American Teachers Association; Association for the Study of Negro Life and History; Bureau for Intercultural Education; Conference of Presidents of Negro Land-Grant Colleges; Southern Education Foundation; United Negro College Fund; Lincoln University; Miner Teachers College; Hampton Institute; Wilberforce University; High School Principals Association of Maryland; National Conference on Adult Education and the Negro; National Council of Negro Women; National Study of Business and Business Education Among Negroes; Howard University conference on The Postwar Outlook for Negroes in Small Business, the Engineering Professions, and Technical Vocations; United States Public Health Service; and the National Education Association's Steering Committee on Education in the Cotton Belt.

In addition to the services indicated above, numerous conferences were held with individuals and thousands of letters and pieces of literature were sent out upon requests.

New Services in Engineering Education

Late in the year the services of a graduate engineer were made regularly available to the Division for the first time. The desirability of such services to more than 150 engineering colleges and nearly 130,000 engineering students has been increasingly indicated by war-

time and postwar demands for engineering information and personnel, and by the interest of veterans and other students in the field.

The operation of the ESMWT program from 1940 to 1945 established cordial relations between the Office of Education and the engineering colleges, and led to a realization of the value of the services which might be rendered by the Office to these colleges, and through them to the scientific and technological development of the Nation. Both of the ESMWT advisory committees recommended that permanent staff members be added to the Office of Education for this purpose. Many specific services have been suggested by presidents and deans of engineering colleges.

Near the close of the fiscal year 1945–46 the former field coordinator of the ESMWT program was retained on the staff of the Division of Higher Education as a specialist in engineering education, to be a liaison officer between the Office and the engineering colleges, serving the colleges and governmental agencies in a spirit of mutual helpfulness, without infringing in any way on the responsibility or authority of any institution. Most of the colleges have designated a staff member (generally the dean of engineering) to serve as the liaison officer between the institution and the Office of Education, thus establishing a definite channel for the two-way flow of information. The new service will be continued during 1946–47 and subsequent years.

The specialist in engineering education will be concerned, among other activities, with planning and conducting studies and investigations of a professional character in the field of engineering education, either independently or in cooperation with colleges and other organizations, and preparing studies for publication. One example is a study in which he aided the Society for the Promotion of Engineering Education during the spring of 1946. Under consideration are a study of the trends in engineering college enrollments and their implications for engineering education, a study of admission requirements and scholastic regulations in engineering colleges, a digest of Federal laws and regulations of special interest and importance to engineering and scientific educators, a description of the organization and activities of Federal agencies whose activities most directly affect engineering and scientific education, a study of salaries and teaching loads in engineering colleges, a bibliography on engineering education, a study of cooperative engineering education, and others.

The specialist is concerned with establishing and maintaining cooperative working relationships with engineering college administrators, industrial executives, government officials, professional organizations of engineers and of engineering educators, and lay organizations

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interested in the development of engineering education, by participation in meetings of such organizations and cooperation with their officers. For example the specialist during the spring of 1946 addressed a regional meeting of the Society for the Promotion of Engineering Education (which in June 1946 changed its name to the American Society for Engineering Education). He served as a member of a national committee of this society which prepared a report entitled "A Study of the Supply of and Demand for Engineering Graduates," which was published by the society and has attracted wide attention. He participated in the national meeting of the society, serving as chairman of the society's committee on secondary schools. He also served as a member of the National Academy of Sciences Advisory Committee on Surplus Property and as a member of the Office of Education's Advisory Committee on Surplus Property.

The specialist is establishing and will maintain a national clearing house for information of value to industrialists, governmental officials, engineering educators, and prospective engineering students. An engineering college directory is being developed to include lists of all engineering curricula, with information as to accreditation and full information concerning the facilities of the engineering colleges.

It is believed that this new service will prove of distinct value to the engineering colleges and to engineering education in general.

Engineering, Science, and Management War Training

The Engineering, Science, and Management War Training program was liquidated during the year, an appropriation for that purpose having been made in Public Law 124, Seventy-ninth Congress, first session. A small staff was maintained in the Office to expedite the work of preparation, examination, and approval of final reports from the participating institutions and to prepare the official records of the program for permanent filing with the Archives of the United States.

One staff member prepared a bulletin entitled "ESMWT—A Final Report," being published as a bulletin of the Office of Education. This report consists of two main parts and a bibliography: Part I is a narrative account of the program; part II is a technical section setting forth in greater detail the authorizations of Congress, the organization established to operate the program, and the general methods of administration employed, and outlining the principal appraisals made of the program during its life.

For the benefit of any who may be interested in still further details of the program, there is assembled in the office a comprehensive

historical collection of forms, manuals, organization charts and other administrative documents, minutes of meetings of advisory groups, releases from the Washington office, detailed statistical reports, appraisals of the program, and testimonial letters from industries served by the program.

The ESMWT program was operated during 5 fiscal years, the first classes starting on December 7, 1940, and the last classes closing on June 30, 1945. Five successive acts of Congress appropriated $88,500,000 "for the cost of short courses of college grade . . . designed to meet the shortage of engineers, chemists,[1] physicists,[1] and production supervisors [1] in fields essential to the National Defense . . . not to exceed 20 percentum [2] of the amount allotted to any school shall be allotted to it for expenditure for purchase or rental of additional equipment and leasing of additional space found by the Commissioner necessary for carrying out its approved plan."

Total enrollments in courses conducted under this program were 1,795,716. The total cost to the government was $59,967,065, an average of $33.40 per trainee. The high percentage of appropriated funds which was not used was due to the small administrative appropriations for developing the program and to the care which was exercised by the Washington staff and by the participating institutions throughout the program to insure strict economy in its operation. The contact hours per trainee varied from about 20 to 600 or more, the average for all courses being about 100 contact hours. The cost per trainee hour, therefore, averaged about 33 cents for the entire program.

The total cost of the program was distributed as follows: general administration, 24.2 percent; instruction, 67.5 percent; maintenance and operation of the plant, 8.3 percent.

Summary of entire ESMWT program.—Table 4 sets forth the 10 specific types of courses in which the greatest ESMWT enrollments were reported over the entire 5-year period. Similar tables for each successive fiscal year have been included in earlier issues of the Annual Report. Comparisons of these tables with each other and with Table 4 illustrate graphically the changing requirements of the war production program and the flexibility with which ESMWT was able to meet them.

Table 5 presents a brief statistical summary of the entire 5-year program of college-level defense training courses which were conducted under the auspices of the Office of Education. All enrollments are based on final enrollment reports from participating institutions, all of which had been received when this table was prepared.

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[1] This field was not included in the program during 1940–41.

[2] Changed to 12½ per centum for the fiscal year 1944–45.

TABLE 4.—*Cumulative enrollment by specific type of course from Oct. 9, 1940, through June 30, 1945*

Type of course	Enrollment	Percent of total
Engineering Drawing and Descriptive Geometry	169,313	9.4
Communications	125,996	7.0
Personnel Administration and Labor	121,281	6.7
Accounting	102,753	5.7
Industrial Organization and Management	95,489	5.3
Mathematics	88,764	4.9
Production Engineering	87,115	4.8
Safety	66,441	3.7
Electronics	59,995	3.4
Aeronautical Structural Engineering	55,756	3.1
All other courses	822,813	46.0
Total	1,795,716	100.0

TABLE 5.—*Enrollment in EDT, ESMDT, ESMWT I, ESMWT II, and ESMWT III courses from Oct. 9, 1940, through June 30, 1945*

Item	EDT,[1] 1940–1941	ESMDT, 1941–1942	ESMWT I, 1942–1943	ESMWT II, 1943–1944	ESMWT III, 1944–1945	All programs, 1940–1945
1	2	3	4	5	6	7
Institutions which participated in program	143	194	214	195	172	(2)
Courses operated in:						
All fields	2,182	7,598	12,740	11,547	8,501	42,568
Engineering	2,182	6,174	9,527	7,859	5,723	31,465
Chemistry		220	480	437	296	1,433
Physics		132	231	270	238	871
Production supervision		1,072	2,502	2,981	2,244	8,799
Enrollment in:						
All fields	120,802	438,503	596,134	402,684	237,593	1,795,716
Engineering	120,802	350,564	443,938	265,366	156,555	1,337,225
Chemistry		7,914	13,929	10,664	6,331	38,838
Physics		5,813	11,998	8,620	5,984	32,415
Production supervision		74,212	126,269	118,034	68,723	387,238
Full-time courses	18,607	22,021	47,305	14,379	3,942	106,254
Enrollment of:						
Females	811	38,341	130,245	79,612	33,226	282,235
Negroes	849	3,265	10,539	7,574	2,931	25,158
Veterans				6,094	8,221	14,315

[1] Instruction began Dec. 9, 1940.
[2] 227 institutions participated in at least one of the five programs.

Student War Loans Program

The Student War Loans Program was authorized by Public Law 647, Seventy-seventh Congress, second session, approved July 2, 1942, and Public Law 135, Seventy-eighth Congress, first session, approved July 12, 1943, to provide Federal loans to students in various professional fields for the purpose of enabling them to complete their education.

Loans were made in this program to 11,081 students in 286 colleges and universities, amounting to a total of $3,327,836.32.

The law provides for repayment of the loans in four equal annual payments of principal, with accrued interest, beginning 1 year after graduation or separation for other purposes. Further provisions are

made for cancellation of the unpaid balance of the loan when the borrower is inducted into the military services, before graduation, through the Selective Training and Service Act, and for deferment of interest payments and repayments of principal during military service of the borrower. The work of the program, since June 30, 1944, has been concerned with the administration of these two provisions, and with the fiscal services related to collections. These duties have occupied the full time of three staff members and part of the time of a fourth.

Although most of the borrowers have been in the military services, with their payments deferred, collections amounted to $777,524.19, as of June 30, 1946, and about 17 percent of all loans had been paid in full.

A brief history of this program has been written and is being published as a bulletin of the Office under the title "Student War Loans Program—Final Report." The report outlines the origin of the program, its principal operating characteristics, and the results attained. Tables are included in it showing the distribution of loans by institutions and by fields of specialization of the borrowers.

CENTRAL SERVICES

The Central Services Division, as the name implies, brings together in one division those services that are necessary to facilitate the operations of the Office of Education as a whole. Reports of the units follow:

Research and Statistical Service

In the past year, an initial step was taken in the organization of a Research and Statistical Service by establishing a position of Chief of the Research and Statistical Service, and transferring to this new Service the functions of the former Statistical Division. The former division became the reports and analysis subdivision of the Service, continuing its former responsibilities for the preparation of basic periodic statistics on education.

The biennial survey projects for 1944 were carried through and completed after redesigning techniques and procedures.

As a means of reviewing the entire statistical function of the Office, a conference of educators and technicians was held in October 1945. The result of this conference have been published in a bulletin, and represent a policy guide or charter for the development of the statistical program of the Office.

A plan was developed for the coordination of the research and statistical functions of the Office of Education. This was achieved through the establishment of an Inter-Divisional Committee on Research and Statistics, the development of operating relationship of various staffs of the Office, and the introduction of a plan of review and clearance of all plans and forms for securing information.

The 1946 biennial statistical surveys were redesigned to make fullest possible use of machine tabulation equipment to produce reports at an earlier date and at less cost. Following recommendations emphasized in the conference on the Office of Education research and statistical program, scientific sampling was experimentally introduced by the Service in the work of the Office: (*a*) In a sample survey made in the fall of 1945 of higher education statistics, and (*b*) in a survey of school-age population conducted at the request of the Office of Education as a part of the Bureau of the Census Monthly Report on the Labor Force.

Another development was an experimental attempt to follow through a recommendation of the conference that Office of Education

materials be presented in graphic form for use of nontechnical consumers.

The Service assisted in the development of emergency programs of the Office. It established and conducted the research and statistical aspects of planning and reporting for the Surplus Property Utilization Program, and developed, at the request of the Veterans' Administration, an operating plan for the establishment of State centers for the collections and dissemination of information on educational opportunities for veterans.

Members of the staff of the Service contributed further to the achievement of its functions by serving on interagency committees involving various other agencies of Government working on special problems, by the preparation of articles published in professional journals, by providing technical advisory service to a congressional committee and others on problems of grants-in-aid to education, and assisting States, on request, in research and survey problems, and in revising State statistical accounting systems.

Information and Publications Service

General Function

In promoting the cause of education throughout the country, the Office is charged with the responsibility of disseminating information and aiding the people of the United States in the establishment and maintenance of efficient school systems. This charge of responsibility requires within the Office a corps of educational specialists, each of whom serves as a channel of communication to professional and lay groups. To facilitate the effectiveness and to expand the range of such communication, the Information and Publications Section has been designated as the chief instrument through which the Office develops a comprehensive information and publications program.

The Section performs the customary services of publishing the professional findings of specialists in official bulletins and of translating such findings into suitable form for dissemination through all media of communication, especially newspapers, magazines, and radio. In addition, the Section provides professional leadership in the whole field of educational journalism, including the organizing of programs of public information about education, methods of graphic presentation and appropriate writing techniques. Within the Office, the Section reviews and confers with responsible officials on the public-relations effect of the total program of the Office of Education. In April a newly appointed Chief assumed responsibility for directing the work of the Information and Publications Section.

A Study of Educational Public Relations

The Section convened a national advisory group of experts in educational public relations to discuss and make recommendations looking toward a long-time public relations program for the Office. Professional problems in the public relations field were discussed by the Chief at the national conference of the American College Public Relations Association and the workshop of the Educational Press Association. The Chief served as a public relations consultant to one State department of education in the development of its program. At the request of the Educational Director, Public Information Division of the United Nations, the Chief arranged a conference of key editors of educational publications which was held in the office of the Secretary-General of the United Nations, to develop a program for presenting factual information about the United Nations to students and teachers in schools and colleges throughout the United States.

Utilization of Office Materials

Information on educational problems was provided writers from leading national magazines. Two articles by the Commissioner attracted wide attention and during the course of the follow-up permitted the dissemination of information on educational matters. Assistance was rendered President Truman's Famine Emergency Committee through liaison with nongovernmental educational organizations, publication of material in SCHOOL LIFE, and arranging for student listening throughout the country to a Nationwide radio program in which Commissioner Studebaker participated. The Section collaborated with a number of government agencies in an important "back to school" drive during the fall of 1945. Approximately 50 news releases relating to Office of Education publications and activities were prepared and issued.

Distribution of Information and Publications

During the year 196 separate jobs of printing and processing were distributed to carefully selected mailing lists. Approximately 23,000 incoming mail requests were answered and responses made to 9,000 telephone inquiries.

Graphics

The total number of assignments completed by the Graphics Unit follows: Illustrations and lay-out format for 269 publications, 29 exhibits and posters, 541 charts and maps, miscellaneous, 63. Reviewing, organizing and classifying the 4,600 educational photographs comprising the office photographic library improved the effectiveness of their use in publications throughout the country.

Editorial

This unit handled a total of approximately 1,000 different items including 192 separate printing jobs. The editorial work varied in complexity and size from a 373-page manuscript to the preparation of a three-fold leaflet. A total of almost 4,000 separate printed pages were edited. The titles include 30 bulletins, 10 issues of SCHOOL LIFE, 18 issues of HIGHER EDUCATION, 2 pamphlets, 3 leaflets, 80 forms and 55 miscellaneous items.

In addition to the foregoing and as a special responsibility of the section, part IV of the Educational Directory, Educational Associations and Directories, was prepared and edited.

The complete list of publications which came off the press during the 1946 fiscal year is as follows:

Publications Off the Press During 1946 Fiscal Year

Bulletins, Pamphlets, Leaflets, etc.

School Census, Compulsory Education, and Child Labor. (Bulletin 1945, No. 1.)
More Firepower for Health Education. (Bulletin 1945, No. 2.)
Education in Training Schools for Delinquent Youth. (Bulletin 1945, No. 5.)
The Place of Visiting Teacher Services in the School Program. (Bulletin 1945, No. 6.)
Introducing the Peoples of the Far East. (Bulletin 1945, No. 7.)
Higher Education Looks Ahead. (Bulletin 1945, No. 8.)
The Use of Training Aids in the Armed Services. (Bulletin 1945, No. 9.)
Education in Chile. (Bulletin 1945, No. 10.)
Report on the Cultural Missions of Mexico. (Bulletin 1945, No. 11.)
Curriculum Adjustments for Gifted Children. (Bulletin 1946, No. 1.)
Proposals Relating to Statistical Functions of the United States Office of Education. (Bulletin 1946, No. 2.)
Offerings in the Field of Guidance and Personnel Work in Colleges and Universities, Summer 1946. (Misc. No. 3162.) (Rev.)
What Every Teacher Should Know About the Physical Condition of Her Pupils. (Pamphlet No. 68.) (Rev.)
Residence and Migration of College Students. (Pamphlet No. 98.)
State Plans for Financing Pupil Transportation. (Pamphlet No. 99.)
School Bus Drivers—Current Practices in Selection and Training. (Pamphlet No. 100.)
Good References—School Finance. (Bibliography No. 75.)
Good References—The Local Board of Education. (Bibliography No. 76.)
Federal Government Funds for Education 1942–43 and 1943–44. (Leaflet No. 76.)

Biennial Survey of Education

Statistics of Public School Libraries, 1941–42. (Vol. II, Ch. VIII.)

Educational Directory, 1945–46

Federal, State, and County Education Officers. (Part I.)
City School Officers. (Part II.)
Colleges and Universities. (Part III.)
Educational Associations and Directories. (Part IV.)

Miscellaneous

Annual Report of the United States Office of Education, 1945.
Expenditures Per Pupil in City Schools 1943–44. (Statistical Circular SRS–12.2–026.)
Job Instruction Training for Supervisory Personnel in Sales Merchandising Organization.
Open Doors to Children—Extended School Services.
Radio Bibliography, 1945.
Family Contributions to War and Postwar Morale Series:
(Nos. 1, 2, and 3 of this series were published the previous year.)
We Carry On. (No. 4.)
First Days at Home. (No. 5.)
Catching up With the Children. (No. 6.)

Vocational Education

Fitting and Selling Shoes, Business Education Series No. 16. (Vocational Division Bulletin No. 230.)
Selection of Students for Vocational Training. Occupational Information and Guidance Series No. 13. (Vocational Division Bulletin No. 232.)
Training School Bus Drivers, Trade and Industrial Series, No. 61. (Vocational Division Bulletin No. 233.)
Vocational Education in the Years Ahead, General Series No. 7. (Vocational Division Bulletin No. 234.)
Proceedings of Sixth National Conference of State Supervisors of Occupational Information and Guidance, Occupational Information and Guidance Series No. 14. (Vocational Division Bulletin No. 235.)
Training Restaurant Sales Personnel, Business Education Series No. 15. (Vocational Division Bulletin No. 222.) (Rerun.)
History of Agricultural Education of Less Than College Grade in the United States, Agricultural Education Series No. 55. (Vocational Division Bulletin No. 217.) (Rerun.)

Periodicals

School Life (10 issues—October 1945–July 1946, inclusive).
Higher Education (18 issues—September 1, 1945–May 15, 1946, inclusive).

Reprints

Reprints from School Life:
A Supplement to 500 Books for Children (October 1945).
Pan American Club News No. 6 (October 1945).
That Civilization May Survive (October 1945).
Health Needs of School-Age Children and Recommendations (November 1945).
International Exchange of Teachers, Legal Aspects (December 1945).
Interest Measurement—Questions and Answers (December 1945).
Disposal of Surplus Property to Educational Institutions (January 1946).
Educational Systems of the Netherlands East Indies (January 1946).
Services to Negroes (January 1946).
China—Selected References for Teachers (February 1946).
UNESCO—Design for Waging Peace (February 1946).
Recreation and Leisure Time Activities in the School Program (March 1946).

Teaching Aids Available from Federal Government Departments and Agencies (April 1946).
National Council of Chief State School Officers (April and May 1946).

Reprints from EDUCATION FOR VICTORY:

The Netherlands East Indies (May 3, 1945).
Federal Cooperation Rather than Federal Control Should be the Means Used to Improve Education in the States (May 3, 1945).
Union of Soviet Socialist Republics—Selected References (May 21, 1945).
Why Education for Inter-American Understanding (June 4, 1945).
Appraisal of the Food Production War Training Program (June 4, 1945).
War Training Program Brought to Close (June 20, 1945).

Reprints from HIGHER EDUCATION:

Salaries in Institutions for Higher Education, 1941–42 (November 15, 1945).
Regulation for Surplus Property Disposal to Educational Institutions December 1, 1945).
State Educational Agencies for Surplus Property (January 1946).

Office of Education Library

The library continued to serve its usual clientele of Office specialists, research workers, and personnel of other Government agencies. However, the nature of the requests received reflected a transition from the war-centered activities of the past few years. Although numerous requests continued to come in from the War and Navy Departments, expansion of such agencies as the Veterans' Administration brought additional calls from members of their staffs or from persons referred by them. Increased enrollments in graduate schools brought additional requests for information on theses completed in various subject fields. College catalogs and other references on institutions of higher education were consulted by both prospective students and prospective members of the faculties, while the representation of new fields of specialization in the Office brought new demands for materials and service. The year was also marked by the development of a plan of organization and other activities, administrative in character, designed to facilitate the program and services of the Office of Education.

Operations of the Library

Acquisitions.—During the past year 8,000 separate publications were added to the collections, increasing the holdings of the library to approximately 325,000 items. Publications were received by purchase, gift, and exchange, and represented books in education and related fields, periodical titles, textbooks, school reports, courses of study, theses, university and college catalogs.

Selection of books to be ordered, requested on exchange, or as gifts to the library required careful and continuous checking of the regular

trade and subject bibliographies. Progress on the acquisition of needed foreign educational literature was made during the year particularly through the services of the State Department, which requested copies of reports and year books of Ministers of Education and catalogs and other publications of institutions of higher education throughout the world.

Cataloging and processing.—A total of 6,261 volumes were cataloged during the year, involving the preparation and filling of 26,000 cards. With the additional help available during the fourth quarter it was possible to make some progress on the arrears of uncataloged material, particularly in the foreign collection. However, this represented only a small fraction of the work still to be done.

The cataloging department continued to furnish original copy in certain categories of materials for cards to be printed by the Library of Congress, supplying information for approximately 200 titles during the year.

Reference and loan services.—Continued publication of the bimonthly New Book List served to bring to the attention of specialists the materials added to the library which were relevant to their work. With additional clerical help available during the last quarter, some progress was made in eliminating arrears of work on shelving and rearranging of the collections which have accumulated through the years.

The statistics below indicate the extent to which facilities of the library were used during the year.

Persons using facilities of the library	9,310
Circulation of books outside the library	6,721
Books used in the reading room	25,399
Telephone reference calls	7,864
Answers to reference inquiries received by mail	1,200
Interlibrary loans (included in 2 above)	2,216
Books borrowed from other libraries	112

Bibliographical service.—The end of the war and the expansion of the United State Office of Education were reflected in the increased number and in the type of requests for bibliographical service in 1945–46. The interest in educational reconstruction abroad and the return of students to the study of education in the United States led to many inquiries on specialized topics and to requests for lists of references in varied areas of education.

The bibliographical service of the library aims to relate the resources of the library to the work of the specialists in the Office and to maintain a constant flow of pertinent literature to members of the

professional staff and to furnish information and bibliographical assistance as needed. In addition to serving the Office of Education, bibliographical assistance was given to many others in the field of education, who referred questions to the library. These questions, concerning historical records or current problems, frequently require extensive bibliographical research. Approximately 250 letters were answered with information on special subjects and lists of references.

An annotated list of new books and pamphlets was prepared monthly for publication in School Life. A selected list of reference books for a teachers college in Korea was compiled under the following subjects: Encyclopedias, dictionaries, literature, science and technology, general science, law, agriculture and gardening, transportation and communication. The library continued to cooperate with the Library of Congress by furnishing a quarterly annotated bibliography for inclusion in Post War Problems: A Current List of U. S. Government Publications.

Bibliographical service on theses and courses of study.—Although it was not possible to publish the Bibliography of Research Studies in Education because of the lack of printing funds, the library continued to collect and tabulate information on theses in education completed at colleges, universities, and professional schools during the year. The files now contain unpublished data on approximately 15,000 theses completed since 1940. Because this information is available only in the Office of Education Library, it is necessary for graduate students and research workers in education to write or come to the library for lists of studies completed in various fields. Approximately 200 requests of this kind were filled during the year.

A total of 320 theses were received increasing the library's collection to 6,794 volumes representing 76 institutions. Receipt of approximately 700 additional courses of study added considerably to the strength of the library's collections in this area. Information on theses and courses of study was made available through the publication of selective lists in School Life. Typewritten lists were prepared in answer to specific requests received by mail.

Administration of the Library

Reorganization of the library.—In order to be sure that personnel decisions which had been pending appointment of a librarian would be in line with future requirements, the development of a plan of organization for the library commensurate with the total program of the Office was begun.

This plan, completed in February 1946 and incorporated into the organization chart for the Office provides for a library staff of 21 professional and 19 clerical and subprofessional positions. Present

status of the library in relation to this plan is indicated by the fact that appropriations for 1945–46 provided for 10 professional positions and 1 clerical position.

Following approval of the tentative organization plan, job descriptions for the professional positions were prepared and submitted to the Civil Service Commission for allocation. Requests for allocations of the clerical and subprofessional positions will be made during 1946–47.

Changes in the professional staff involved the resignation of a reference librarian and a cataloger, both to accept other positions, and the appointment of the chief librarian and reference librarian.

Survey of acquisitions.—A survey of current production of books and other materials in education and related fields was undertaken as a basis for developing a plan for determining the library and bibliographical needs of the Office. The survey, completed in June 1946, contains comprehensive and detailed estimates of the quantity of material of various kinds which would be of possible use in the program of the Office, recommendations as to the number or percent which should be acquired currently, and the estimated number which would have permanent research value. The study revealed, for example, that it would be necessary for the library to acquire approximately 28,000 items annually to provide complete support to all phases of Office of Education operations. Of this number, approximately 19,000 should be incorporated into the collections as permanent acquisitions. During the year 1946–47 it is expected that further discussion of the problem with the library committee and with specialists in the Office will lead to the establishment of an acquisition policy for the library which will meet the needs of the Office and provide a basis for determining budget requirements. Data presented in the study will be useful also in working out cooperative agreements with other research libraries for the acquisition of various categories of materials.

Relations with other libraries.—During the year arrangements were completed with the Library of Congress whereby the Office library will receive publications as follows: From their duplicate and unprocessed collections, textbooks and other materials which are within the scope of the Office of Education's activities; of second copyright copies, all elementary and secondary textbooks, and materials in the fields of religious education, school administration, and teaching of various subjects; and when not needed in their reference collections, second copyright copies of college textbooks and texts in the fields of educational psychology and philosophy of education. (These arrangements are described in the following references: Library of Con-

gress General Order No. 1257 of June 25, 1945; Commissioner's letter to the Librarian of Congress dated December 28, 1945; and letter of January 14, 1946, from the Librarian of Congress to the Commissioner.)

Administrative Management and Services Section

During the year the Administrative Management and Services Section supplied staff assistance to the Commissioner, division heads, and specialists in the following fields of activity.

A. Budget preparation and planning.
B. Fiscal services, including procurement and property.
C. Personnel.
D. Mails and files.

Within the limits of available staff the section has successfully made some important contributions to the operations of the Office. These included the following activities:

1. Development of a plan for programming the work of the Office was initiated last spring. Many preliminary discussions were held and a general plan was agreed to in the last fiscal year. The plan will be developed further, however, in the next fiscal year.

Briefly, the plan contemplates a submission from each division head on the manner in which the divisional program will be undertaken during the fiscal year 1947 as well as a projected plan of the divisional program for the fiscal year 1948. While the initial steps in this program have been completed, much remains to be done in making further refinement to provide the Commissioner with a means of bringing about effective administration and coordination of the work of the Office.

2. Early in the fiscal year 1946 a program was started to classify all positions in the Office to bring them into conformity with the organizational plan of the Office. The classification pattern was fully developed during the past year and the positions have been allocated in accordance with the plan of organization.

Members of the staff worked closely with the Civil Service Commission in the development of registers from which candidates for positions in the Office were to be selected and assisted in the preparation of qualification standards to be followed when changes in regulations permitted the Office to select and make appointments pending the establishment of registers.

3. At the close of the fiscal year a review of the mails and file practices in use by the Office was initiated and data were obtained that will be helpful in developing uniform procedures. Pursuant to an agency-

wide program, a records inventory and appraisal survey was conducted and the results were reported to the agency. This survey involved a review of the records located in all offices throughout the Office and information indicating the number of copies, approximate linear footage involved, dates, frequency of use, and recommended manner of disposition was obtained.

4. The staff has spent considerable time during the past year in assisting professional staff members engaged in special programs such as surplus property, veterans' education, etc. The nature of these programs involved constant changes in plans. Organization arrangements and operations presented unusual difficulties and required more than the normal time expected of the staff working on regular Office programs.

INTERNATIONAL EDUCATIONAL RELATIONS

The International Educational Relations Division carries on the work of the former Division of Comparative Education and of Inter-American Educational Relations. Its objectives are the development of better international understanding and the furtherance of more effective international cooperation. It seeks to attain these objectives by services to schools and teachers of the United States and of other countries through the following programs.

Exchange of Educational Personnel

The Exchange of Educational Personnel Program includes the exchanges of fellows and professors under the Buenos Aires Convention for the Promotion of Inter-American Cultural Relations, teacher trainees from the other American Republics, language teachers, the provision of information on teaching positions in the other American Republics, and the interchange of teachers between Great Britain and the United States.

A total of 30 graduate students from 12 of the other American Republics were in the United States under provisions of the Buenos Aires Convention. These students were enrolled in 22 universities and pursued programs of study in 27 different fields of specialization. Activities of the division included assisting in the selection of candidates from the other American Republics, recommending appropriate personal adjustments to a foreign country, assisting in registration and housing, providing continuous counsel and evaluation of progress, and making arrangements for paying monthly allowances to the students and teacher trainees.

In cooperation with the Department of State, the Division also assisted in the selection of United States graduate students for study in the other American Republics. Nine awards were made and four alternates were chosen.

A program was inaugurated in August 1944, in cooperation with the interdepartmental committee of the Department of State for the education in the United States of teachers from the other American Republics. Five teachers from four of the other American Republics have come to this country to pursue study in a particular field of education at an appropriate educational institution, to observe in our schools, and to confer with specialists in their field of learning.

The division again carried on the selection and notification of 96 teachers of Spanish from our schools who attended the Spanish Language Institute in Mexico City. Sixteen teachers of English from 7 of the other republics were invited to this country. Each teacher became an active participant in the Spanish teaching of a United States school or college, served as interpreter of the culture of his country before community groups, visited a number of schools en route, and attended a special course in the teaching of English at an outstanding institution of higher education.

The division maintained an active file of persons interested in securing teaching positions in other areas of the world. Panels of applicants for positions have been selected for the Inter-American Schools Services of the American Council on Education, the Department of State, and others. Assistance was also given the Department of State in securing professors to go to universities in other countries.

The Division was responsible for the administration of the program for the interchange of teachers between Great Britain and the United States. Under this program, 74 teachers from the United States changed places with 74 teachers from Great Britain.

Basic Studies of Education in Other Countries

During the year, the preparation of studies of educational systems in Central and South America, under the sponsorship of the Interdepartmental Committee on Scientific and Cultural Cooperation was continued. Final reports were completed for Colombia, Chile, Ecuador, El Salvador, Guatemala, Haiti, Nicaragua, and Peru. Field work was done in Panama and Venezuela. Preparation of a report on Brazil was continued.

Preparing Instructional Materials

Requests from teachers in the field as well as from the lay public for curriculum materials relating to countries outside the United States, UNESCO, United Nations, and international relations generally, continued to be exceptionally heavy during the past year. In an effort to meet these demands the loan packets service on Latin-American countries was revised and enlarged. At present packets for 20 subject fields, such as instructional materials, social studies, club organization, and higher education have been developed. Last year about 3,000 of these packets were sent to teachers free upon request, except for return postage. Similar packets on Far Eastern countries were revised but have not yet been circulated. Annotated lists of references on all Far Eastern countries were prepared and mailed free of charge upon request.

About 600 books, charts, and other pieces of instructional material were selected and prepared for use in the Department of State's cul-

tural centers situated in 10 Latin-American cities. The books selected were largely descriptive of United States history, geography, literature, and the teaching of English as a foreign language.

Through the Radio and Transcription Exchange of the Office a number of sets of 16-inch transcription recordings dealing with various foreign countries were supplied on a loan basis to schools and other agencies which requested such service.

A large number of educators from all parts of the world came to the Division for information and help on educational problems.

Consultant Services

Consultant services developed significantly during the past year. Ten members of the division staff served as speakers, resource leaders, and consultants to more than 100 university, college, and professional meetings, institutes, conferences, and work shops in the United States. In connection with international educational organizations, various members of the staff performed such services as the following:

1. Technical expert, United States delegation to United Nations, Educational, Scientific, and Cultural Organization, London, November 1945.
2. United States representative on Education Committee, UNESCO, London, May 1946.
3. United States delegate, Ninth International Congress on Public Education, Geneva, Switzerland, March 1946.
4. Member of Education Mission to Japan, February–March 1946.
5. Consultant to War Department, United States Military Govment, Germany, June 1946.
6. Consultant to War Department on selection of educational personnel in occupied areas.
7. Consultant services to Korean Educational Mission sent to the United States by the United States Military Government in Korea. The Near and Far Eastern section of this division prepared a list of suggestions on educational recommendation and development of Korea for the Korean Educational Mission, the United States Department of State, and the United States Military Government in Korea.
8. Services as observer-advisers to the World Conference of the Teaching Profession at Endicott, N. Y., August 1946.
9. Consultation services to more than 1,000 educators of other countries by correspondence, and to more than 400 who came to the Division in person for information and help on educational problems.

Evaluation of Credentials

The number of requests for the evaluation of foreign academic credentials reflects an increasing utilization of our educational resources by foreign students as well as the expanding influence of our schools. In the four fiscal years ending June 30, 1943, 1944, 1945, and 1946, the total number of requests made of the Office of Education for evaluation of credentials was respectively 687, 813, 909, and 1,466. An additional indication of this increase in requests for interpretation of foreign academic credentials is found in a comparison of the statistics for the months of June, July, and August of 1945 and 1946. The number of requests for these 2 years were respectively, for June, 50 and 153; for July, 62 and 183; and for August, 83 and 156. Thus in the summer period of 1946 there were three times as many requests as in the corresponding period of 1945.

In the fiscal year ending in June 1946, there was no significant change in the number of credentials coming from Latin America. From the British Empire and Europe the number was double that of the previous year, and for the Near and Far East the number was about three times that of the preceding year.

Quite naturally these requests have a wider distribution among our educational institutions. The number of institutions making requests for evaluations in the fiscal year ending in June 30, 1944, was 128; the following year the number was 178; and in the fiscal year ending in June 1946, the number reached 275.

Credentials submitted for evaluation were in more than 30 different languages, for the translation of some of which it was necessary to seek the aid of other agencies and in a few cases of private individuals. The credentials of a given student varied from a few lines to many pages. In some of the cases the evaluation involved but a few minutes and in other cases it called for many hours of research.

The Language Program

Assistance to teachers of English, Spanish, Portuguese, and French has been continued through projects stressing international understanding and cooperation. The important role of language study in interpreting American civilization to other nations as well as other cultures to our own people has been emphasized.

During the year approximately 250 instructors and supervisors of English, both national and foreign, visited the Office, where they consulted with staff members and received the specialized publications prepared and distributed by the Division. Written requests for information and counsel from more than 300 additional persons received attention.

About 200 new texts for the teaching of English as a foreign language were acquired for the use of Office of Education personnel, visiting teachers, and persons from other Government agencies. An additional collection of 600 books dealing with outstanding aspects of American life and culture and the teaching of the English language was assembled and turned over to the Department of State for use in the cultural institutes it maintains in Latin America.

Throughout the year the Division acted as technical advisor for the District of Columbia Public Schools Orientation Center for Foreign Students and Trainees. Under a loan arrangement with the Inter-American Educational Foundation, one specialist spent several months in South America lecturing and teaching in summer English institutes for Brazilian teachers of the language. Staff members participated in conferences on the preparation of textbooks and tests for foreign students of English. The manuscripts of three new English texts for Spanish-speaking secondary school students were read critically for the Inter-American Educational Foundation; descriptive bibliographies of texts and teaching materials were prepared and articles on problems and techniques of English teaching were reprinted and widely distributed.

Services to Spanish teachers have included answering several thousand requests for information and material on a wide variety of subjects pertaining to the teaching of Spanish at all grade levels, from teachers in every State and Puerto Rico and from educators in the other American republics.

Contacts have been established with the cultural attachés of Spain and the Latin-American republics with a view to improving the linguistic and informational service of the Division. For one month, March 15 to April 15, 16 Latin-American English teachers, brought to the United States under a special program, served as teaching assistants and informants in high schools and colleges, following arrangements made by the Spanish language specialist.

Through the Division, and upon the recommendation of chief State school officers and other school administrators, 96 teachers of Spanish from 34 states and Puerto Rico were selected and registered for the Spanish Language Institute held June 25 to August 5 in Mexico, D. F. The Division furnished counsel during the planning of this course and later supplied a resident consultant for a fortnight of the 6-week session in Mexico. Service on language-teaching methodology and materials was made available to a large number of teacher-education institutions throughout the country. Articles and news notes were contributed regularly to Hispania, the official journal of the American Association of Teachers of Spanish and Portuguese, and to other educational reviews.

The Division provided professional advice and instructional materials on the teaching of French and Portuguese in answer to numerous requests and assisted several Brazilian teachers in finding teaching positions in the United States. Loan packets on Brazilian history, art, geography, and current periodicals were assembled and mailed to interested persons. Student correspondence between United States schools and many European and Latin-American educational institutions was facilitated.

AUXILIARY SERVICES

Service to Libraries

The function of the Service to Libraries Section of the Auxiliary Services Division is to assist State and local communities in achieving the full potentiality of service for their libraries. During the war period, the essentiality of adequate library facilities received noteworthy recognition. The armed forces, realizing the importance of an informed personnel, maintained library systems to an extent never matched before: the Department of State embarked upon an extensive program of overseas libraries to present unbiased information about the United States to the citizens of foreign countries; and the wartime State and Federal agencies found local libraries effective media for the dissemination of basic facts about current problems. In peace, libraries can play just as important a role in the education of all ages and all classes of our population, provided these institutions are adequately supported and administered; and it is to this latter task that the Service to Libraries, within the limitations of an inadequate staff and budget, has been devoting its research, bibliographical, consultative, and informational activities.

The extent of current inadequacies in library service throughout the United States is evident from the fact that:

(1) At least an estimated 80 percent of the elementary and secondary public schools have inadequate library service or no library facilities at all.
(2) Over 50 percent of the college libraries are operating on inadequate budgets and with insufficient staffs.
(3) About one-third of the population has no public library facilities and another third has only inadequate service.

In its attack upon these deficiencies, Service to Libraries undertook during 1946 such activities as those which follow.

Statistics and Research

Statistics on libraries are used not only by research workers but also by administrators and governing bodies. The following inquiries answered during a short period of time give an idea of the practical uses made of the library data collected by the Office:

What are the per capita expenditures for public library purposes, the per capita circulation, and the size of library staffs in 20 large cities? (From a large municipal library for use at a budget hearing.)

What proportion of the budget is spent for books as compared for that spent for periodicals in university libraries? In liberal arts college libraries? In large public libraries? In medium-sized libraries? (From a Federal department preparing a budget for overseas libraries.)

How many professional librarians are currently employed in service libraries? In college libraries? In school libraries? (From the United States Civil Service Commission.)

What are the total book resources, the circulation, and the expenditures of the public libraries in each of the cities with populations over 100,000? (From the editor of a standard annual reference book.)

What amounts do cities with population ranging from 10,000 to 15,000, and having reasonably good library service, spend for salaries and for books? What is their expenditure per capita and how many books per capita do their public libraries contain? (From a Midwest city library for use in an appropriation hearing.)

The proved usefulness of Office of Education library statistics is found in the planning publication of the American Library Association, *College and University Libraries and Librarianship*, which states "The publication of *College and University Library Statistics, 1939-40*, was an event of real importance in the college library field."

Another compilation, *Statistics of Public-School Libraries, 1941–42*, distributed in the early fall of 1945, has been widely used for many purposes: For example, by State supervisors of school libraries to help raise standards of service, by school accrediting associations to assist in revision of standards for member schools, and by publishers to determine potential markets for children's library books.

In cooperation with the staff of the Research and Statistical Service, the public library specialist has had a major responsibility in a Nationwide collection of public library statistics covering the fiscal year ended in 1945. These data were intended as a basis for tabulations and interpretations to be published in the series of library statistical compilations issued periodically by the Office of Education since 1870.

In order to keep the library statistical program adjusted to the needs of the profession, the Commissioner invited a group of library specialists to Washington early in March to discuss problems and make recommendations. These conferees submitted a series of proposals covering the items to be collected, the frequency of collection, and the types of libraries: Municipal public, county public, school, college and university, government, and special.

The public library specialist, jointly with other staff members in the Service to Libraries Section, has assembled data on the legal authority, organization, administration, and activities of State library agencies, intended for publication in a manual now being prepared to assist State library authorities in plans for legislative action. The specialist for school libraries continued research in the field of lay-outs, equipment, and furnishing of school libraries. This staff member also gave consideration to the factors involved in desirable library service to children and young people.

Bibliographical Services

The bibliography, 500 Books for Children, due to urgent requests for an up-to-date, annotated list of elementary library books from such groups as the Department of Elementary School Principals, was supplemented by publication (in the October 1945 issue of School Life) of the completed portion of a revision which was under way during the year. Reprints of this 1939–45 Supplement to 500 Books were available for wide distribution.

Various unpublished biblographies were prepared in the Library Service Section, such as a list of children's books for use of the Inter-American Education Foundation, a list of books on citizenship for use by the Department of State in Japan, and a list of sources of international information available for use in schools.

During the year the specialist for public libraries furnished the publishers of a standard municipal reference work with a list of recent professional publications on public library administration. The specialist for public libraries, as a member of the Inter-Divisional Committee on Adult Education in the Office prepared for the use of that committee, A Preliminary Working Checklist of American and British Books on the Theory and Methods of Adult Education—Published 1940–1946.

Service to Libraries was responsible for the monthly column, New Publications of Other Agencies, in School Life, a selected list of Government documents considered to have significance for librarians and teachers. The unit also assumed the major responsibility for compiling an extensive list of books and periodicals to be used by the Korean Education Commission in stocking a teachers college library in that country.

Consultative and Informational Services

Consultative service was rendered by field trips, by office interviews, and by correspondence. The specialist for school and children's libraries participated in a State-wide library institute attended by approximately 100 school and public librarians at the University of

Alabama. This staff representative conducted daily discussions on books and reading for children and young people, and worked also in the field of library materials in the Latin-American workshops being held on the same campus.

At the Library Planning Conference of the Southern Association of Colleges and Secondary Schools held October 18–23 at Atlanta, Georgia, the specialist for school libraries served as consultant. Problems of the conference were standards for the training of librarians and standards for libraries in the member schools. The State supervisors of school libraries at the meeting asked for a discussion of: (1) In-service training of school librarians; (2) initiation of a leaflet on State school library supervision; and (3) development of a clearing house for the activities of State school library supervisors.

Another type of service was carried on in Louisiana at the request of the State Department of Education and the State Library Commission, where discussions were conducted with librarians of school, parish, and college libraries, and with teachers and school administrators. District meetings were held in New Orleans, Winnfield, Shreveport, Monroe, and Baton Rouge.

Work with teachers colleges included contributions to the first annual Eastern Pennsylvania Library Conference at Kutztown and consultative services at the newly organized school for librarianship at the Western Michigan College of Education. Similar services were rendered at an in-service workshop held in Wisconsin under the auspices of the State Free Library Commission, a discussion group on book selection sponsored by the Michigan Library Association, and a workshop for school librarians at the Indiana State Teachers College.

Service to Libraries was represented on the small Library Advisory Council of the Joint Army and Navy Committee. This group was available, upon request, for consultative service in connection with the library programs of the armed forces.

Representative of numerous consultative services of the public library specialist during the year were the following: (1) At the request of its president, a college for women in the District of Columbia was visited and recommendations were made by the public library specialist as to expansion of shelf and seating capacity; (2) jointly with other library specialists in the Office of Education, the specialist for public libraries was consulted on plans for a new site and building for the suburban public library in Maryland; (3) A local civic improvement association in New Jersey requested and was advised as to publications in library science useful in developing community library service; (4) War Department officials were assisted in the selection of reading materials for air base libraries faced with the problem of serving the civilian population; (5) the specialist for public libraries

participated in the annual Conference of Eastern College Librarians held at Columbia University in the fall of 1946 and devoted to the immediate postwar library problems of colleges and universities.

The specialist for public libraries, in cooperation with other staff members, has prepared monthly for publication in the Library Service column of School Life, a review of significant activities of public and school libraries in various States and localities. This information has been based on official data selected for its importance as a useful pattern of library service and as library news of interest to educators.

Consultative service was given also through office conferences and by correspondence with librarians, teachers and administrators from the United States, official visitors from foreign nations, and United States appointees being sent abroad on foreign assignment. Among foreign visitors were included a representative of the newly organized Ministry of Education in Australia, and a representative of the Siamese Government, who spent several months studying the children's books assembled by the specialist for school and children's library work.

Representing Library Interests Nationally

Close cooperation was maintained with national and State library associations. The relationships with the National Relations Office of the American Library Association have been of mutual help. National meetings, governmental and nongovernmental, have been participated in, where library interests are involved and information about developments passed on to school, college, and public librarians. Unfortunately, it has not been possible to perform this service adequately because of lack of staff.

The section has engaged, however, in activities with national organizations. For instance, conferences were held with a representative of the General Federation of Women's Clubs in connection with the latter's proposed program to provide a youth library in every community. As a result of these conferences, the specialist for school and children's libraries prepared a folder on youth libraries which was given wide distribution. This specialist also cooperated with other staff members of the office in preparing a chapter for the current yearbook of the Department of Elementary School Principals. Included among the other national organizations in which the specialist represented library interests were: Association for Childhood Education; Educational Policies Commission; American Association of University Women; American Junior Red Cross, and the National Congress of Parents and Teachers.

At the request of the Illinois State Civil Service Commission, the Service to Libraries Section conducted, for the area around Washing-

ton, the examinations for library positions in Illinois. This involved the administering of the written tests and the holding of oral examinations of the applicants. It constitutes a good example of how this national agency can be of practical assistance to State library agencies.

Until the library consultant for surplus property was appointed to the staff of the division in the office responsible for that program, the unit gave considerable time to the problem of surplus army libraries, textbooks, and other materials. It meant contact with Federal officials on the one hand and with the State and local library authorities on the other.

In the light of the present deficiencies existing in our school, college, and public library systems, this function of representing library interests at the national level should be greatly strengthened. It should be performed in cooperation with the activities of other Federal libraries in some cases, but in many instances it should be the special responsibility of the Service to Libraries Section. It will mean carefully planned and executed research to produce or reemphasize guiding principles in the field of library operation and extension.

Educational Uses of Radio

The volume of requests for program materials, informational and advisory assistance, and consultation services received by the Educational Uses of Radio Section during the fiscal year ending June 30, 1946, was approximately double that of the preceding year. The bulk of this demand was directed toward obtaining informational materials and consultation services relating to the production, broadcasting, and use of radio programs and recordings designed to serve specialized educational applications. Increasing specificity in the nature of requests received, along with a noticeable emphasis on instructional methodology and diversified program-utilization techniques indicates wider appreciation and understanding of the potentialities of radio and audio aids in accelerating learning, in broadening its scope, and in promoting its retention.

Script, Transcription, and Information-Exchange Services

During the year, 70 new educational-program scripts have been put into circulation through the script exchange, and the number of recorded educational programs available to educational institutions through the Transcription Exchange has been increased by another 50 programs. These new educational-program acquisitions tend partially to off-set the number of scripts and transcriptions dealing with problems of war-time significance which have been retired from circulation because of sharply-diminished borrower interest. This has tended to keep the volume of script and transcription circulation for the past

fiscal year at approximately the same level as that of the three preceding years. It should be pointed out, however, that the demand for educational-program scripts and transcriptions dealing with cultural, scientific, and vocational topics is growing at a more rapid rate than that of new program acquisitions. This is due, in part, to the fact that more schools are beginning to use educational-program scripts and transcriptions, and, in part, to the fact that schools and colleges now in the process of developing new educational FM broadcast stations are turning to the Offices radio section for these program materials.

TABLE 6.—*Services provided by the Educational Uses of Radio Section, fiscal year 1945–46*

Materials or services provided on request	Volume for 1945–46	Volume for 1944–45	Grand total to date
1	2	3	4
Supplementary (informational) materials:			
Radio Manual, Radio Glossary, Handbook of Sound Effects, and Radio-Program Production Aids (all separate publications)	----------	1,536	57,164
Production Aids (includes above publications and replaces them)	1,175	----------	1,175
Radio Bibliography	3,096	----------	10,661
College Radio Courses (a directory of courses for teachers)	1,850	35	5,959
Technical Publications (loan circulation)	134	227	6,418
FM for Education (miscellaneous No. 7)	5,027	2,975	8,002
Standards for College Courses in Radio	2,000	2,200	4,200
State-wide Educational FM Broadcast-System Planning (mimeo.)	1,015	559	1,574
Coordinated State-wide Educational FM Broadcast Planning (mimeo.)	625	----------	625
Information Bulletins on Educational-Station Planning (mimeo.)	351	----------	351
Total	15,273	7,532	96,129
Catalogs:			
Fourth-Edition Script Catalog and O. C. D. Script Catalog (dropped)	----------	499	11,290
Scripts-for-Victory Catalog	125	1,406	9,064
Script-Catalog Supplement	95	199	6,616
Transcriptions-for-Victory Catalog	927	1,288	8,955
Transcriptions-for-Victory Catalog Supplement	1,231	599	1,830
Totals	2,378	3,991	37,755
Miscellaneous:			
Transcription Circulation (program loans)	2,481	2,604	13,060
Script Circulation (program loans)	6,329	8,989	352,386
F. R. E. C. Service Bulletin (total copies)	49,166	40,000	389,666
F. R. E. C. Program-Listing Service Bulletin	9,300	5,198	19,198
Requests Filled for Technical Advice or Information	502	493	1,891
States Given Requested FM-System Planning Assistance	10	14	26
Individual Requests Received for one or More Services	16,438	16,159	103,239
Separate Pieces of Out-Going Mail	37,815	39,826	Unknown.

The general trend, on the part of schools and colleges, toward developing educational FM broadcast stations has greatly accelerated the demand for information concerning administrative procedures for the planning and development of educational FM broadcasting stations and State systems, the translation of educational-program needs of listeners into scheduled program services, and techniques of educa-

tional program production and use. This is reflected in the fact that the demand, for the fiscal year just ended, for informational publications dealing with these subjects, as shown in table 6 was slightly more than double the demand for corresponding materials during the preceding year.

Federal Radio Education Committee Services

A number of changes have occurred, during the past fiscal year, in the membership of the Federal Radio Education Committee. Upon termination of term of office as president of the National Association of Broadcasters, J. Harold Ryan resigned as a member of the FREC, to be replaced by the Association's new president, the Honorable Justin Miller. Similarly, when Harrison B. Summers resigned as director of public service programs for the American Broadcasting Co., his successor, Robert Saudek, replaced him as the American Broadcasting Co. representative on the Federal Radio Education Committee. Edgar Kobak, president of the Mutual Broadcasting Co. was appointed to represent his network as a member of the FREC.

In view of the fact that American Education is presently concerned with redefining its obligations in this period of transition from a period of wartime economy, it is but natural that the membership of the Federal Radio Education Committee should undertake a thoughtful review of its past accomplishments in the light of both continuing problems in the field of education by radio and such new problems as can be anticipated at this time. To this end, the special committee to study postwar activities has unanimously recommended continuation of the FREC, and has outlined more than a dozen new research and service activities that might legitimately be undertaken by the Committee if and when funds can be found to support them. (A proposal to raise the necessary funds through one or more of the educational foundations, as well as through the National Association of Broadcasters, was under consideration at the close of the fiscal year.) Likewise, the special committee to consider possible expansion of FREC membership has suggested names of a dozen new organizations for possible membership in an effort to make the FREC more completely representative of all groups concerned with education by radio. (Action on its report was deferred for consideration until the time of the 1946 fall meeting of the Executive Committee.)

Meanwhile, established FREC services have continued during the past fiscal year. Although demands for copies of the monthly Suggested Radio Programs for Student Listening were approximately doubled those of the previous year, reduced personnel and lack of funds made it necessary to keep the mailing list to a minimum. However, toward the close of the fiscal year, arrangements were made with

the publishers of the Scholastic Teacher magazine to print the full program listings as a monthly feature. It is hoped that similar arrangements can be made with other professional educational journals in the interests of extending the circulation of the program listings still further.

Preparation of the annual Directory of College Radio Courses, suspended during the wartime years, was resumed this year in response to demands from students specializing in this field, and from representatives of the radio-broadcasting industry. Returning veterans and their counselors, as well as college student counselors, have commended the FREC for making this useful information available. The total supply of 3,000 copies that were made of the current directory already has been distributed, and new data are now being collected for the next edition. Wartime restrictions reduced the mailing list of the FREC Service Bulletin to slightly under 5,000 names.

Advisory and Consultation Services

Four general types of advisory and consultation service were provided during the past fiscal year in response to the requests received for assistance. Stated in order of amount of staff time expended in meeting these demands, these services were: (1) Assisting State departments of education, colleges and universities, and city school systems in relation to the planning of educational FM broadcast stations and the program services to be offered; (2) providing requested information or advice to individual school systems and teachers in relation to problems of educational-program selection and use, audio-equipment selection and use, and school audio-equipment requirements for specialized applications; (3) participating in meetings and projects involving various aspects of the use of radio in education; and (4) meeting with representatives of national service organizations and of broadcasters to discuss problems of producing programs to serve particular educational applications.

During the fiscal year, direct field assistance in the nature of administrative, procedural, and technical consultation was provided to State educational FM broadcast-system planning bodies in each of 10 different States—Virginia, North Carolina, South Carolina, Georgia, Alabama, Texas, Indiana, Ohio, Connecticut, and Maryland. Assistance of the same kind was also provided to planning bodies in each of four other States through consultations with individuals that were sent to Washington to meet with Radio section personnel. In addition, field service in the nature of participation in State and regional conferences to promote the use of radio in education was provided to a total of 11 different States. As of June 30, 1946, a total of 31 States

were known each to be planning the development of enough educational FM broadcast stations to insure substantially State-wide program service, while 12 of these were actively engaged in developing plans for complete State-wide educational FM broadcast systems.

Assistance provided in response to requests for assistance or advice relative to radio-education problems of individual school systems and teachers was of three general types: (1) Sending printed or mimeographed informational materials dealing with the problem specified; (2) providing the requested information or advice by letter; and (3) preparing carefully detailed information pertaining to problems of unique or highly specialized nature.

Requested participation, by members of the Radio Section's professional staff, in special meetings and projects involving the use of radio in education accounted for somewhat over 80 man-days of staff time, and included such kinds of assistance as (1) speaking before teacher groups and meetings of educational and civic organizations concerned with the use of radio in education; (2) participating actively in the work of the Joint Committee of the Office and the Radio Manufacturers Association on Standards for School Audio Equipment; (3) taking part, as discussion leaders and special-problems consultants, in the Ohio and the Wisconsin State Radio-Education Planning Workshops held during July and August of 1945; and (4) serving on the advisory committees of professional radio-education organizations such as the Institute for Democratic Education (New York City) and the School Broadcast Conference (Chicago).

Joint Study of School Audio Equipment Standards

The special committee which was created, in June 1944, under joint auspices of the Office of Education and the Radio Manufacturers Association to study problems school people encounter in the use of various kinds of radio and sound-amplifying equipment, and to develop recommendations as to design, construction, operative characteristics, and performance standards for equipment of this kind, completed an exhaustive study of central program distribution systems and related accessory equipment in the schools. This report is being published at the expense of the Radio Manufacturers Association. Scheduled for similar study during the coming fiscal year are radio receiving-sets for classroom use, together with equipment for making and playing recorded programs.

Liaison Services

Liaison relationships that have been maintained by members of the Radio Section's professional staff during the past fiscal year include the following:

1. Continuing promotion of mutual understanding (of problems, motives, and needs) between educators and broadcasters, through the medium of the Federal Radio Education Committee.
2. Direct liaison with the National Association of Broadcasters and with "key" personnel of the radio networks and independent stations, aimed at keeping commercial broadcasters continuously informed of developing trends in the use of radio in education.
3. Direct liaison with the Association for Education by Radio, the National Association of Educational Broadcasters, the National Educational Association, and other professional organizations and groups of educators concerned with the use of radio as an educational medium.
4. Direct liaison with the Federal Communications Commission aimed at keeping that body continuously informed of the status and directions of planning for noncommercial broadcasting by educational institutions and State departments of education, in an attempt to make sure that the Commission fully understands the needs, problems, and motives of existing and prospective educational-station licensees.
5. Direct liaison with the Radio Manufacturers Association and with other trade organizations representing manufacturers, distributors, and retailers in this field, aimed at promoting a clearer understanding, by the radio manufacturing industry. of specific educational applications and conditions of operation for which they will need to provide in the design, construction, and installation of equipment items they produce for the school market.
6. Direct liaison with the Institute of Radio Engineers and with professional radio consulting firms, aimed at the continuous accumulation of NEW technical information pertinent to the designing, production, and use of new communications—equipment items for educational applications.
7. Direct liaison with service, religious, and professional groups and organizations interested in the production and/or use of educational radio programs and transcriptions. (Groups of these kinds with which close working relationships have been maintained over the past fiscal year include various religious groups, educational foundations, and a variety of national organizations such as the Association of Women Directors of the National Association of Broadcasters, the Association of Junior Leagues of America, the Girl Scouts, the Intercollegiate Broadcasting System, and Town Hall, Inc.)

Visual Aids for War Training

With the end of the fiscal year, 1946, the Division of Visual Aids for War Training completed its wartime production program. The division was created in February 1941 to produce visual aids specifically designed to expedite the training of war workers.

During the 5 years of its existence the division produced a total of 457 visual-aids units, which included 457 sound motion pictures, 432 silent film strips, and 457 instructors' manuals. It was planned that the sound motion picture, silent filmstrip, and instructors' manual would be used as a unit of visual materials with each complementing and supplementing the other.

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These visual aids units were produced in the basic areas of wartime training where the shortages of manpower were most critical and where visual materials could make the optimum contribution. The primary purpose was to assist in training men by providing an authoritative film demonstration which used all the unique techniques of visual presentation to present the essential facts, develop an understanding of the basic principles involved, assist in developing desirable attitudes and appreciations, and to provide a picture, which the trainee would imitate, of a skilled operator performing a job.

Extent of Production

The following table indicates the total number of visual-aid units produced in the various subject-matter areas:

Subject areas	*Total number of productions in each subject*	*Subject areas*	*Total number of productions in each subject*
Machine shop work	125	Farm work	18
Aircraft work	77	Refrigeration service	15
Precision wood machining	41	Nursing	14
Shipbuilding skills	40	Foundry practice	14
Electrical work	28	Plastics	10
Engineering	23	Optical craftsmanship	6
Problems in supervision	22	Welding	5
Automotive operation and maintenance	19	Total	457

Each of these general areas of subject matter included many different types of work. For example, the 125 units in machine shop work include the following:

Subject areas	*Total number of productions in each subject*	*Subject areas*	*Total number of productions in each subject*
Basic machines	4	Operations on grinding machines	23
Precision measurement	8	Operations on the horizontal boring mill	6
Carbide tools	5	Operations on the vertical boring mill	3
Blueprint reading	5	Operations on the shaper	3
Bench work	10	Operations on the broaching machine	3
Operations on the lathe	17	Operations on the planer	2
Operations on the drill press	5	Operations on the gear hobber	5
Operations on the turret lathe	7		
Operations on the milling machine	15		
Operations on the metal cutting band saw	2		
The use of single point cutting tools	2		

Each of these series in turn consisted of film demonstrations of a graded series of specific jobs.

Each of these general subject matter areas was selected by the Office Committee after a careful study was made of the areas where manpower shortages were critical and in terms of the continuing usefulness of the material in peacetime training. These subjects were then submitted to the War Manpower Commission for approval. In the meantime, staff members prepared job break-downs and treatment synopses.

Contracts Awarded

Production was undertaken by commercial producers working under a production contract awarded on a competitive-bid basis. Altogether 35 commercial producers located in all parts of the country assisted in the production program of the division. The commercial producers were guided and assisted in their work by a team of Office specialists; one a specialist in the use of visual techniques in education and the other a specialist in the subject matter of the film under production.

The production of motion pictures in machine-shop work introduced new problems of accuracy and authenticity, for it introduced a new dimension. An operation on a machine could be completely accurate in terms of the operations and the end result, but could be quite undesirable in terms of the movements of the operator which could be awkward, or unsafe, or inefficient. To make certain that the films were completely accurate and trustworthy instructional materials, a local vocational advisory committee was established in each State to check each step in the production of each series of films at the studio or in the shop of the commercial producer.

The finished visual aids units were sold outright to all training groups interested in purchasing and using them. This policy was followed since it was believed that (1) the films would be most effectively used when they were locally available at the time they fitted best into the course of instruction, (2) the distribution of the films should be achieved at the lowest cost to the Government.

Film Distribution

Following the basic policy of utilizing existing facilities, the distribution of the films was awarded on the basis of competitive bids on a contract. For the fiscal year of 1946 they were distributed by Castle Films, Inc., of New York City.

After the division had been in operation for some time, Congress in making the annual appropriations placed the production on a liquidating basis and provided: "Copies of slides and films hereafter made shall be sold at a price sufficient to pay the whole cost of production of such slides and films." On the basis of estimated sales, it was decided that $5.75 per sound motion picture and $0.35 per filmstrip should be returned to the Treasury Department.

Extent of Sales

The following table indicates the number of prints sold and the moneys returned to the Treasury Department during the fiscal year 1946.

TABLE 7.—*Sales for the fiscal year 1945–46*

Date	Number of—		Money received
	Motion pictures	Film strips	
1945			
July	880	413	$5,181.55
August	526	431	3,175.35
September	651	1,556	4,287.85
October	564	449	3,367.75
November	770	676	4,664.10
December	74	28	435.30
1946			
January	1,113	1,085	6,779.50
February	304	611	1,961.85
March	557	644	3,428.15
April	605	750	3,741.25
May	254	515	1,586.75
June	632	504	3,810.40
Total	6,990	7,662	42,420.50

A summary of the sales during the previous years follows:

Fiscal year	Number of prints sold		Sums returned to the Treasury
	Motion pictures	Film strips	
1941–42–43	28,112	0	0
1944	3,038	1,250	$12,951.75
1945	7,542	5,907	52,380.15
1946	6,990	7,662	42,420.50
Total	45,622	14,819	107,751.85

During this same period the armed forces purchased a total of approximately 22,000 prints of the sound motion pictures. Altogether some 67,000 prints of the sound motion pictures and 15,000 prints of the filmstrips have been purchased for use in training. None of the years listed were ever free of various material shortages that tended to make the sales less than the demand.

During the war period the sales of prints (exclusive of the armed forces) were approximately 75 percent to war industries and 25 percent to vocational schools. During the fiscal year of 1946 the averages were changed considerably with approximately 70 percent to schools, 15 percent to industries, and 15 percent to foreign governments. Prints have gone to South Africa, Canada, New Zealand, Australia, China, India, Mexico, Brazil, Chile, and other nations.

In addition to the foregoing production program the division through funds provided by the Office of Inter-American Affairs provided Spanish and Portuguese versions of five of the subjects on the lathe. The division also with funds provided by the United States Public Health Service produced three sound motion pictures dealing with the pasteurization of milk and two films on the techniques of mass

radiography. All of these films are distributed within the United States through the present Office of Education distribution contract.

The division through its distribution contract has also made available to educational institutions approximately 400 additional films produced by the armed forces, the United States Public Health Service and the Civil Aeronautics Authority.

Publications

As a part of its wartime production program the division was responsible for the issuance of a catalog of Government films, which listed for the schools the films produced by the various governmental agencies and available for educational uses. The division has also directed the issuance of a complete catalog of the films distributed under its distribution contract, as well as the monthly newsletter describing the films most recently placed on sale. The final report of the wartime activities of the division was given in the Office of Education Bulletin 1946 No. 13, *Training Films for Industry: Final Report of the War Training Program of the Division of Visual Aids for War Training.* This report provides a discussion of the problems of educational film production, and suggests some of the research needed in the field. As a result of the wartime activities of the division there remains as a continuing contribution to vocational training the visual aids units. The large majority of these will continue to be as useful in peacetime training as they were in wartime. The division maintains a library of its own productions, which is available to all Government agencies and visitors for previewing and study. There also remains approximately 20,000 still pictures that represent the original negatives used in the production of the film strips. These stills are being made available to publishers of textbooks and magazines for illustrative purposes. Schools are also requesting copies of these and are using them to develop posters and other classroom aids.

The increasing interest of all types of educational institutions in the field of visual education has been manifested by a constantly increasing demand for assistance in the various phases of production, distribution, and utilization. The division, therefore, in addition to its wartime functions of film production, undertook to make the services of its staff available to consult and advise with educational institutions and industrial organizations, and other governmental agencies.

The period of the war has seen a great increase in the general understanding of the potential role that visual aids can play in education. The widespread and intensive use of visual aids in the training of the armed forces has received wide attention. Furthermore, as the members of the armed forces return to positions of influence in their

home communities they are often responsible for developing the interest of the local schools in the more effective use of these new tools of instruction.

As a result of these influences the demand for assistance has increased beyond predicted limits. Schools, business organizations, industrial concerns, governmental agencies, international agencies, and foreign governments are interested in developing a more competent understanding of the applications of visual education. Some assistance has been given on an increasing scale but it is difficult if not impossible to meet effectively the existing demand.

At the present time there exists no complete and authoritative body of statistical data in the field, the training of personnel in the field of visual education is quite inadequate, there is a dearth of good courses in the use of visual aids in the education of prospective teachers, and the general demands for knowledge far exceed the information that is now available. There is a serious need for further study and research of the problems of utilization, distribution, and production.

The war period saw great advances made in the field. It remains for peacetime study to apply the knowledge gained during the war to the problems of education and to conduct the study and research necessary for the continuing development of these new tools of instruction.

SCHOOL ADMINISTRATION

The Division of School Administration realizes that no State or local system or program of education is likely to advance far beyond the vision, the imaginative leadership, the genius for organization, or the resources of technical skill and knowledge which its chief executive officer can bring to bear upon its administration. The primary effort of the division, therefore, has been to make available technical leadership resources which can be provided most effectively at the national level to rapidly improve the quality of educational administration at local levels, and thus to contribute to national strength, security, and prosperity.

The division has been able to meet only a small fraction of the requests and demands from the field for greatly needed services. The very limited staff, however, spread its services over a wide range of important problems and over widely separated areas of the Nation. The work of the staff involved activities of which the following are typical:

1. The maintenance of current comprehensive cumulative files on problems of educational administration, and using same in conducting correspondence, interviews, and committee work.
2. Research for discovering, gathering, organizing, analyzing, and presenting information regarding all aspects of school administration with particular attention to needs, problems, trends, and successful programs of operation involving significant developments.
3. Participation in State, regional, and national conferences, workshops, committee studies, and activities, conventions, meetings, and important activities of all legitimate kinds where problems of school administration of national concern are considered.
4. Consultative services for and participation in surveys of State education systems or selected city or county systems.
5. Field visitation and services to State departments of education, colleges, and other appropriate educational administrative agencies.
6. Publication of leaflets, pamphlets, bulletins, study and survey reports, and by preparing articles for publication by professional magazines.
7. Maintenance of working relationships with, and provision of consultative services for professional and technical organizations and appropriate lay organizations whose activities have implications for school administration.

Work With Chief State School Officers

By constitutional provision in 33 States, and by State statutory law in the remaining 15 States, the chief State school officer has been

designated as the head of the public school system. Ordinarily he serves as the chief executive officer of the State board of education. He is responsible for long-range planning and for professional leadership on all matters pertaining to education within his State. He has professional, legal, and official responsibility for influencing public officials of the State in the establishment and maintenance of the State pattern of education and in setting minimum standards for the various local subdivisions.

The chief State school officer exercises his responsibilities through a professional staff known as the State department of education which, as a legally established agency of official State government, is under his general direction. The State department of education must provide broad professional leadership and expert, technical consultative services not otherwise readily available through a local school administrative unit. Probably no official or professional agency is comparable to the State department of education in potential influence for the advancement of education along sound lines.

Poorer and less favored school communities, while retaining local control of their schools, must look to this official State educational agency for a high quality of leadership beyond their local power to provide. They must also look to the State department of education for the establishment and execution of sound policies for the equitable distribution of State funds to provide more nearly equalized educational opportunities throughout the State.

The United States Office of Education maintains a constant, official, direct relationship with each chief State school officer and with each State department of education. In addition, the Division of School Administration has established definite working relationships with the National Council of Chief State School Officers, an organization to coordinate and unify the study and activities of State departments of education on problems of common concern. During 1946 the Commissioner of Education and the director of the Division of School Administration met often with the officers and the executive committee of the organization and served as consultants on most of their plans.

A division staff member was assigned to serve as secretary of the planning committee of the study commission established by the council.

Office of Education specialists from several of the divisions served as consultants to various committees on studies undertaken by the study commission.

The April and May 1946 issues of School Life carried complete reports of the annual convention, resolutions adopted, reports to the council from committees of the study commission on a wide range of problems, and the policy statements of the National Council of Chief

State School Officers. Reprints of this special material have been made widely available.

The director of the Division of School Administration has been designated as liaison between the council and the United States Office of Education.

General Administration and Business Management Services

In the absence of staff members to be assigned on a full-time basis to give attention to a wide range of problems in general administration and business management, the director has attempted to answer correspondence and provide consultative services on many and varied problems on which there is increasing demand from the field for specialized technical service from the United States Office of Education. Such problems include the organization and functions of State, city, and county departments of education; budgeting, accounting, and reporting procedures; purchasing, handling, distributing and using of supplies and equipment; the pre-service and in-service education of school administrators; special problems of rural school administration and the reorganization of school administrative units.

Pupil Transportation Services

In pupil transportation, as in other fields, 1945–46 was a period of reconversion. During the war, State and local school systems made every effort to provide essential transportation service with minimum interference to the war effort. Bus routes were skeletonized to save tires and gasoline. Old buses were patched up, sometimes at very high cost, to make them last through the war. Bus drivers and school bus mechanics left school transportation in large numbers for activities more remunerative or more directly connected with the war. They were replaced by housewives, highschool boys and girls, and general handy men. Most of the children got to school most of the time, but often under difficult circumstances. The urgency of these problems made it necessary for the Office of Education, as well as many States and local school units, to devote increasing time and energy to the whole area of pupil transportation. In 1945–46 attention was centered on certain of the most pressing problems on which progress must be made to provide safe, economical, and efficient transportation for all children entitled to the service.

Because of the acute need for new equipment it was a foregone conclusion that tens of thousands of school buses would be purchased in the first few years after the war. To make sure that all of these new buses would be the best that the industry could build at moderate cost, there was need for a revision of the national bus standards adopted by a conference of the representatives of all the States in

1939. The Office of Education participated in planning and carrying on a conference which was held at Jackson's Mill, W. Va., in October 1945. From this conference resulted a new set of national school bus standards which are rapidly being adopted in most of the States.

Attention to the pressing problem of the selection, employment, training, and retention of competent and reliable drivers for school buses required much time and intelligent planning in 1945–46. Many States do not yet have adequate standards for school bus drivers and the standards which do exist vary widely from State to State. Less than one-third of the States now have organized programs for the training of school bus drivers. However, a large majority of the States are now actively interested in setting up adequate standards for drivers and in giving them a course of training after they are employed. Many State transportation supervisors have been asking for information on the experience of other States on these problems. To help those who are responsible for formulating programs for the selection and training of school bus drivers, the Office of Education published Pamphlet No. 100, *School Bus Drivers—Current Practices in Selection and Training.*

In 1944 the Division of School Administration initiated a comprehensive survey of pupil transportation to include studies on (1) the legal basis; (2) financing; (3) records and reports; (4) the selection and training of school bus drivers; (5) school bus standards; (6) school bus maintenance; (7) methods of purchasing buses; (8) ownership of buses; (9) insurance; and (10) State and local responsibility. Studies on these problems were scheduled to appear over a period of 3 years. The 1945 National Conference on School Bus Standards requested that the study on pupil-transportation insurance be completed as soon as possible. Since the studies on two of the other problems were in a more advanced stage and since the limited staff working in this field could not issue the study on insurance this year, the research division of the National Education Association was requested to complete the study. This they agreed to do and the Office turned over to them the incomplete data which had been collected on the insurance problem. As a result of the cooperation of the NEA, this study can be issued at least a year earlier than otherwise would have been possible. Other aspects of the study were continued by the Office of Education.

Considerable progress was made in the collection of information for a study on school bus maintenance. A great deal of material concerned with the maintenance of motor vehicles is now available, but much of it either presumes the maintenance of large fleets of vehicles on a commercial basis or the maintenance of vehicles which travel great distances in the course of a year. There is urgent need for setting up procedures which will apply to the maintenance of school

transportation facilities ranging from single vehicles to fleets of 100 or more which wear out more from deterioration than from use. Several States have had valuable experiences in setting up such programs and operating them over a period of years and this study will pool these experiences and evaluate them. In this study assistance is being given by an advisory committee composed of persons who have had extensive practical experience in the operation of school bus maintenance programs.

Because of the quick growth in pupil transportation and rapidly changing conditions, many local units which have been operating extensive programs for a period of years have been requesting their own State departments of education to conduct pupil transportation surveys. The Office assists in such surveys insofar as it can be of help to State departments of education in establishing patterns for them. Staff members cooperated this year with several State departments of education in carrying on the field work and in writing up reports for a number of county surveys of pupil transportation.

The Division of School Administration performed two continuing, direct special services designed to assist States in keeping abreast of developments in the field of pupil transportation. First, it continued the practice, begun during the war, of sending periodically to all State supervisors of pupil transportation memoranda which gave information on some late event or development. These memoranda were not sent according to any schedule, but only when it seemed that State supervisors should receive information which would be of assistance to them. Second, the division initiated a packet loan service for supplying to those interested in certain problems in pupil transportation all materials related to those problems published by State departments of education. For example, one packet contains all State laws concerned with pupil transportation and another contains all State published documents and forms relating to procedures in the purchase of school buses. Any State interested in developing procedures to be followed in the purchase of school buses may obtain all existing State publications on this topic simply by writing to the Office of Education. Packets of material related to 18 pupil transportation problems have been assembled and are loaned for periods long enough to permit the borrowers to make full use of the materials.

The division has continued to offer consultative services in the field of pupil transportation. In addition to assistance through correspondence, visits were made to several State departments of education to discuss with appropriate staff members the most pressing problems of their schools in rendering this service. A staff member served as consultant to a pupil transportation conference which was composed of representatives of 11 Midwestern States. In addition to working with the States, the Office continues to cooperate with other organi-

zations and agencies which work with problems related to pupil transportation, such as the National Safety Council, the Safety Commission of the National Education Association, the American Automobile Association, and the Automotive Safety Foundation.

School Finance Services

Reports collected and compiled by the Office of Education indicate that substantial increases were made during the year throughout the country in the amount of funds provided for the public schools. These increases were provided for principally in local school district budgets. Some of these were prepared during July and August of 1945 for the school year 1945–46 and others during the closing months of the fiscal year 1946 for the school year 1946–47. The most important item of expense for which additional funds were provided was that for salaries of teachers. These increases range from small to comparatively large amounts.

Important developments during the year regarding the financing of the public schools are the many proposals voted upon favorably for school district bond issues. School patrons generally have favored a proposal to incur school-district indebtedness, when current funds are insufficient, to improve their school building facilities. Probably in no other time in the history of the country has there been more consideration given by local school districts to school building construction needs and consequently the voting of school district indebtedness for the purpose of borrowing money to finance such construction.

Unusual activity in State and local programs to improve the financial status of schools has been accompanied by increasing requests for information, advice and technical services from the finance section of the Division, during the fiscal year.

In addition to many other important activities, the Specialist on School Finance:

1. Continued the study of State Plans for Financing Education—a State by State study. Completed the description of one additional State plan which was published in the June 1946 number of SCHOOL LIFE. Revised previously prepared descriptions of two other State plans.
2. Completed the work on the report of Federal Government Funds for Education, 1944–45 and 1945–46. (Leaflet No. 77.)
3. Issued Pamphlet No. 99, State Plans for Financing Pupil Transportation.
4. Continued work on the study, Essentials of a Satisfactory Plan for Financing the Public Schools.
5. Took part in several conferences in which State and other school administrators participated in study and discussion of school finances.
6. Served as a member of the Interdivisional Committee on Research and Statistics. This committee was established to:

   Develop recommendations on the general research program of the Office and statistical reporting projects. Advise the Chief of Research and Statistical Service regarding the work of that Service.

School Legislation Services

During the fiscal year ending June 30, 1946, the Division of School Administration carried on through its section on School Legislation a number of studies on important phases of school legislation and rendered consultative services touching many current problems in school legislation. The Office was called upon more than in any previous year to render information and guidance services to interested persons concerned with Federal legislation affecting education. Probably more congressional action relative to education was in evidence than in any other single session in the history of the Congress. Information was constantly requested relative to pending educational measures. The Specialist in School Legislation attended hearings on educational bills before Congress and endeavored to keep abreast of legislative developments affecting education.

In 1945, practically all the State legislatures were in session and there was considerable State legislative action affecting education. A study of this legislation continued throughout the year. The Specialist in School Legislation visited a number of State departments of education in 1946 where important educational legislation was under consideration, deriving useful information on current State legislative developments affecting education, and was available for consultation by officials in State departments of education and representatives of State education associations.

In addition to rendering consultative services on a wide range of problems in educational legislation, the Specialist in School Legislation engaged in a number of projects, which included the following:

1. A review of 1945 State legislative action affecting important phases of education, including a summary of recent State legislation affecting Federal-State educational relations was published in School Life, January 1946.
2. The Division continued cooperative services in connection with the National Survey of School Transportation, with special attention to State laws affecting the transportation of school children. This project involves an analysis by States of the numerous statutory provisions applicable to the operation and maintenance of State systems of pupil transportation. This study has for its object to ascertain what type of laws governing school transportation seem to produce the most satisfactory results. Satisfactory progress is being made on this important study which will be continued into the fiscal year 1947.
3. Upon invitation from the president of the Association of School Business Officials, the Specialist on School Legislation attended in Pittsburgh a 4-day convention of school business officials and served as consultant to the organization. He addressed the convention on Recent State Legislative Action Affecting the Business Management of Schools, and participated in group discussion of problems in the management of school business affairs.

4. Work has continued on the project of developing a bulletin on the Codification and Improvement of State Laws Relating to Education. This study is designed to serve as a handbook of useful information, suggestions, guiding principles, procedures, classification of subject matter, etc., designed chiefly for the use of those interested in and engaged in improving their State school laws. There is considerable awareness of the need of simplification and recodification of school laws in many States. An increasing number of State legislatures are concerned with this problem. Some of them have authorized such undertakings and have appropriated money therefor. Hence the need of leadership and services of this type from the Office of Education is increasingly in evidence
5. The Specialist in School Legislation completed a manuscript on International Exchange of Teachers—Legal Aspects, which was printed in SCHOOL LIFE, December 1945. This article deals with some of the international legal involvements confronted by a teacher who endeavors to carry on his profession in a foreign country. Considerable interest has been manifested in this field.
6. Work was devoted to the compilation and classification of digests on current State legislation affecting different phases of education. The need for this information is constant and is essential to the rendering of effective consultative services in school legislation by the Office.
7. The Division of School Administration also kept up-to-date classified information on educational measures pending before Congress. A summary of legislative measures enacted by the 79th Congress, First Session, appeared in SCHOOL LIFE, October 1945.

Considerable attention of the Specialist on School Legislation was devoted (1) to personal interviews with State and local school officials and representatives of Federal agencies with respect to current problems and needs in educational legislation; (2) to various divisions and staff members of the Office in reference to legislative problems in their respective fields, and (3) in conducting the wide range of correspondence relative to school legislation.

School Plant Services

During the fiscal year 1945–46, the Division of School Administration worked with State and local school systems, institutions of higher learning, and professional and trade associations for the improvement of educational plant facilities, including sites, buildings, and equipment.

State and local school and college authorities are greatly concerned with their physical plant programs because of inadequate and obsolete facilities resulting from war-time restrictions, increased enrollments, educational reorganization, and the expansion of educational and community services. It will require an estimated 3 billion dollars to provide the public educational plant facilities now urgently needed and contemplated as soon as sufficient building materials and skilled

mechanics are available. State and local educational officials are looking to the United States Office of Education for guidance and leadership in this field.

The following are among the school plant services provided by the School Housing Section during the year:

1. Staff members served as chairman of the Standards Committee of the National Council on Schoolhouse Construction for the preparation of a Guide for Planning School Plants, a project which will continue through the next fiscal year.
2. Staff member served on the programs of three national school plant conferences: American Association of School Administrators, National Council on Schoolhouse Construction, and Association of School Business Officials.
3. Staff member served on the programs of four regional school plant conferences at New York City; Nashville, Tennessee; Daytona Beach, Florida; and Chicago.
4. Staff member directed or participated in State-wide school plant conferences in Maryland, Alabama, Oregon, and California.
5. Provided consultative services to State departments of education in Maryland, Florida, Georgia, Alabama, and Tennessee.
6. Staff member served as plant consultant on college and university surveys in Florida, South Carolina, Alabama, and Mississippi.
7. Provided consultative service to War Department on Air College at Maxwell Field.
8. Provided consultative services on the plant programs of 17 county and city school systems in Maryland, Ohio, California, Alabama, South Carolina, and Georgia.
9. Staff member served as plant consultant to the Interstate School Building Service of Peabody College, which serves the State departments of education in 16 southern States.
10. Staff member served on School Equipment Committee of the American Council on Education which is studying types, designs, and educational requirements of school equipment to assist manufacturers in producing more functional equipment at lower costs through simplified practices.
11. Checked and offered suggestions on several building plans brought or sent in to the Office by school superintendents and architects.
12. Answered a large volume of correspondence giving references, advice, and technical data on the planning of educational plant facilities.
13. Published six school plant articles in professional magazines, and contributed to Office bulletins and reports.

The school plant consultative services provided by the Office of Education consisted of surveys of existing facilities, studies of future plant needs, developing of State-wide school plant programs, selection of school sites, developing State and local standards for educational buildings and equipment, and methods of financing construction.

SURPLUS PROPERTY UTILIZATION

The general lack of jurisdiction of existing State educational machinery [1] to handle in a unified way a State-wide program for surplus property led the United States Commissioner of Education, with the approval of the Surplus Property Administration, late in 1945 to request the Governors and the State legislatures to designate existing State educational agencies or to create new State agencies to handle the functions that necessarily would devolve on States in carrying into effect the public benefits section of the Surplus Property Act of 1944. The first implementing of section 13 of the Act had appeared as Surplus Property Administration Regulation 14, in November of 1945.

Responsibilities Placed in U. S. Office of Education

SPA Reg. 14 placed the following responsibilities in the Federal Security Agency which delegated them to the United States Office of Education:

1. Prepare certified list of educational institutions and instrumentalities;
2. Prepare estimates and submit recommendations of property to be reserved for educational institutions and instrumentalities;
3. Develop criteria for the determination of legitimate and relative needs of educational institutions and instrumentalities;
4. Establish procedures under which applications by or for educational institutions and instrumentalities will be submitted and reviewed and providing for action to be taken on such applications following review;
5. Cooperate with disposal agencies with respect to the giving of notices of available surplus property to educational institutions and instrumentalities;
6. And such other action as may be necessary to fulfill the functions of the Federal Security Agency under Regulation 14 with respect to disposal of surplus property appropriate for school, classroom, or other educational use to educational institutions and instrumentalities.

Divisional Organization and Functions—July 1, 1945, to June 30, 1946

In order to meet these responsibilities and otherwise to promote the acquisition of surplus property and to achieve equitable distribu-

[1] A study of the jurisdiction of State boards of education over the total field of public education was made and published by the U. S. Office of Education early in 1944.
Much preliminary planning had been done in 1944–45 to assist States in acquiring and effectively utilizing surplus Government war property immediately following the passage of the Surplus Property Act of 1944.
An advisory committee had been set up by the Commissioner in March of 1944.

tion to eligible educational claimants, the Commissioner organized the Division of Surplus Property Utilization in the Office of Education, with a director in charge. The division has two branches in the Washington Office—Field Operations Branch and Plans and Programs Branch—and a field staff.

The Division's functions and activities include the following:

1. Assisting the WAA, Army, and Navy in securing an equitable distribution to educational institutions of property surplus to the needs of the Federal Government;
2. Aiding the State educational agencies in the continuous revision and adaptation of their procedures as they relate to revised WAA, Army, and Navy regulations and changing conditions in the disposition of properties involved.
3. Advising and assisting the State educational agencies in the review, approval, and summarization of Declarations of Intent and in the review and approval of requests for Army and Navy donable property from educational institutions.
4. Stimulating the development of procedures for consolidated purchases in order that educational institutions may acquire all types and kinds of available surplus property.
5. Making, upon request of WAA, field surveys of real property under negotiation for purchase by educational claimants.
6. Reviewing and certifying requests for Army and Navy donable property.
7. Maintaining close liaison with the Army and Navy for the purpose of assisting in developing expeditious and equitable methods of distributing donable property needed by schools, colleges, or universities.
8. Notifying educational institutions through State educational agencies regarding donable Army and Navy property and methods of acquisition.
9. Determining the eligibility of educational institutions for the benefits as provided under SPA Regulation 14 and keeping current a list of all eligible educational claimants for use by War Assets Administration, State educational agencies for surplus property, and field representatives.
10. Developing and maintaining harmonious and effective working relationships between WAA regional offices, educational institutions, the State educational agencies, and the Army and Navy.

Field operations branch.—The field operations branch is headed by a deputy director who is responsible to the director. This branch is responsible for the operation of the functions listed above as they affect the 130,000 potential educational claimants, the 48 State educational agencies plus those in the District of Columbia, Alaska, Hawaii, and Puerto Rico, the 33 War Assets Administration regional offices, and the Army Service Commands.

The deputy director is responsible for the supervision of operations of the branch. This includes the establishment of procedures in accordance with the regulations of WAA, the Army and the Navy, and

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the coordination of the entire disposal program in the field to insure a fair and equitable distribution.

A staff of field representatives is stationed in or assists the WAA regional offices, the Army headquarters, the naval establishments, and the State educational agencies.

In order effectively to carry out the field operations the States have been divided into five regions: roughly, the Northeast and North Atlantic States; the Southeastern States; the Middle Western States; the Southwestern States; and the far Western States. A regional chief and assistant regional chief are in charge of each region and are charged with the responsibility for the entire disposal program in the region.

They are responsible for the supervision of the field representatives activities, which include liaison with WAA regional offices; the stimulation of the growth and development of the State educational agencies for surplus property; the encouragement through direction and advice of cooperative buying and central warehousing by educational institutions within a State; the allocation of available surplus and donable property among States; the supervision of reallocation of available surplus and donable property to educational institutions within States; the coordination of Navy, Army, and WAA special order programs to insure a fair and equitable distribution of like equipment among eligible claimants; and, promotion of the distribution of surplus and donable property to educational institutions.

Plans and programs branch.—The plans and programs branch is headed by a deputy director who is directly responsible to the director. This branch has the responsibility for liaison and consultative services to WAA, Army, Navy, and other governmental and private agencies. These liaison and consultative services include technical and professional advice on all phases of education as it is related to the disposal to and the acquisition by eligible educational claimants of property surplus to the needs of the Federal Government.

Specifically, such services include technical and professional advice concerning: The needs of educational claimants for all kinds of property; the usability and adaptation of real property for eduational purposes; the fiscal and business procedures of school systems, colleges, and universities as they relate to the acquisition of property; the need by educational claimants for property to be offered through special orders to SPA Regulation 14; the methods and procedures necessary to insure a fair, orderly, and equitable distribution of available property.

The director was delegated authority by and is responsible to the Commissioner of Education for performing these functions and has

responsibility for effecting expeditious transfer to educational institutions of Army and Navy donable property.[2]

The director determines jointly with the director of the Office of War Property Distribution of the Federal Security Agency and other departments or agencies concerned, the procedures to be followed by educational claimants in acquiring surplus property by purchase and donation.

State Educational Agencies for Surplus Property

Each of the 48 States, the District of Columbia, Alaska, Hawaii, and Puerto Rico, has established a State (or territorial or District) educational agency for surplus property, with headquarters in the capital city of the State (or Territory) except in the case of Delaware (located in Wilmington) and Maryland (located in Baltimore), to keep eligible claimants and the public informed of procedures in force in the State and to answer inquiries addressed to it by interested persons.

The purpose of the State educational agencies and the functions they perform in the program are given in educational surplus property memoranda Nos. 1 and 9 which, together with other duplicated and published materials, are available from these agencies, from the division's office in Washington, D. C., and from the field representatives. These agencies assist claimants to buy surplus property at a discount and to obtain donable property for educational use.

Since a principal purpose of the program of the Division of Surplus Property Utilization is to assist WAA and eligible educational claimants to do business, and particularly to assist these claimants to get price benefits permitted under SPA Regulation 14 (and other SPA regulations) and to obtain donations for eligible educational institutions, both the departmental and field staffs of the division seek wide dissemination of information on sales and donable property. The major source of information on sales of property to priority claimants[3] is the War Assets Administration, Washington, D. C., and its regional offices, since the sales are controlled by that administration.

The State educational agencies for surplus property, with assistance from the field representatives of the United States Office of Education, give information to those seeking purchases or donations of property. Requests for information should be addressed to the executive officer of the State educational agency for surplus property in the State in which the request originates.

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[2] Delegation of authority to Office of Education in donation programs for Army and Navy are contained in SPA Regulations Nos. 4 and 19 and in War Department PR–7, par. 7–316 and Navy Department PR&D Regulation No. 1, par. 210.

[3] See SPA Regulation 2.

In proportion as the State agency is adequately staffed and financed by the State, the State is in position to acquire by purchase and by donation its share of surplus and donable property. Through its own efforts the State agency can enhance the quality as well as the quantity of its acquisitions.

Six Methods of Acquiring Surplus Property

At the present time there are six different methods or procedures by which educational institutions may acquire property surplus to the needs of the Federal Government. These are: (1) WAA brochure sales at 40 percent discount under SPA Regulation 14; (2) WAA site sales at 40 percent discount under SPA Regulation 14; (3) WAA real property disposals under SPA Regulation 5; (4) WAA Special Orders under SPA Regulation 14; (5) Army donable property under SPA Regulation 19 and War Department PR 7; par. 7–316; and (6) Navy donable property under SPA Regulation 19 and Navy Department PR & D Regulation No. 1, par. 210.

There are four control points through which property is obtained under these six methods, namely: (1) the 33 Regional Offices of WAA (brochure and site sales); (2) the Washington Office of WAA (special orders and real property); (3) the Army and its various installations; and (4) the Navy and its various installations.

Participation by the Office in the Six Methods

1 *Brochure sales.*—Technical assistance to the WAA regional offices as to the kinds of surplus property needed by educational institutions at the various levels.

Technical assistance to the WAA regional offices and the State educational agencies in the adaptation of the varied and complex business procedures of educational institutions to the business methods of WAA. (This involves the stimulation of cooperative buying and central warehousing by educational institutions within a State through the State educational agency in order to permit the greatest flow of available property to educational institutions in accordance with WAA procedures.)

Technical assistance to WAA regional offices in the allocation of property available to priority IV and V claimants. (This involves presenting the needs of educational institutions to WAA when available property is allocated among the claimants of group IV and group V; the allocation of the property made available to education among the States: and insuring for WAA that property allocated to a State is reallocated by the State educational agency in a fair and equitable manner to educational institutions within the State.)

2. *Site sales.*—Technical assistance for WAA at site sales to educational institutions desiring to acquire property. (This involves screen-

ing the inventories of property available at a site sale to determine if there is any property in which educational institutions might be interested; to notify eligible claimants of such property when notices by WAA are through general newspaper advertisements; to determine, when possible, if any property of interest to educational claimants is available at a site sale at the time when group IV and V claimants are authorized to buy. This assistance has been found to eliminate needless attendance by representatives of educational institutions at site sales.)

Technical assistance to State educational agencies in promoting group purchasing by educational institutions at site sales. (This involves the only effective method by which educational institutions can acquire any appreciable amounts of property at site sales.)

3. *Real property disposals.*—Technical assistance to WAA in determining the need for and effective utilization by an educational institution of available real property. (This involves independent surveys by the United States Office of Education representatives of the real property requested by an educational claimant to determine if the facilities requested are adaptable for educational purposes and if the proposed educational use of such facilities is educationally sound and of benefit to the Nation.)

4. *Special orders to SPA Regulation 14.*—Technical assistance to WAA in the disposal of special kinds of equipment to educational claimants at a nominal price. (This involves assistance in the allocation of available property.)

5 & 6. *Army and Navy donable property.*—These two programs are basically alike in their problems but differ in details.[4]

Technical assistance to the Army and Navy in the determination of what kinds of property can be effectively utilized by educational institutions. (This involves the location, screening, and freezing of excess property for educational claimants in accordance with the needs of such claimants.)

Technical assistance to the Army, Navy, and State educational agencies in the allocation of available excess property. (This involves the formation of a cooperative plan between States and by States for the removal of excess property to central warehouses and subsequent reallocation to educational claimants; the obtaining and approving of requests for donable property on the basis of need and utilization; a fair and orderly distribution; and a coordination in the disposal of property available from Army sources and from Navy sources.)

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[4] See War Department PR–7, par. 7–316 (revised) and Navy Department PR&D Regulation No. 1, par. 210 (revised). Educational surplus property memorandum Nos. 10 and 11 giving policies and procedures applicable to these programs are available from the State agencies and the U. S. Office of Education. Forms and instructions are also available from these sources.

How Eligible Educational Claimants Acquire Property [5]

1. *By purchase at discount from fair value from WAA* [6]

(*a*) *Personal property.*—Educational institutions desiring to purchase property offered by WAA on notices of offering indicate their intent to purchase certain quantities and types of property to the appropriate State educational agency for surplus proerty. State educational agencies will approve declarations of intent, summarize the declarations of intent of all institutions within the State which are filed against a specific notice of offering, and transmit the summary to WAA. WAA notifies the State educational agencies of the amount and type of property reserved for claimant institutions. State educational agencies will allocate the property available reserved by WAA among educational institutions within the State, and instruct them to file purchase orders with WAA for the quantities and types of property allocated to them.

(*b*) *Real property.*—Educational claimants may submit applications to WAA for any real property known to belong to the Federal Government which they can effectively utilize for educational purposes. Applications should be sent to War Assets Administration, Washington 25, D. C., even though the claimant does not know whether the real property has been declared surplus.

The United States Office of Education, as advisory agency to the War Assets Administration, upon request of WAA, makes independent investigations of applications from educational claimants.

On the basis of its investigations, the United States Office of Education makes recommendations as to the benefits that have accrued or may accrue to the United States by the disposition of the real property to the particular educational claimant applying for it.

2. *By donation from WAA, Army, and Navy*

(*a*) *Donation of property authorized under WAA Regulations 4 and 19.*—Nonprofit educational institutions may obtain property which is considered salvage (worn, damaged, deteriorated, or in incomplete condition, or which is of such a specialized nature that it has no reasonable prospect of sale as a unit) or scrap (property that has no reasonable prospect of sale except for its basic material content) by donation from disposal agencies, upon approval of the Federal Security Agency, United States Office of Education, to the end that such donations, shall, to the extent feasible, be made to those institutions which are in the greatest need of the property.

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[5] Information on WAA sales under SPA Regulations 5 and 14 is available from the WAA office in Washington, D. C.; forms and instructions on Army and Navy donations are available from the headquarters, activity, or installation at which property is located or from U. S. Office of Education, Washington, D. C., and State agencies.

[6] Under SPA Regulations 5 and 14.

(*b*) *Donation by Army under PR–7, par. 7–316.*—Institutions not operated for profit (including institutions operated by States or political subdivisions thereof) may obtain certain types of machinery, mechanical equipment and tools which have been declared obsolete or excess to the needs of the Army upon presentation of a written application approved by the United States Office of Education (Federal Security Agency) and reviewed by the commanding general of the Army area, to the chief of the Technical Service Command.

The United States Office of Education representatives assist educational institutions in locating and selecting obsolete or excess Army property which may be used appropriately for the primary purpose of instruction. The applicant institution must warrant that it is not operated for profit; the property requested must be used in courses of vocational training or instruction; the institution must have a standard curriculum in the fields for which it offers training; the institution must provide a regular course of instruction which will require the use of the property; the request must be reasonable and proper in view of the training to be given and the amount of property reasonable in proportion; the institution must provide adequate facilities to maintain the property; and the applicant institution must pay all expenses necessary for packing, handling, and delivery to the carrier before property will be shipped.

(*c*) *Donations by Navy under P. R. & D. Reg. 1, par. 210.*—Nonprofit schools, colleges, or universities may obtain certain types of machinery, mechanical equipment, tools, boats and boat equipment, and obsolete air-borne electronics and radar equipment, which has been declared excess to the needs of the Navy, upon presentation of a written application approved by the Office of Education (Federal Security Agency) to the cognizant bureau, Navy Department, Washington, D. C. The applicant institution must warrant that it is a nonprofit school, college, or university; state that the property will be used in courses of vocational training or aeronautical courses; indicate the specific method of use in such courses, and if air-borne electronics or air-borne radar is requested, certify that such property will not be used in actual flight. In addition, the applicant must agree to pay all packing, handling, and shipping charges resulting from the filing of the application.

Amount of Property Acquired

The following tables show, for the periods indicated, the fair value of property purchased by educational claimants from War Assets Administration and the acquisition cost of property donated to schools, colleges, and universities by the Army and Navy.

TABLE 8.—*Preliminary report of purchase orders and sales under SPA Regulation 14, educational institutions and instrumentalities, for period Feb. 16, 1946, through June 28, 1946*

[This preliminary tabulation is incomplete as shown by the other footnotes to the table. This explanation should also be made: Although the number of sales documents received is indicated as 48.8 percent of the purchase orders received it is known that several sales documents, in many instances, may be written against a single purchase order. Furthermore, the fair value of the property which the sales documents represent is only 28.8 percent of the total fair value of the property on the purchase orders received. This is due in part to the difficulty of obtaining sales documents immediately from WAA and in reporting complete data to the Office of Education. If all sales documents issued to the close of the period had been available the number and the fair value of property which they represented would have been considerably greater]

WAA region	Purchase orders received		Sales documents received from War Assets Administration			
	Number	Fair value	Number	Percent, column 4 of column 2	Fair value	Percent, column 6 of column 3
1	2	3	4	5	6	7
Alabama—Birmingham	62	$74,972	17	27.4	$8,084	10.8
Arkansas—Little Rock	31	15,459	28	90.3	10,608	68.6
California—						
San Francisco	1,693	1,136,175	756	44.6	275,100	24.2
Los Angeles	478	253,479	162	33.9	62,077	24.5
Colorado—Denver	1,694	349,700	920	54.3	182,506	52.2
Florida—Jacksonville	17	12,195	0	0	0	0
Georgia—Atlanta	2,654	1,323,612	1,721	64.8	414,287	31.3
Illinois—Chicago	1,148	923,990	427	37.2	162,270	17.6
Kentucky—Louisville [1]						
Louisiana—New Orleans	440	363,083	230	52.3	95,684	26.4
Massachusetts—Boston	1,522	566,380	1,093	71.8	227,759	40.2
Michigan—Detroit	261	107,114	28	10.7	[2] 17,815	16.6
Minnesota—Minneapolis	138	73,320	14	10.1	9,684	13.2
Missouri:						
Kansas City	1,644	950,869	725	44.1	[3] 198,795	20.9
St. Louis	65	36,985	15	23.1	[4] 26,695	72.2
Montana—Helena	28	16,644	1	3.6	3,623	21.8
Nebraska—Omaha	86	49,460	42	48.8	39,773	80.4
New York—New York City	2,498	889,437	1,383	55.4	323,134	36.3
North Carolina—Charlotte	65	83,448	10	15.4	3,413	4.1
Ohio—						
Cincinnati	2,275	559,390	451	19.8	114,088	20.4
Cleveland	238	111,132	430	180.7	62,120	55.9
Oklahoma—Oklahoma City	240	68,817	4	1.7	2,106	3.1
Oregon—Portland	139	38,401	44	31.6	6,593	17.2
Pennsylvania—Philadelphia	1,101	441,263	667	60.6	156,110	35.4
Tennessee—Nashville	80	66,277	68	85.0	59,609	89.9
Texas—						
Dallas [1]						
Fort Worth	1,256	1,045,871	891	70.9	245,664	23.5
Houston	12	2,711	0	0	0	0
San Antonio	11	1,736	6	54.5	837	48.2
Utah—Salt Lake City	106	37,310	18	17.0	3,520	9.4
Virginia—Richmond	191	212,031	10	5.2	6,367	3.0
Washington—						
Seattle	1,021	426,437	805	78.8	254,252	59.6
Spokane [1]						
Washington, D. C.—Electronic program	1,297	70,562	0	0	0	0
Total	22,491	10,308,260	10,966	48.8	2,972,573	28.8

[1] No reports received.
[2] On 26 sales documents only.
[3] On 496 sales documents only.
[4] On 13 sales documents only.

Army and Navy donation programs.—Table 9 shows donations to educational institutions by the Army Air Technical Service Command for the 12-month period ending May 31, 1946.

TABLE 9.—*Donations to educational institutions by Air Technical Service Command, Army Air Forces. Total cost price of donations and percentage donated to several types of institutions, by months*

Month	Total cost price of donations	Percent donated to—			
		Regular public elementary and secondary schools	Public technical, trade and vocational schools	Higher educational institutions	Miscellaneous
1	2	3	4	5	6
Total for 12 months	$28,640,769				
1945					
May	4,324,113	25.6	62.5	11.4	0.5
June	4,495,269	21.9	30.0	47.1	1.0
July	5,228,540	48.6	30.1	19.3	2.0
August	1,673,726	41.4	43.2	15.3	.1
September	1,645,154	29.5	64.6	5.9	.0
October	1,339,808	35.1	17.3	47.5	.1
November	865,463	54.7	11.7	33.6	.0
December	1,893,061	59.6	24.1	13.8	2.5
1946					
January	850,416	28.4	2.8	63.2	5.6
February	1,912,491	41.0	9.2	49.1	.7
March	1,569,095	55.3	15.1	29.6	.0
April	1,750,201	38.2	5.9	49.4	6.5
May	1,093,432	53.0	12.7	26.8	7.5

Comparable statistics are not available for donations by the Army Service Forces and the Navy. However, figures have been provided as follows:

Source of donation and period covered	*Acquisition cost*
Army Air Technical Service Command, February through June, 1946	$8,168,000
Army Service Forces, February through June 1946	20,697,000
Navy, May and June 1946	2,870,000

It should be pointed out that these figures represent acquistion cost of the property donated and are not directly comparable with the fair value figures for surplus property purchased from the WAA. Furthermore, the acquistion cost of much of the property donated by some of the technical services of the armed forces is an inflated measure of the value of that property in educational programs.

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Annual Report *of the* Federal Security Agency

SECTION TWO

U. S. Office of Education

1947

Annual Report
of the
Federal Security Agency

SECTION
TWO

U. S. Office of Education

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FEDERAL SECURITY AGENCY - Oscar R. Ewing, Administrator
U. S. Office of Education - - - John W. Studebaker, Commissioner

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FEDERAL SECURITY AGENCY

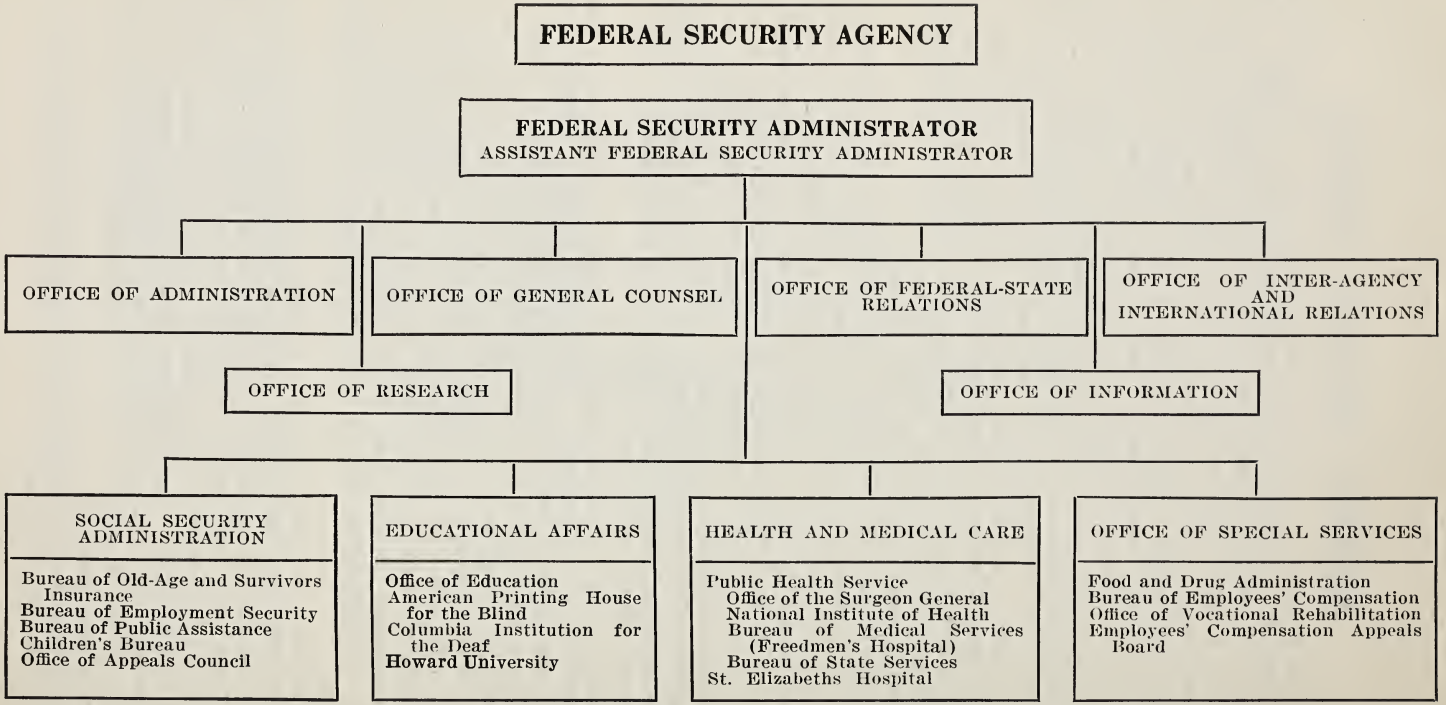
The Federal Security Agency was established on July 1, 1939, by Reorganization Plan No. I pursuant to the Reorganization Act of 1939. In transmitting the Plan the President stated that he felt it necessary and desirable to group in a Federal Security Agency those agencies of the Government, the major purposes of which are to promote social and economic security, educational opportunity, and the health of the citizens of the Nation. Transferred under Reorganization Plan No. I were the Social Security Board, the U. S. Employment Service, whose functions were transferred from the Department of Labor and consolidated in the Board, the Office of Education from the Department of the Interior, the Public Health Service from the Department of the Treasury, the National Youth Administration from the Works Progress Administration, and the Civilian Conservation Corps. Reorganization Plan No. II, which also became effective on July 1, transferred the Radio Service and the U. S. Film Service from the National Emergency Council, and Federal functions relating to the American Printing House for the Blind from the Department of the Treasury.

The organization of the Agency was enlarged by Reorganization Plan No. IV, which became effective June 30, 1940. Under this Plan the Food and Drug Administration was transferred from the Department of Agriculture, and Saint Elizabeths Hospital, Freedmen's Hospital, and the Federal functions relating to Howard University and the Columbia Institution for the Deaf from the Department of the Interior. When the War Manpower Commission was established in September 1942, the U. S. Employment Service and the National Youth Administration were transferred to that Commission. Because of expanded employment opportunities the liquidation of the Civilian Conservation Corps was begun in 1942.

During the war the Agency became the center around which numerous war activities were developed. The Federal Security Administrator was named Coordinator of Health, Welfare, and Related Defense Activities, which later became the Office of Defense Health and Welfare Services. Thereafter, this Office was abolished and its functions transferred to the Office of Community War Services then created in the Federal Security Agency. The Administrator was also named Chairman of the War Manpower Commission and carried on these threefold duties until the conclusion of the war, when these emergency activities were either liquidated or transferred elsewhere. The U. S. Employment Service was then transferred to the Department of Labor.

The Agency was further expanded by Reorganization Plan No. II of 1946. This Plan, which became effective on July 16, 1946, transferred the Children's Bureau, exclusive of its Industrial Division, from the Department of Labor to the Federal Security Agency. The same Plan abolished the Social Security Board and transferred to the Administrator all the functions of the Board and of its Chairman. The Employees' Compensation Commission was also abolished and its functions transferred to the Administrator, as were the functions of the Secretary of Commerce and the Bureau of the Census with respect to Vital Statistics.

The organization of the Agency as of the close of the fiscal year 1947 is shown on the following chart.


FEDERAL SECURITY AGENCY
FEDERAL SECURITY ADMINISTRATOR
ASSISTANT FEDERAL SECURITY ADMINISTRATOR
OFFICE OF ADMINISTRATION
OFFICE OF GENERAL COUNSEL
OFFICE OF FEDERAL-STATE RELATIONS
OFFICE OF INTER-AGENCY AND INTERNATIONAL RELATIONS
OFFICE OF RESEARCH
OFFICE OF INFORMATION
SOCIAL SECURITY ADMINISTRATION
Bureau of Old-Age and Survivors Insurance
Bureau of Employment Security
Bureau of Public Assistance
Children's Bureau
Office of Appeals Council
EDUCATIONAL AFFAIRS
Office of Education
American Printing House for the Blind
Columbia Institution for the Deaf
Howard University
HEALTH AND MEDICAL CARE
Public Health Service
Office of the Surgeon General
National Institute of Health
Bureau of Medical Services
(Freedmen's Hospital)
Bureau of State Services
St. Elizabeths Hospital
OFFICE OF SPECIAL SERVICES
Food and Drug Administration
Bureau of Employees' Compensation
Office of Vocational Rehabilitation
Employees' Compensation Appeals Board

LETTER OF TRANSMITTAL

FEDERAL SECURITY AGENCY,
U. S. OFFICE OF EDUCATION,
Washington 25, D. C., October 1, 1947.

The Honorable OSCAR R. EWING,
Federal Security Administrator.

SIR: I herewith submit the annual report embracing the activities of the U. S. Office of Education for the fiscal year ending June 30, 1947.

Respectfully,

JOHN W. STUDEBAKER,
U. S. Commissioner of Education.

Section Two

OFFICE OF EDUCATION

INTRODUCTION

WHEN THE HISTORIANS come to record the developments of the past year they will probably set in bold italics the grave disappointment and growing anxiety of the American people with respect to the fruits of World War II. With the coming of victory our hope had been for an end of international strife and for cooperation in the establishment of a rule of law among the nations of the world. Yet, as the peace settlements and economic reconstruction have been delayed, as the United Nations has experienced extreme difficulties in dealing with obvious threats to the peace, and as the awful threat of an atomic arms race has continued to overshadow the world, earlier confidence in the prospect for international cooperation and concord has diminished rapidly.

Adding to the sobering realization that we are living in precarious times was the report of the President's Advisory Commission on Universal Training published in the spring of 1947. In addition to recommending prompt legislative provision for 1 year of military training for all able-bodied young American males between their seventeenth and twenty-first birthdays, the Commission was only slightly less emphatic in urging action respecting five other elements in an "integrated national security program." The first of these provides the theme for the Introduction to this Annual Report to the Congress.

"Our Number One security requirement," said the Commission, "is a strong united Nation . . . It is not sufficient to take our democracy for granted. We must concentrate our attention on keeping it vibrant and alive to expanding social and economic needs. In particular we must be concerned with the following things: (1) A healthy economy reflected in full production, full employment, industrial peace and the avoidance of recurring economic crises or inflation . . . (2) A high level of general education throughout the country, with advanced schooling made the privilege of all who can qualify for it by their own merit . . . (3) Improved physical and mental health, not only for the happiness they would bring, but also to make available to the

country, in peace or war, its full potential manpower resources . . . (4) An understanding of democracy and an increased sense of personal responsibility on the part of every individual for making democracy work . . ."

To the achievement of this "Number One security requirement," education has a contribution to make of Number One importance. To strengthen education is to contribute mightily to a healthy economy, improved physical and mental health, an understanding of democracy, and a greater sense of personal responsibility for its success. To achieve "a high level of general education throughout the country, with advanced schooling the privilege of all who can qualify for it on their merit" is to assure an electorate competent to keep democracy "vibrant and alive to expanding social and economic needs."

The achievement, in the interest of the national security, of a strengthened educational program "throughout the country" cannot be solely the responsibility of the several individual States. A national objective implies a national responsibility for leadership and assistance. This responsibility the President's Commission recognized, although it refrained from making specific recommendation as to ways and means by which the national responsibility might be discharged. I invite your attention to three such specifics.

I submit that the national responsibility for leadership and assistance in strengthening education requires for its discharge Congressional action on three fronts: (1) General Federal aid to education: (2) Federal scholarships; (3) continued expansion of the staff and services of the United States Office of Education.

The necessity for Federal financial assistance to assure a reasonable national minimum of educational opportunity in every State and community has repeatedly been urged by United States Commissioners of Education. Year after year groups of citizens have appeared before committees of Congress to present testimony in favor of one Federal aid bill or another. Year after year, in peace and lately in war, the evidence of need has accumulated. It fills volumes of printed testimony. Year after year the deplorable results of educational discrepancies between richer and poorer States, between urban and rural communities, and between schools for white and for Negro children have been pointed out. Why is nothing done? Surely it is not that we cannot afford it. The annual cost would be trifling in comparison with what the Nation now pays in wasted human talent for the lack of universally strong schools and school systems; or in comparison with the economic dividends that would accrue from what the United States Chamber of Commerce terms "Education—An Investment in People."

A second front on which national educational leadership and assistance should be forthcoming is in the prompt congressional provision of

a program of Federal scholarships and fellowships which will make, in the words of the President's Commission, "advanced schooling the privilege of all who can qualify for it by their own merit." National conservation of our human resources is imperative in any "integrated national security program." To cite but one example, there is at present urgent need to make up wartime arrears in the training of scientists. Many more highly trained scientists are needed to expand the research activities upon which our future national security and industrial progress so largely depend. That need will be met in part through sharply expanded programs of scientific training in our colleges and universities now being conducted under stimulation of the present temporary program of Federal scholarships for GI's. The success of this GI education program argues for the development, before 1950, when that program tapers off, of a permanent program of Federal scholarship grants to be administered in the interest of the national need for trained leadership, not alone in scientific fields, but in all fields of learning and open to "all who can qualify . . . by their own merit" for advanced schooling. By such a system of Federal scholarships the national interest in the further strengthening and democratization of higher educational opportunities can be permanently assured. At the same time the essential autonomy of the colleges and universities and the essential democratic freedom of learners to choose the studies they wish to pursue can be left unimpaired.

The third front for recommended congressional action is continued support for further expansion of the staff and services of the United States Office of Education to provide needed leadership and advisory assistance to schools and colleges which voluntarily seek such assistance. This recommendation is not motivated by any bureaucratic urge for prestige or authority. Rather it springs from a conviction, based on more than 2 decades of experience in the States and 13 years as Commissioner, of the need for a well-staffed United States Office of Education to enable it to discharge its essential statutory functions.

I am not unmindful of the encouraging increase in interest and support accorded the United States Office of Education by recent Congresses. Yet the fact remains that the Office still is inadequately staffed to fulfill its statutory mandate or to meet the proper service expectancies of the schools and colleges of the Nation. The fact also remains that the United States Office of Education, after an existence of more than three-quarters of a century, is today only a relatively small bureau in the Federal Security Agency.

Important Federal educational functions are distributed among numerous governmental agencies. Because the Federal education office has been ill-equipped to perform its functions with respect to the total field of education some of those functions have naturally been assumed by other and stronger agencies. The resultant dispersal

of educational functions and of educational leadership in the Federal Government structure has long since created a situation which fully justifies the closest scrutiny. It is to be hoped that the recently appointed 12-man Commission on organization of the Executive Branch of the Government will not neglect this field of inquiry.

These, then, in brief are my recommendations to the Congress as called for by the statute establishing the Office. In the ensuing pages of this annual report you will find reflected some of the concerns of American educators during this second postwar year, together with a brief record of various projects and accomplishments of the several Divisions of the Office in relation to those concerns. It is hoped that the reading of that record will give some indication of the ways in which a relatively small but capable and hard-working staff in the Office of Education has devoted itself to "promotion of the cause of education throughout the country" during the fiscal year ending June 30, 1947.

JOHN W. STUDEBAKER,
U. S. Commissioner of Education.

ELEMENTARY EDUCATION

"School's in Sesssion"

Nothing dramatic happened in elementary education during the year—except—the schools stayed open and continued to serve more than 20 million children. That, however, was drama of heroic proportions.

These things were being said about the schools—in newspapers, magazines, lectures, sermons, and radio broadcasts:

> Approximately 110,000 teachers were teaching on emergency licenses. This means that 2,000,000 children depended for instruction on individuals who did not possess the minimum requirements for standard teaching certificates.
>
> Probably from 5 to 6 million additional children were dependent upon teachers who have less than 4-year college degrees, at a time when the level of training of the general adult population has itself attained second year of high school. At this rate the teaching profession must exert itself to be in a leadership position.
>
> Many schools are reporting half or more of their teachers new in their positions, at a time when young children especially need a sense of stability and certainty.
>
> The number of young persons who elect teaching as a vocation and the proportion of those who choose to be elementary-school teachers are both declining. Bad as the current situation is, it cannot but be worse in elementary schools in the next few years.
>
> Construction has not caught up with war-connected shortages, so that overcrowded buildings, large classes, half-day sessions, inadequate facilities and supplies are common.
>
> The beginning of the ground-swell in increased enrollments due to wartime increases in births has reached primary grades. Where there was one first-grade teacher, many schools will now need two, at a time of severe teacher shortage.

Nevertheless, schools continued almost without a break—some even lengthened the school year; teacher memberships in professional organizations steadily increased; and curriculum workshops, courses of study, teachers meetings, and other indications of professional activity to improve children's school experiences continued and multiplied.

There is no doubt however, that elementary education faces one of its worst crises, not only in the matter of shortages of staff and facilities but also in the degree of confidence placed in it by homes and communities.

Program Plans of the Division

Early in the year, the anticipated activities of the staff of the Elementary Education Division were itemized and described in 34 pro-

jects. Some of these were specific activities to be completed at a certain time, such as manuscripts for publication. Others were continuing activities, which carried over from year to year. In general they were of four types: (1) A variety of activities carried on in cooperating with professional and public service organizations and agencies; (2) the organization and improvement of information services; (3) the production of manuscripts; and (4) consultative services in the field of elementary education. The following report of staff activities for the year 1946–47 is organized around these four headings.

Cooperating With Educational Organizations and Agencies

State Directors of Elementary Education

During the year the Division continued its cooperative relationships with the Association of State Directors of Elementary Education. The annual meeting of this Association, held in Chicago, brought together the persons responsible for elementary education at the State level in 24 States. These persons, under Chief State School Officers, administer State laws relating to elementary schools, prepare curriculum guides, establish or help to establish training and certification standards, develop leadership in local school systems, and carry out other important functions which determine in large measure the character and the quality of the education which is provided for millions of elementary school children.

At the Chicago meeting the program centered on progress reports of the Association's six committees: 1. *Characteristics of a Good Elementary School;* 2. *Coordination of School and Community Services for a 12-Month Developmental Program for Elementary School Children;* 3. *Programs for Children Below 6;* 4. *Techniques for Stimulation of Curriculum Development Throughout a State;* 5. *Programs for the Continuous Professional Preparation of Teachers;* 6. *School Housing Facilities for a Desirable Educational Program.*

Later in the year, members of four of the six committees met in Washington to carry their reports another step toward publication, which is anticipated for the coming year.

State Directors of Special Education

Similarly the Office has continued its cooperation with the Conference of State Directors and Supervisors of Special Education, the association for State department officials who carry responsibility for developing and improving the States' programs for exceptional children and youth. In May, under the leadership of the chief of the section on education of exceptional children, and with the cooperation of the Conference of State Directors and Supervisors of Special Edu-

cation, a conference was held to make plans for analyzing current State legislation, looking toward a comprehensive digest and interpretation of the same. It is expected that a publication on this subject will result, under the joint authorship of the Office of Education and the Conference.

Health Education Conference

Convinced of the critical importance of a concerted effort to improve health education in the elementary schools, the Division held a work conference on the school health program in cooperation with the Southern Regional Association of the Department of Health, Physical Education, and Recreation of the National Education Association. Thirteen States were represented at this work conference by health education and general elementary education supervisors from city and State departments of education, by health educators from health departments, and by members of college health education staffs. A statement of recommended program resulted. Equally valuable was the experience of the generalists and the specialists in health education in planning together.

Conference of Leaders in Elementary Education

A high light of the year was the Leadership Conference in June, at which representatives of 17 national organizations met with the staff of the Elementary Education Division. The conference brought leaders in various aspects of education which have some relation to children in the elementary school, so that they might plan together for better things for those children. The list of organizations included both subject-matter groups and general education groups which have active programs in elementary education.

The first session of the conference centered on current problems in elementary education representing serious unmet needs of children. They are many: Programs for children under 6 years of age; year-round programs for elementary school children; the coordination of county school systems so as to assure appropriate programs for all children and youth; continuity of planning for elementary and secondary schools in a school system; a class size conducive to children's individual development; salaries sufficient to attract and hold the kind of teachers every child should have; arrangements for teachers to work on curriculum programs; and many others. At the end of the conference a committee summarized the discussion under the headings (*a*) Obstacles to the development of better elementary schools: in the teacher, in the school, in the community, in the State department of education or in State laws; and (*b*) Recommendations for overcoming these obstacles.

Two important problems seemed to the conference members to be related—that of developing common purposes on the part of the school staff, and that of obtaining understanding and support of the elementary school program on the part of the public. There was needed, it seemed, a clear statement of the *experiences* children should have. Only then can the contributions in art, in social studies, in music; the facilities in playgrounds, tools, laboratories, and libraries; the help of specialists in geography, penmanship, mathematics, and other fields *be pooled for children's desirable growth.* Only then can curriculum workers talk clearly to parents and the public about how and why today's elementary schools are different from the ones they attended. Consequently, another committee went to work on such a statement, classifying their recommended types of experiences under 10 major headings.

In succeeding sessions of the conference questions about research and the resources available to elementary schools were discussed. Each representative described briefly his organization's program in elementary education. Everyone present was impressed with the wealth of materials and services available to classroom teachers and to other curriculum workers. Publications, national and regional conferences, field service, and other activities were reported by many organizations. It seemed to the group that some periodic canvassing of organizations as to their current projects in elementary education and possibly a published summary would be useful in helping organizations to avoid duplication and to seek cooperation on certain projects. It was recommended that the Office of Education make such a canvass during the next school year.

As the discussion continued it became evident that there are gaps in our knowledge of the growth problems—mental, physical, social, and emotional—of boys and girls; of the effects of certain teaching practices; and of other matters important to successful programs for children and youth. A committee appointed to summarize the discussion reported that the studies that need to be made in the field of elementary education appear to be of two general types. One type of investigation would be the result of analytical group thinking on the part of this conference or of representatives of the various organizations concerned. The other type of investigation would be based upon scientific methods of objective research carried on either as an individual or as a cooperative project.

One outcome of the conference was the proposal that there be another conference in 1948 sponsored jointly by this group and the Office of Education, but including representatives of parents and public service groups.

Cooperation With Other Federal Agencies

Many Federal agencies have divisions, or going programs, in the field of education. Others have programs which in some way affect education. During the year, the Division cooperated with various Federal agencies, bureaus, and committees in a variety of activities affecting the educational program of children in the elementary school. For example, members of the staff cooperated with other constituent units in the Federal Security Agency: United States Public Health Service in connection with the development of facilities for schools under the National Mental Health Act; Bureau of Public Assistance, Social Security Administration, in a conference on problems of the blind; Children's Bureau, Social Security Administration, on a study of facilities for children with cerebral palsy; and with the Children's Bureau in preparing for publication a manuscript entitled "Youth Education and Employment," and in working out policies which affect group services for young children.

Staff members of the Division also cooperated with the Attorney General's Office in the preparation of material for the National Conference on Juvenile Deliquency; Department of State in planning itineraries for visiting educators and in preparing packets of materials on elementary education; War Department in preparing book-purchase lists and other educational materials; Federal Public Housing Authority in a postwar planning conference on community services; and with the President's Fire Prevention Conference in planning and conducting the program as it related to education.

Research and Publication

During the year five studies prepared by the Division of Elementary Education have gone to press:

Schools for Children Under Six (Bulletin 1947, No. 5).—Public opinion was aroused during the war to the needs of children below the traditional school entrance age of six. Extended school service programs spread rapidly in schools throughout the country. This study is a report of the status of nursery schools and kindergartens. It provides a statistical account of the development of schools for children under six.

Camping and Outdoor Education in the School Program (Bulletin 1947, No. 4).—This study, through the use of specific illustrations from various parts of the country, shows the importance of camping and outdoor education in relation to the total elementary school program, and suggests the steps that a school staff can take to make such a program a reality.

Schools Count in Country Life (Bulletin 1947, No. 8).—The objective of this study was to present descriptions of current practices which are significant for teachers, supervisors, and curriculum workers in rural education. Descriptions of practice have been obtained from schools of different

types and sizes ranging from 1-, 2-, and 3-teacher schools to large consolidated schools.

Science in the Elementary School.—During the year four articles on different phases of elementary science teaching were published in SCHOOL LIFE. They included statements of objectives, descriptions of practices, analyses of trends in the training of science teachers, and description of activities in elementary school classrooms. These articles have been combined into a reprint available for purchase from the Superintendent of Documents.

Health Education in the Elementary School.—During the year four articles on various phases of health education were published in SCHOOL LIFE. They covered the general philosophy of health education, descriptions of needed facilities and equipment and of health services, and recommendations concerning the place of physical activity in the school day. These articles have been collected in a reprint available for purchase from the Superintendent of Documents.

Other materials prepared by the staff have been issued as articles in SCHOOL LIFE and other periodicals and year books, and as circulars of information.

Informational Materials

To supplement the publication program and to provide brief compact summaries of information on topics related to elementary education, particularly those which are subjects of frequent inquiry through correspondence, and to provide reading lists on specific topics, two series of mimeographed circulars were issued this year. They are called, respectively, *Education Briefs* and *Selected References.* They include the following titles:

EDUCATION BRIEFS

1. Materials and apparatus for teaching elementary science.
2. Using pictures at school.
3. Registration of nursery schools, kindergartens, and child-care centers by State education departments.
4. Changing practices with time allotment.
5. Some types of classroom organization.
6. Health plays in the elementary school.

SELECTED REFERENCES

1. The primary unit—An aid to children's progress.
3. Professional literature for teachers of elementary science.
4. Physical education in the elementary school.
5. Education of exceptional children and youth.
6. Nursery schools and kindergartens—The first years in elementary education.
7. Recent publications in elementary school health.
8. Health songs for primary grades.

Progress has been made also in the organization of loan services, which now include packets of material, display books, and picture serials.

Consultative Services

On State and Local Education Programs

While we are committed in this country to the ideal of State and local autonomy in education, there is a great unevenness in educational facilities and services throughout the country. Consultative services from a national office can help to minimize this unevenness.

The term "Consultative services" needs some specifics to give it reality. Here is what some typical letters of invitation said:

. . . help us plan our State course of study in elementary science.

. . . give us information and advice on how to organize our division of special education.

. . . serve as chairman [or director, or participant, or summarizer] in our work conference.

. . . survey our State school for the blind (or the deaf, or other special group)

. . . work with our State and county supervisors on the health program in rural schools.

. . . bring us the best of the new educational materials for young children.

. . . meet with our committee on training and certification standards for elementary teachers.

. . . serve as consultant to our citizens committee which is preparing recommendations to the legislature.

. . . show us how to teach an intermediate grade to interpret science in their own school community.

. . . help us make plans for the enrichment of educational programs for seventh and eighth grades.

Altogether a total of 639 days was spent in travel status by staff during the year—140 on State programs, 124 on local programs, 164 on national or regional programs, and 211 on foreign educational missions.

On International Educational Relations

At a time when our international relationships occupy such a prominent place in public affairs, it is inevitable that the educational aspects of such relationships assume a place of great importance, so far as staff time and office facilities are concerned.

Three members of the staff went abroad in order to study and assist with the education program in Germany and Austria. The director visited Germany and Austria, at the request of the War Department and the State Department, to observe and evaluate the educational program, as a member of the United States Education Mission to Germany. The specialist in nursery-kindergarten-primary education spent 3 months in Germany, at the request of the War Department, assisting in planning better services for young children. The spe-

cialist in education for intermediate and upper grades spent 2 months in Austria, at the request of the War Department, observing the schools and preparing recommendations for their improvement as a democratic institution.

At home, members of the staff have assisted in the preparation of materials requested by foreign education officials, in planning school tours for foreign officials, and in arranging for teacher and student exchanges.

SECONDARY EDUCATION

THE AMERICAN HIGH SCHOOLS are one of our greatest national achievements. They are a major contribution to world culture. No other nation ever enrolled such a large proportion of its youth in secondary schools. And yet, we fall short of our ideal of providing equal educational opportunities for all youth. At no time have more than 73 percent of the persons of secondary school age attended school. For many youth attending high school the offerings are calculated neither to challenge their interests nor to meet their needs.

Probably the most significant single accomplishment of the Office of Education during the past year was the leadership given in preparing the Nation's high schools to redirect their efforts.

Evidence that our high schools are not meeting the needs of the great majority of our youth has mounted rapidly since the end of the war. The traditional curriculum that has long served college-bound youth, or youth going into the relatively few skilled trades, is not useful to the multitude of youth who are destined for the numerous unskilled occupations that do not require extended training. Clearly, the Nation's high schools must face the technological age and concede to its demands—by orienting youth psychologically, as well as vocationally, to the workaday world as they will find it upon leaving school. In thus realistically directing the majority of youth toward jobs that are no less essential to the world's work for being routine and unglamorous, the school will fulfill its duty—long overlooked—of recognizing the dignity and necessity of all types of labor.

The preliminary statement that articulates the necessity for changes in the high-school curriculum is contained in the Prosser Resolution of 1945, which the Office of Education is implementing through the joint efforts of the Division of Secondary Education and the Division of Vocational Education. (The resolution and its origin were discussed in detail in the annual report for this Division for the fiscal year 1946.)

During the fiscal year 1946, workers in both general secondary and vocational education held two regional conferences dealing with the resolution; these were followed in 1947 with additional regional conferences and a national conference. All conferences were conducted under the sponsorship of the United States Office of Education.

Culminating action taken at the 3-day national conference, held in Chicago in May 1947, was of decisive and immediate importance.

Secondary and vocational educators (1) assisted in developing a preliminary, comprehensive statement covering the meaning and implications of the Prosser Resolution; (2) agreed upon a series of activities to be carried on at national, State, and local levels in gearing the secondary curriculum to meeting the needs of the times; and (3) outlined a plan for organizing, financing, and administering a 3-phase action program aimed at (*a*) creating a wide understanding of the problem on the part of the public as well as school people; (*b*) stimulating in selected communities within the States specific educational programs designed to meet the particular need and to serve as demonstration centers for other schools as they attempt to provide an education suited to all youth; (*c*) developing such educational services in every community of the Nation.

One of the recommendations, unanimously agreed upon, called for the United States Commissioner of Education to set up a Commission on Life Adjustment Education for Youth, composed of representatives from several of the major national organizations working in the field of professional education. Plans were well under way for the establishment of this Commission by the end of the fiscal year. Both the Division of Secondary Education and the Division of Vocational Education were anticipating an active role in the Commission's program.

Evolved jointly by members of the Secondary Division and other Office staff members was a publication entitled "A Tentative Statement Concerning the Meaning and Implications of the Prosser Resolution." This document contains sections on such areas of secondary education as guidance, citizenship, home and family life, use of leisure, health, tools of learning, work experience, and occupational adjustments. The tentative character of this publication indicates the likelihood that revision will be made as the work of the Commission progresses.

Another project closely related to the work of the Commission is a study of the characteristics of high-school students. Gathering of materials and planning on this project have been under way for some time; recently discussions have been carried on with educational authorities in one State concerning the selection of a specific community in which to study the characteristics of pupils. Such research may be expected to help educators plan the curriculum which would help achieve in fact the ideal of universal secondary education.

Publications

School-and-Work Programs

A study of school-and-work programs was undertaken jointly with the Industrial Division of the Children's Bureau when that agency was a part of the Department of Labor. Final gathering of data and prep-

aration of the report of findings were completed during the year. It is expected that the publication will come from the printer in early fall.

In the bulletin are reported the experiences and problems of 136 school systems which during the war and in succeeding months operated programs for high-school pupils combining school attendance and employment. The report deals principally with the purposes of these programs, their prevalence, the types of arrangements made, the kinds of work undertaken, the controls exercised by the schools, and the attitudes toward the programs by pupils, school officials, employers, and labor representatives. Finally, an attempt is made to evaluate such programs.

Small High Schools

Studies in the broadening of curriculum offerings and of other services of small high schools are made constantly. One of these entitled "Cooperative Planning—The Key to Improved Organization of Small High Schools" was completed during the year. It supplies suggestions on scheduling and administering so as to provide maximum utilization of staff and physical resources with special emphasis on counseling services in small high schools.

A second study was nearing completiton. It is entitled "Cooperative Community Services—The Key to Improved Programs in Small High Schools" and deals with cooperative school-community programs designed to vitalize the programs of these schools.

Other studies relating to this over-all project which are in various stages of preparation are: Use of correspondence courses, State and county supervisory organizations and practices, and area technical schools.

State Administration of School Health, Physical Education, and Recreation—A Status Study

This study was made to determine the State administrative changes in health, physical education, and recreation that have been made since 1940 by new legislation or by official board rulings and regulations. The report, now completed, lists States with directors or supervisors of health education, physical education, and recreation both in State Departments of Education and State Departments of Health. The study summarizes the State legislation and regulations providing for health examinations; describes the nature and dates of first legislation enacted; and gives the present provisions of laws, rules, and regulations for school health and physical education by States. A study is also made of cooperative arrangements set up between State Departments of Health and State Departments of Education to secure improved programs.

Other Studies Completed or in Progress

In addition to a considerable number of statements prepared for publication in professional magazines or as separate pamphlets, several bibliographies were prepared relating to small high schools, education for children of migratory workers, pupil personnel problems, and tests.

As the year closed staff members of the Division were engaged on studies of supervision of teachers, the teaching of United States history, science courses of study, high-school graduation requirements, and an evaluation of secondary school aptitude tests. Some of these studies are in the manuscript stage. Others have progressed only to the point of preparation of preliminary forms and plans.

Service Activities

Service to the Education and Religious Affairs Branch, Office of the Military Government for Germany, the War Department

At the request of the War Department, three members of the staff spent a total of 200 days in Germany making studies and providing consultative service to the Education and Religious Affairs Branch, Office of the Military Government for Germany. The Specialist for Social Sciences served as a member of a committee assigned to help German teachers and administrators reorganize programs in the social studies in order to facilitate the development of democratic citizenship. The report of this committee treats conditioning factors in social education in Germany, goals and principles for social education, and social studies program, the social education of teachers, materials and equipment; and includes recommendations.

The Specialist for Science investigated the use of visual instructional aids in German schools, explored their use in the redirection of German education, and made recommendations for the improved use of visual aids in the schools.

The Specialist for Tests and Measurements investigated and evaluated the methods used in German schools for the selection of pupils to attend secondary schools.

By no means do these projects present a complete picture of the work done in Germany by these specialists. They illustrate, however, a significant type of service which this Division provides for other government agencies concerned with educational problems.

Second Pan-American Congress of Physical Education

As official representative of the Department of State and the United States Office of Education, one staff member attended the Second Pan-American Congress of Physical Education held in Mexico City in October. The Congress formulated a "Declaration of Principles of

Pan-American Physical Education" and treated the educational principles and methodology of physical education, the scientific and medical bases of physical education, the organization of physical education, educational policy and sociology, Pan-Americanism, the teachers of physical education, technical sports, and sports for leisure time.

This Congress established the Pan-American Institute of Physical Education, some of the main purposes of which are: To establish and strengthen physical education relations among the American countries, to study and investigate the matters recommended to it by the congress for presentation and consideration by future congresses, and to distribute the results of its investigations, studies, inquiries, and research in all American countries.

The specialist attending from this Division was elected, as one of the two representatives from North America, to serve as a member of the Planning Committee of the Institute.

Selected Services to Professional Organizations and to the Field

All staff members have engaged extensively in cooperative enterprises involving professional organizations of educators. On the staff is the present president of the National Association of Secondary-School Principals, the vice president of the Middle States Association of Colleges and Secondary Schools, and the secretary of the Cooperative Study of Secondary School Standards. Other offices which were held for part of the fiscal year by members of the staff are president of the National Science Teachers Association, vice president of the American Association for Health, Physical Education, and Recreation, and secretary of the National Committee on Coordination in Secondary Education.

Service as consultants or as members of committees of national, regional, and State organizations of educators was frequently performed. Among professional agencies which were thus served by staff members during the year are:

Alabama State Education Conference.
American Association for Health, Physical Education, and Recreation.
American Association for the Advancement of Science.
American Society for Engineering Education.
American Council on Education.
American Educational Research Association.
American Psychological Association.
Department of Education of the University of Alabama.
Emory University.
Junior Town Meeting League.
Maryland State-wide Principals' Conference.
National Conference of County Superintendents of Schools.
National Council for the Social Studies.
National Council of Geography.
National Education Association.

National Training Laboratory in Group Dynamics.
New York State Science Teachers Association.
Pennsylvania Branch of the National Association of Secondary-School Principals.
Princeton University Bicentennial Conference.
Society of State Directors of Health and Physical Education.
University of New Hampshire Conference on Rural Life Education.

The National Tuberculosis Association and the Athletic Institute requested the Office of Education to organize during the year three conferences on educational problems. For this purpose, they spent $19,000. The proceedings of these conferences are being published.

Individual schools, school systems, and other educational bodies in many regions were supplied with consultant, evaluative, or other types of field service. Examples of agencies of this type which were served are the Cincinnati Board of Education, Indianapolis Board of School Commissioners, New York City Federation of Science Teachers, and curriculum committees in Atlanta and in Fulton and DeKalb Counties in Georgia.

Interagency and Interdivisional Committees

Two members of the Division prepared materials for a Federal Security Agency committee which reported to the President's Advisory Commission on Universal Training. An extensive statement was prepared for the Federal Inter-Agency Committee on Migrant Labor and was printed by that Committee in its report entitled "Migrant Labor—A Human Problem." Other interagency undertakings in which members of the Division have cooperated are the President's Highway Safety Committee and the Conference on Juvenile Delinquency sponsored by the Department of Justice.

Specialists in the Division serve as chairman of interdivisional committees in the following four areas: Health and physical education, social science, science, and rural education. These committees, drawing their personnel from several divisions of the Office, have an important planning function to perform. They plan for the coordinating of the work of specialists in various divisions and for the development of constructive thought regarding studies and activities which ought to be undertaken within the area of interest of each committee. A function almost as important is the trading of experiences and information regarding projects under way in the office and in the field. The coordination of the activities of the various divisions is an important motive in the Office of Education; the interdivisional committees are significant means for effecting that coordination.

Advisory Committee on Secondary Education

The Advisory Committee on Secondary Education is a continuing committee with rotating membership based upon a 3-year term. The

committee's membership includes recognized leaders in the field of secondary-school education. Its function is to advise the Division of Secondary Education with respect to: Types of services in which the Office should engage; specific projects, studies, or undertakings which should occupy the time and attention of the Division; and facilities and procedures needed for carrying on the projects, studies, and undertakings.

The membership is as follows:

Bertie Backus, Principal, Alice Deal Junior High School, Washington, D. C.

Francis L. Bacon, Principal, Evanston Township High School and Junior College, Evanston, Ill.

Clarence E. Blume, Principal, Central High School, Minneapolis, Minn.

Roy L. Butterfield, Principal, Benjamin Franklin High School, Rochester, N. Y.

Frank W. Cyr, Teachers College, Columbia University, New York, N. Y.

Harl R. Douglass, University of Colorado, Boulder, Colo.

D. H. Eikenberry, Ohio State University, Columbus, Ohio.

Paul E. Elicker, Executive Secretary, National Association of Secondary-School Principals, Washington, D. C.

Will French, Teachers College, Columbia University, New York, N. Y.

E. D. Grizzell, University of Pennsylvania, Philadelphia, Pa.

Earl Hutchinson, Director of Secondary Education, State Department of Education, Augusta, Maine.

Rev. M. J. McKeough, Department of Education, The Catholic University of America, Washington, D. C.

Lloyd N. Morrisett, University of California, Los Angeles, Calif.

Francis T. Spaulding, State Education Department, Albany, N. Y.

All members of the committee were present at a meeting in Washington on January 13–14, 1947. As in the May 1946 meeting, when there was adopted a report on guidance and counseling, the discussion of the members found its outlet most often in a consideration of guidance services. The emphasis was upon a guidance service which would be comprehensive in its coverage, reaching all types of schools and all pupils in each school.

It was the opinion of the advisory committee that the Office of Education through its Division of Secondary Education should provide leadership for school workers who are attempting to provide suitable educational opportunities at the secondary school level for all youth. It was suggested that regional conferences would be effective in combating juvenile delinquency and in promoting character education, consumer education, and civic education.

At a second meeting, May 19 to 21, 1947, the committee addressed itself to the question, "What ought to be done about recruitment and training of teachers for the new program in secondary schools?" The following proposals were presented:

1. The training of teachers for the kind of program which is necessary to serve the needs of all must be accomplished mainly by in-service training programs. It would be helpful if the Office of Education were to publicize what is being done in various cities and States in relation to salary increases, increased training requirements, and the like.
2. Campaigns should be launched by lay groups to interest young people in teaching—campaigns based on the ideals of social service as well as upon the desire for adequate remuneration.
3. Teachers should be encouraged to assume community leadership, to attract able young people into teaching, and to secure better conditions for teaching. It was even suggested that a score card be developed so that recognition could be made of States in which teachers themselves were making appreciable progress in professionalizing their work.
4. Some national organization should prepare a bulletin for the use of local school boards on "how to secure and hold good teachers." This bulletin would deal with such subjects as social status, living quarters, tenure, in-service training programs, salaries, promotions, and the like.

VOCATIONAL EDUCATION

THE PAST FISCAL YEAR was especially marked for vocational education by the passage of the Vocational Education Act of 1946 (George-Barden Act), P. L. 586, Seventy-ninth Congress, which was approved by the President on August 1 of that year. This act amends, and in effect supersedes, the act of June 8, 1936, the George-Deen Act.

The new act authorizes appropriation of funds for vocational education in four fields: Agriculture, home economics, trades and industry, and distributive occupations. The major differences between the acts of 1936 and 1946 are that the latter allows expenditures from Federal funds allocated to the States for (1) administration, (2) rental or purchase of equipment and supplies, (3) vocational guidance, and (4) training and work-experience training for out-of-school youth. The new act also increases the total authorization for appropriations to the States from $14,483,000 to $29,301,740.22. The first session of the Eightieth Congress appropriated $17,750,000 for the fiscal year 1948. This figure is in addition to the continuing authorization of $7,167,000 under the Smith-Hughes Vocational Education Act of 1917, and compares with $14,483,000 authorized under the George-Deen Act.

Revision of Policies

Passage of the new act made revision of Vocational Education Bulletin No. 1, *Statement of Policies for the Administration of Vocational Education*, particularly urgent. The bulletin was last revised completely in 1937 although amending statements have appeared from time to time.

The ground was laid during the past fiscal year by eight regional conferences which were attended by representatives of State boards for vocational education and by officials of the Office. When the year ended, the revision had been prepared in tentative form.

Reorganization of Division

A reorganization of the Vocational Division was announced late in 1946. Under the reorganization, the Division is operating with three new branches: State Plans Operations, Program Planning Operations, and Field Service Operations; and the five facilitating services—Agriculture, Business, Home Economics, Occupational Information and Guidance, and Trade and Industry.

TABLE 1.—*Funds available for allotment to States from Smith-Hughes and George-Deen Acts, fiscal year ended June 30, 1947*

Purpose	Smith-Hughes Act	George-Deen Act
Total	[1] $7,285,122.03	[3] $14,483,000.00
Agricultural education	3,058,452.99	4,066,465.00
Trade and industrial education	[2] 3,111,913.15	4,056,857.50
Home economics education		4,051,677.50
Distributive occupations		1,254,000.00
Teacher training	1,114,755.89	1,054,000.00

[1] Includes appropriation for Hawaii and Puerto Rico under separate authorizing acts. Total appropriation Smith-Hughes Act, $7,167,000; Hawaii, $30,000; Puerto Rico, $105,000.
[2] Allotment for home economics included in trade and industrial allotment, not to exceed 20 percent for home economics.
[3] Allotments to the States are made on the basis of this amount as authorized in the act. Actual appropriation for fiscal year 1947, $14,200,000.

The significance of the State plans branch is that it recognizes these facts: Federally aided vocational education stems from State plans prepared by the State boards for vocational education; and expenditures from Federal funds are made in accord with State plans. The branch reviews State plans; allots funds; audits accounts involving Federal funds; and compiles reports from the States.

The inclusion of the Program Planning Branch is a step aimed to bring about greater coordination of programs in the five federally aided areas: Agriculture, distributive occupations, home economics, trades and industry, and vocational guidance. The chiefs of the five services with other officials in the Division compose the Program Planning Committee. The committee has the responsibility for viewing the needs of vocational education comprehensively.

It is the responsibility of the several services to assist the States in developing and operating their particular phases of the total program, working at all times within the framework of over-all planning done by the Program Planning Committee.

The Field Service Operations Branch carries the responsibility of the Division for cooperating with the States in the development of a comprehensive program of vocational education. The personnel are concerned particularly with assisting the States in (*a*) the development of a complete program of vocational education; (*b*) the preparation and justification of budgets necessary to support such a program; and (*c*) the further development of administrative techniques for program operation.

State Plans Revised

As indicated in the previous section, State plans are the basis on which federally aided programs operate. Plans covering the 5-year period 1947–52 had been submitted to the Federal Office and were undergoing review when the fiscal year ended.

TABLE 2.—*Expenditure of Federal, State, and local funds for vocational education, by type of program, fiscal years 1945–46 and 1946–47*

Source of funds	Expenditure, by type of program				
	All programs	Agriculture	Distributive occupations	Home economics	Trade and industry
1	2	3	4	5	6
1945–46					
Total	$72,806,830.91	$21,293,343.38	$2,232,875.57	$20,370,176.74.	$28,910,435.22
Federal	20,628,072.26	7,270,563.12	967,481.37	5,131,079.63	7,258,948.14
State	18,537,851.34	5,192,794.69	653,160.96	5,499,019.57	7,192,876.12
Local	33,640,907.31	8,829,985.57	612,233.24	9,740,077.54	14,458,610.96
1946–47 [1]					
Total	83,235,822.73	24,556,393.68	2,623,491.21	22,425,298.91	33,630,638.93
Federal	21,088,535.85	7,560,510.31	1,036,051.95	5,168,824.46	7,323,149.13
State	22,178,973.71	6,303,690.91	841,659.26	6,341,463.05	8,692,160.49
Local	39,968,313.17	10,692,192.46	745,780.00	10,915,011.40	17,615,329.31

[1] Provisional figures, subject to final audit of State reports.

Prosser Resolution

During the past year the Vocational Education Division participated extensively in the conferences arranged jointly by the Office on the subject of the Prosser Resolution. This is discussed in the report of the Secondary Education Division.

Digest of State Reports

As required by law, the Division each year prepares a digest of annual reports from State boards to the Federal Office. The report for 1946 appeared during the fiscal year here reported.

TABLE 3.—*Enrollment in federally aided vocational classes, by type of program, fiscal years 1945–46 and 1946–47*

Type of program	Enrollment	
	1945–46	1946–47 [1]
Total	2,227,663	2,512,105
Agriculture	510,331	584,571
Distributive occupations	174,672	235,087
Home economics	911,816	964,521
Trade and industry	630,844	727,926

[1] Provisional figures, subject to final review of State reports.

Agricultural Education

Veterans' Education

Institutional-on-farm training of veterans under the Servicemen's Adjustment Act of 1944 has been a special concern during the year to the Agricultural Education Service. Based on the development of the

program so far, many agricultural educators feel that it has significant implications also for the training of nonveterans.

Under provisions of the GI bill, over 100,000 veterans were enrolled in this type of training by June 1947. H. R. 2181, Eightieth Congress, under discussion at that time was intended to clarify provisions of the GI bill with respect to institutional-on-farm training (H. R. 2181 became Public Law 377 shortly after the end of the fiscal year).

Funds for the operation of this program come from the Veterans' Administration which contracts for these services with State boards for vocational education. State boards in turn reimburse local boards, which employ special teachers. Out of these funds, the State boards employ persons to supervise this program under the direction of their regular staff members.

Improvement of Instruction

As in many other fields of education, it has been recognized for years that teacher-training institutions hold the key to improved programs of vocational agriculture. In 1945, the Office had presented to the Negro Land-Grant College Association the results of a study it had conducted on qualifications of agricultural staffs in 20 Negro colleges. A joint committee of the association and the Office then asked the General Education Board for a special grant to continue this study. The General Education Board acted favorably on the request in 1946. It granted funds for conducting three 10-day conferences, 1 each year beginning in 1947; expenses of 5 consultants who shall visit the colleges and make evaluations and recommendations; and a number of fellowships for which staff members of the 20 institutions shall be eligible. The project is being conducted by a committee of the association, with the director of the Division of Higher Education in the U. S. Office of Education serving as an advisory member.

The rapid trend toward more complete farm mechanization tends constantly to outmode most training courses in farm mechanics for both students and in-service teachers. Following a Pacific regional conference of seven States in May 1946, the Service reported later in 1946 the findings of the conference, which was a result of the joint efforts of the Federal Office and the American Society of Agricultural Engineers. The report in effect serves as a guide to training institutions in bringing their instruction in line with the progress in mechanization and with the needs of students.

Food Conservation Program

The Food Conservation Program which followed a Food Preservation Program and known as the Special Grant operated during the fiscal year. Approximately 3,000 canneries with a capacity of 500 cans per day each were a part in this program.

The Food Conservation Program consisted of education in the production and canning of food; preparing and placing fruits, vegetables, and meats in freezer lockers; and the rendering of lard. During the first three-quarters of the year, approximately 400,000 individuals received instruction in food conservation and at the same time processed approximately 60,000,000 pints of food, rendered over 1,000,000 pounds of lard, and placed 2,000,000 pounds of food in the freezer lockers.

The School Lunch Program was greatly aided by the Food-Conservation Program. Most of the 3,000 stationary canneries were available for this purpose during the year.

Program Evaluation

Evaluating vocational agriculture programs has been a concern of the Federal Office for several years. Studies were begun as early as 1940 in cooperation with various State supervisors. There resulted an evaluation study of 400 local programs which was published during the year.

From the 400 evaluations, 20 evaluative scales were obtained; and under each scale 5 grades of programs were described, ranging from very superior to very inferior. Scale 6, for example, pertains to the organization of Future Farmer chapters. The scales may be used for two main purposes: To revise program standards in Federal and State laws and regulations; and to permit teachers to evaluate all or parts of their local programs.

Promotion of Local Advisory Councils

At the request of the States in the Pacific region, the Service issued Miscellaneous 3227 on *The Advisory Council for a Department of Vocational Agriculture.* Since advisory councils in vocational agriculture are still in a formative stage, the purpose of this document was to make available to the States the experience of agricultural education workers with such advisory councils, together with suggestions for promoting the establishment of such councils.

Student Organizations

To Kansas City, Mo., late in October 1946, came 12,550 Future Farmers of America for their Victory Convention, reported to be the largest gathering of farm boys ever held in the world. Now in its twentieth year, this organization, which aims to develop rural leadership, has continued to grow. Membership at the end of the fiscal year was close to 240,000, 15 percent above the previous year. Chapters numbered about 7,000, an increase of 1,000 over the previous year. Forty-seven States and two Territories are represented.

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New Farmers of America, a comparable organization for Negro boys, operated in the States which maintain segregated schools with a membership of over 23,000, about 1,000 above 1946; and about 850 chapters, a slight growth in the year. Attending the Victory Convention of the New Farmers were 250 Negro farm boys.

Both organizations are sponsored by the Agricultural Education Service of the Office of Education, so that in addition to conducting the conventions, the Office conducted regional contests in public speaking, farm mechanics, and farm electrification. In addition, applications were reviewed and recommendations were made to the national board of trustees for awards of American Farmer degrees to 178 students of vocational agriculture.

Other Work

Other activities of the Service during the year included a study of 108 school-operated farms in the States of the Pacific region; development of an educational program for Spanish-American citizens in the Southwestern States—a program now going forward under a grant from the General Education Board; and a cooperative program with the Federal Bureau of Prisons.

Two years' work culminated with the publication of *Better Homes for Negro Farm Families* in 1947. For several years Negro teacher trainers in vocational agriculture and home economics have worked together on plans for assisting rural families in obtaining better homes and better family living. This bulletin represents the joint efforts of a national committee of Negro teacher trainers and the Agricultural and Home Economics Educational Services of the United States Office.

Business Education

Perhaps the foremost leadership problem in business education today is that of organizing into one comprehensive and closely knit program the administration and supervision of all phases of business education—distributive, office, managerial, and professional. The problem arises from the need for developing better integration and coordination of Federal, State, and local activities designed to educate youths and adults for business competence.

Through conferences, publications, and other means at its disposal the Business Education Service during the year endeavored to help solve this problem and to interpret to educators and others the needs and purposes of a total, long-range, and balanced program which provides for economic literacy as well as vocational efficiency.

One member of the staff, for instance, collaborated with two teacher trainers in conducting and reporting a study of current practices considered to be representative of desirable developments now gaining

favorable recognition and showing evidence of future growth and significance. The report of this study appeared as a major section of the 1947 *American Business Education Yearbook*, published jointly by two major education associations.

Cooperation with Business Associations

Better business service is the keynote of the day. Many firms and trade associations are employing professional educators to organize training programs for managers and employees. They recognize that quality of business service depends on trained employees, and are looking to the schools not only for better trained personnel, but also for help in developing their own training programs.

Illustrative of cooperative activity carried on by this Service is the preparation of *Paint Power and How to Sell It.* Published by the National Paint, Varnish, and Lacquer Association in April 1947, this 350-page book is addressed to "newcomers in wholesale and retail stores, painting contracting shops, and field selling." A member of the Vocational Division was assigned to work with the association's Committee on Education, and reviewed the book for its educational approach. A teachers' guide to accompany the students' manual was prepared jointly by this same Division member and by the author of the book.

Collaboration in another type of activity is illustrated by the publication late in 1946 of *Retail Job Analysis and Evaluation*, by the National Retail Dry Goods Association. This manual is a "guide for retail stores in . . . analyzing . . . and defining jobs . . . and evaluating them . . . based on standard measurement." It is a collaboration of one author each from the association and from the Business Education Service.

Educators must plan subject matter of courses in light of job content. In many industries, however, there is frequently a lack of agreement among employment officers, job supervisors, and employees on the actual content of the job. The manual therefore aims to assist store managers in making job studies and in conducting educational programs on job studies.

In cooperation with the National Confectioners Association the Service developed a training program for salesmen in this industry. At the end of the year, plans had been devised for organizing classes locally. The training program calls for ten 1-hour discussion periods, under the leadership of an instructor provided through Federal and State or local funds. The Service also cooperated in the preparation of 10 students' manuals and an instructor's outline prepared and printed at the expense of the association.

The Service cooperated with the National Association of Music Merchants in a similar program. *Selecting and Training Salesmen*,

a 16-page pamphlet, is based on the assumption that supervision and training are inseparable. Its educational orientation is at once evident; the pamphlet starts with "Teaching Suggestions." A leader's manual also was produced for use in the vocational training of music salesmen. It was prepared jointly by two authors, one from the association and one from the Business Education Service.

Members of this Service also participated in the beginning of a detailed survey of training needs in hotel and restaurant industries, and a study of curricula in food preparation and food service. This work was in cooperation with the Council on Hotel and Restaurant Education.

Cooperation with Education Associations

The staff of the Business Education Service maintains cooperative relations with education associations by serving on joint committees, participating in conferences and meetings, carrying on research, preparing instructional materials, and contributing articles to professional publications. One staff member served as associate editor of the 1947 *Business Education Yearbook*, joint publication of two major business education associations. Another staff member served on the Editorial Board of the *National Business Education Quarterly*. Assistance was given to a national research fraternity in business education in initiating and planning a Nation-wide study to determine (1) basic business and economic competence needed by everybody, and (2) the nature and scope of training needed by those who teach this basic and economic competence.

The Office of Education endeavors to fulfill its duty of planning and promoting studies and investigations designed to aid school authorities in identifying training needs, in preparing instructional materials, and in improving and evaluating instruction. Highlighting research activities for the year was a conference held at the Office of Education for the purpose of exploring areas of business education for which findings of studies and investigations are inadequate although urgently needed. Resulting from the conference was an 8-page publication, *Research in Business Education*, in which are listed 17 groups of problems in need of further study. A plan of cooperation was developed between the Business Education Service and selected colleges and universities whereby graduate theses developed under the direction of these institutions may be planned to meet educational needs as observed by the Office of Education.

Teacher Training

In promoting the improvement of teacher education, the Business Education Service carried on a wide range of activities. Assistance was given to teacher-training institutions and to boards of education on

programs for the preparation and professional growth of teachers and supervisors. Staff members of the Service participated in summer sessions, workshops, and special conferences on teacher education. A bulletin, *Plans for Providing Business Experience for Business Teachers*, was developed in tentative form by one member of the staff in cooperation with an advisory committee of educators and businessmen.

Home Economics Education

Vocational education in home economics is construed by the Federal Office to mean education for the vocation of homemaking. As such, it has wide application in training for home and family living. It is not a program for girls only; boys as well as parents in many places participate in the courses. The work of the Division during the past year should be viewed against this broad concept.

Survey of Teacher Supply

Naturally the supply of home economics teachers has not been unaffected by the over-all teacher shortage which became so acute last year. In cooperation with the American Vocational Association, the Home Economics Education Service assisted with a study of factors affecting the supply of home economics teachers. A pilot study was first developed in the summer of 1946. Plans for the National Study were then developed and data collected in the spring of 1947. By the end of the year, data had been tabulated by the Office, but results were still to be published.

College Teaching

Curriculum work with colleges continued, building on studies made cooperatively with institutions in the past. Members of the staff assisted with conferences on curriculum sponsored by the Association of Land-Grant Colleges and Universities in cooperation with the American Home Economics Association. Among these conferences, two of major importance were (1) a conference on the teaching of clothing and textiles held in Washington in the late spring of 1947, attended by representatives of 14 institutions; and (2) a pilot conference of teachers of family relations in college departments of home economics held in Detroit in the summer of 1947 with representatives of 15 institutions. Both of these conferences dealt with such vital problems in college teaching as "How to determine student needs" and "How to adjust teaching problems to meet changing needs." Materials developed in the family relations conference are being prepared for distribution to institutions throughout the country wishing to use them.

Study Credit Practices

Many students who might otherwise enroll for high-school homemaking courses are deterred by college practices, real or assumed, in the acceptance of high-school credits. This was the opinion of a group of State supervisors and teacher-trainers of the North Atlantic region, who subsequently asked the Office of Education to make a survey of such practices in the colleges in that region.

A questionnaire was sent to 167 colleges in the summer of 1946. Returns were received from 127, of which 104, or over 80 percent, reported that they accept high-school homemaking credits. Sixty-seven accept them on the same basis as other credits, and 37 specified limitations. It was found that State universities and land-grant and teachers colleges generally accept homemaking credits. Institutions in the North Atlantic region which do not accept them are mainly women's colleges and liberal arts colleges. All but a few of those which accept credits (99 out of 104) do so for all curricula offered by the institution.

Student Organizations

The Future Homemakers of America, an organization for pupils enrolled in homemaking, is devoted to bringing about better home and family living. This organization, founded in 1945, continued to grow. Comparable figures for the end of the fiscal years 1946 and 1947 are as follows: Membership—1946, 168,259 (revised) and 1947, 216,871; chapters—1946, 4,340 (revised) and 1947, 5,527. In both years, 45 States and 2 Territories were represented.

New Homemakers of America, an organization for home economics pupils in the 17 States maintaining separate schools for Negroes grew from a membership of 19,762 in 1946 to 28,737 in 1947. The number of chapters increased from 579 in 1946 to 790 in 1947.

Future Homemakers is jointly sponsored by the Office and by the American Home Economics Association. Salaries of the national staff, including the national adviser, are paid from funds raised by the membership of the organization. The chief of the Home Economics Education Service of the Office is ex officio permanent chairman of the national advisory boards of both organizations. Regional field agents give professional assistance to both organizations through representation on the advisory boards and in workshops and conferences of national, regional, or subregional character.

Aid to Schools on Equipment

Two facts prompted the revision of an Office publication on physical aspects of high-school homemaking departments: (1) many new school buildings being constructed or planned, in addition to old

buildings being remodeled; and (2) equipment being released as peacetime production has gottten under way. The need for aid was expressed in many requests directed to the Office.

The aid took the form of a complete revision of Bulletin No. 181, published in 1935. The new bulletin, *Space and Equipment for Homemaking Education*, incorporates new trends in arrangement and equipping of homemaking departments. It includes floor plans of departments that have been found satisfactory in use. It emphasizes providing for all phases of homemaking by use of all-purpose rooms and in other ways. The information will be equally useful to teacher-training institutions.

At year's end, the manuscript was completed except for the inclusion of suggestions of reviewers—members of the National Advisory Committee on Space and Equipment who have worked with the Office throughout this project.

Homemaking Education in the United States

Homemaking education is offered in about two-thirds of the Nation's public secondary schools, and homemaking courses have been taken by about two-thirds of all high-school girl graduates. *Homemaking Education in Secondary Schools of the United States*, published in 1947, outlines the organization, aims, content, methods, and equipment of homemaking education in this country. This bulletin has been translated by the State Department into Spanish and Portuguese for distribution in Latin-America.

Aid to States on Program Planning

The George-Barden Act presented new problems and possibilities to home economics workers in the State departments of education and in teacher-training institutions. For discussion of these problems and possibilities, especially in relation to research and teacher training, members of the Home Economics Education Federal staff met in a week's conference with State supervisors and teacher trainers from 45 of the States, Hawaii, and Puerto Rico following the American Vocational Association convention in St. Louis in December. This service was supplemented by visits to State departments of education and teacher-training institutions in approximately half of the States to work on problems particularly significant to the respective States and institutions.

Trade and Industrial Education

Apprentice Training

Recently apprentice training for skilled occupations and on-the-job training for occupations not apprenticeable has been stimulated by the veterans' training program, as well as by demands from industry.

Organized apprentice programs have been extended to include about 100 trades. As of the end of the fiscal year, there were approximately 125,000 indentured apprentices—most of whom were receiving instruction supplementary to training and work experience on the job.

Related training for apprentices is the responsibility of State and local boards of education. During the year, the Trade and Industrial Education Service of the Office of Education cooperated with the staffs of a number of State boards for vocational education and of industrial associations in collecting information for the supplementary instruction of apprentices and other on-the-job trainees. This information was distributed to all State departments of education and many local school officials, as well as training departments of industry and the Apprentice Training Service of the United States Department of Labor.

The Trade and Industrial Education Service also laid the groundwork for coordinating future preparation of instructional materials for this type of training by publishing a bulletin entitled "Suggestions Relating to the Preparation of Instructional Materials for the Supplementary Training of Apprentices." A suggested pattern for preparing and publishing outlines of supplementary instructional content for skilled and other occupations also was prepared during the year. It is expected that in the future much duplication of effort among the several States in preparing such materials will be eliminated.

An outstanding project was the development, in cooperation with five State boards for vocational education, of related materials for apprenticeship in six railroad shop crafts of the Union Pacific Railroad. This material is being used in 11 States served by that system. It is expected that similar programs will be developed with several other railroads as a result of this pilot project.

Public Service Training

Training for public service occupations that are trade and industrial in nature is a phase of vocational education in which there is continuing interest. During the year, assistance was given to many States in identifying public service training needs, maintaining and improving State programs, and in training an adequate supply of instructors for such work. Special emphasis was given to firemen's training, in line with the President's Conference on Fire Prevention, as well as to rural electrification job training. Public service enrollments as compiled from reports submitted from the States showed a total of 49,028 persons receiving organized instruction through 2,571 classes held in 1,480 different centers. General areas in which training was offered included fire prevention and fire fighting, guarding people and property, custodial work, school bus driving, generation and dis-

tribution of electricity, water supply and sewage disposal, and inspection in the interests of public health and safety.

Study of Trade School Graduates

"What are we getting for our money?" is always a good question. What results from the funds spent for trade training? Certainly a basic measure of successful trade and industrial education programs is the ability of graduates to find and keep employment in the occupations for which they were trained.

Around 1920, a number of North Atlantic States, under the leadership of a member of the Vocational Division, established the precedent of reporting graduate-placement data. These States being heavily industrialized contain a high proportion of trade schools in the Nation.

The report for the class of 1945 was published in May 1947, and was entitled "What Becomes of the Trade School Graduate?" It contains reports from 10 Eastern States, including a total of nearly 11,000 graduates. Primarily because many of the graduates of this class entered the armed forces immediately after graduation, the report does not represent normal conditions. Even under such conditions—nearly 40 percent entered the armed forces after graduation—41 percent entered the trade they trained for, immediately after graduation. In addition, about 6 percent were employed in related occupations utilizing parts of their training, and only about 4 percent entered trades not related to those for which they were trained. Among trades in which women specialize, and therefore not affected by military induction, percentages are shown as follows: cosmetology, 84; dressmaking, 74; and power sewing machine operation, 71.

Analysis of Nursing

Practical Nursing, an analysis of the practical nurse occupation with suggestions for the organization of training programs, was published during the year. This analysis was the result of 2 years of work by a committee made up of representatives of various nursing and health organizations together with representatives of this Office. This is the first complete analysis of the work of a practical nurse undertaken on a national scale, and is considered by professional nurses as a pioneering project of great significance. The publication includes suggestions for organizing courses, selecting teachers, and cooperating with hospitals offering clinical experience. The Government Printing Office reports large sales, including orders from foreign countries, which indicates that the analysis is meeting a real need. A curriculum on practical nurse training to accompany the publication *Practical Nursing* has been partially worked out, in cooperation with a committee appointed by national professional nursing organizations.

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Other Work

Advisory service was given to a number of States in the improvement and expansion of their teacher-training programs for trade and industrial education. Emphasis was placed on the unification of formalized courses among the various States in line with program needs.

A study that has attracted considerable attention was one conducted in cooperation with national associations of State supervisors, and with teacher trainers of trade and industrial education. This study, enitled "Analysis of the Functions Performed in Operating a Local Program of Industrial Education," has clarified points of emphasis that are required in the improvement of instruction, and is to form the basis of specific recommendations.

A tentative outline for teaching food subjects in trade schools was prepared in cooperation with the Committee of the Council on Education of the National Hotel and Restaurant Association. Along with this was a special study made of food preparation and service as taught in trade schools and commercial establishments. Two bibliographies were completed; one on painting and decorating, and the other on craft work. The staff collaborated with the United States Department of Labor in the preparation and distribution of *Training for Jobs for Women and Girls.*

Other accomplishments of the staff during the year included: Advisory and training work done in connection with employee-employer relations; increasing the effectiveness of advisory committees for trade and industrial education; improvement of part-time cooperative programs; and studies of teacher-training development.

Occupational Information and Guidance

Several factors have stimulated the demand for assistance from the Occupational Information and Guidance Service in the developing of guidance work throughout the country. The passage of the George-Barden Act, which recognized the need for the extension of this phase of vocational education, brought specific demands from States desiring to take advantage of the new Federal provisions. The Prosser Resolution, extensively discussed during the year as reported elsewhere, gave striking emphasis to the importance of guidance work to general and vocational education, both directly and also in its function as an integrating factor. The role of guidance functions in the further development of vocational education, in such phases as selection, persistence, and employment adjustment, turned the thinking of vocational leaders toward better State and local guidance programs. The new State plans for most States include increased provisions for supervision, for the training of counselors, for research work, and for estab-

lishing local programs which can be used as experimental or demonstration centers.

Following prolonged vacancies during the war in State supervisory staffs, programs were reactivated in four States during the year. This brings to 43 the number of States offering supervision in occupational information and guidance. Altogether 13 new State supervisors in this field were appointed during the year. Assistance to these State supervisors in their new duties was a major responsibility of this Service.

Three phases of the year's work deserve special comment: Training guidance workers; evaluating guidance services; and developing guidance techniques.

Training Guidance Workers

Basic to the improvement of guidance services is the training of administrators, teachers, and counselors. The entire faculty must understand the aims of the program. To answer the constant requests from educators throughout the country for information as to the sources of training, the third annual directory of summer courses in guidance and personnel work offered by colleges and universities was compiled and issued. This was a cooperative project with the Higher Education Division.

Other work in this area included consultative services in the training of counselors in three States: Connecticut, Georgia, and North Carolina. In addition, a bulletin on teaching occupational information was in process of preparation, and was about one-third completed at the end of the year.

Evaluating Guidance Services

Program evaluation is especially pertinent in the field of guidance. Relatively few evaluation studies of a total program of guidance have been available in the past. To shed light on this problem, the Service undertook research into the literature in the field, classifying it into seven groups according to the method used by the investigator. This study was issued at the end of the year in tentative form as a mimeographed document.

School administrators called upon the Service for evaluations on two occasions during the year. The Service evaluated the guidance program offered at the National Training School for Boys in Washington, D. C. The State of Virginia requested a more elaborate study of the 5-year accomplishments of the Richmond Consultation Service. This latter study is still in progress.

Developing Guidance Techniques

Of various techniques in use, testing in particular calls for professional know-how. The odds are great, especially in small schools, that

no faculty member has more than limited training on the subject. Under such circumstances testing is subject to maladministration and results are subject to misinterpretation. To aid in meeting that problem, the Service prepared during the year, with the assistance of a committee of nationally known leaders in the field, a bulletin entitled "Guidance Testing." It is addressed to counselors faced with the task of carrying on a testing program. This manuscript was ready for publication prior to the year's end.

To demonstrate a testing program in action, the Service conducted a series of workshops in guidance testing in various parts of Wisconsin. The workshops had the dual purpose of assisting that State and of developing good practices applicable in other States.

Occupational Information

Because trends in industry and in job opportunities are constantly developing, new information is as constantly being produced. On the other hand, counselors need guides to the vast informational resources available. They also need suggestions on the use of the materials. To serve these purposes, *Guide to Occupational Choice and Training* was published during the year.

To provide guidance workers with additional information, 12 occupational briefs and bibliographies were issued during the year. Titles in the former group include: Designer, Jewelry Workers, and Secretary. Titles in the latter include: Government Publications; Occupations; Reading List for Counselors; and Guidance Bibliography.

Assistance to Professional Groups

An important phase of the work of the Service is always that of assisting groups, organizations, and agencies connected with the professional development of the field, although not part of State or local educational units. In addition to the Prosser committee, already mentioned, substantial assistance was given to the Southern States Work Conference, a voluntary organization composed of professional educators in 14 Southern States. The National Vocational Guidance Association was aided not only by participation in its meetings but also by several contributions to the magazine *Occupations*. The National Council of Chief State School Officers was assisted through consultation services to its committee on guidance services. Illustrative of the scope of organizations assisted, the full list of which would be too long to mention here, are the National League of Nursing Education, the National Council of Teachers of Mathematics, and the Boys' Clubs of America.

HIGHER EDUCATION

The Current Situation in Higher Education

HIGHER EDUCATION in the United States experienced the greatest growth in enrollments during 1946–47 that has ever been recorded in any one year in any country. The 2,078,095 students estimated to be in attendance at some 1,700 colleges and universities in the autumn of 1946 represented a 100 percent increase over the enrollment of the preceding year, and a 50 percent increase over the peak enrollment of prewar years. The expenditures for educational and general purposes in institutions of higher education in 1946–47 were slightly more than 1 billion dollars; this sum represented an all-time high for the financial support of higher education.

The tremendous and sudden expansion in the demands for higher education have required the introduction of many emergency measures in colleges and universities throughout the country. The staff members of the Division of Higher Education have been active during the year in helping authorities meet the emergency and plan their programs for carrying on the best possible educational services, not only in the current year but in the years that lie ahead.

Veterans taking advantage of the educational benefits under Public Laws 16 and 346 have in large part accounted for the increase of college enrollments. Slightly more than half the college population in the fall of 1946 consisted of veterans, and the proportion of veteran students promises to continue high for several years to come.

Veterans have proved to be especially capable students. Careful analyses of their work in many institutions indicate that, as a group, they maintain grades that are in most cases above the average for the entire student body.

Plant space for the housing of the increased numbers of students has been extremely limited. The temporary facilities provided by the Federal Government, through the transfer of surplus war properties, helped ease the emergency, but they do no solve the problem permanently. Most institutions are still unable to give students the kinds of accommodations that were available in prewar years—for rooming quarters, laboratories, classrooms, and library reading rooms.

Even more serious than the shortage of plant facilities has been the shortage of qualified faculty members. Graduate school enrollments, greatly reduced during the war period, did not produce new faculty

members in normal supply, and significant numbers of college teachers who entered military service, industry, or Government work during the war, have not returned to their teaching posts. Under these conditions it would have been difficult to fill the normal prewar number of positions with qualified teachers; under the impact of unprecedented enrollments the staffing of the instructional program has proved to be an extremely serious problem.

The shortage of college teachers has necessitated greatly increased loads for faculty members, as well as the employment of some teachers whose qualifications are not equal to those formerly considered requisite for college-level instruction. Acceptance of some new instructors who do not have the highest academic qualifications has not resulted in serious deterioration in the quality of instruction, however, since most of these new teachers have been assigned to classes at the freshman or lower division level, where the bulk of the increased enrollment is concentrated and where specialization of subject matter has not reached a high degree.

The overloading of instructors has involved not only a lengthened teaching schedule but also an increase in the size of classes, sometimes to almost incredible numbers. The spirit of the faculty members in accepting these overloads has been admirable, but such an arrangement must clearly be considered temporary in spite of the fact that the prospects for having a sufficient number of qualified teachers during the next few years are decidedly dim.

A further complication in the faculty situation has arisen from the fact that institutional revenues have not increased in proportion to the numbers of students and the rise in the cost of living. While there has been some general tendency to adjust the faculty salary scale upwards, in few institutions have such adjustments been equal to the increase in the cost of living. As a result, college teachers today are carrying these heavy overloads of work and are receiving less remuneration, in terms of purchasing power, than they did in prewar years. This situation militates against the recruitment of the kinds of personnel needed for faculty positions.

Although the situation during 1946–47 was extremely difficult for all concerned with higher education—students, faculty members, and administrative staff—even greater difficulties are anticipated within the next 2 or 3 years. The overcrowded campus facilities must be expanded to care for still further increases in enrollments. As the wave of increased enrollments moves along, from its present concentration in the freshman year into the upper divisions and graduate schools, the demands for specialized equipment and laboratory facilities and for faculty members of the highest levels of scholarly competence will be much more difficult to meet than the shortages that have been met and in some measure overcome in 1946–47.

Question was frequently raised with the Division of Higher Education concerning the numbers of qualified young people who were unable to obtain admission to college or university during 1946–47. Definite statistics to answer this question are not available, and to obtain them would require a large-scale project beyond the resources at hand. It seemed feasible, however, to take a poll of the opinions of educators who were in a position to observe the situation in their own States; and such a poll was undertaken by the Division from a well-distributed sample of educators throughout the country. About 80 percent of the respondents were of the opinion that practically all qualified students in their States were able to obtain entrance to college. It was apparent, however, that the situation was by no means uniform throughout the country, and that in certain States considerable numbers of well-qualified students could not obtain admission to any college or university. There were also probably large numbers of students who managed to get into some college, but not into the one they wished to attend, or not into the curriculum they were chiefly interested in pursuing.

Great interest has been shown, both by institutions of higher education and by large numbers of interested citizens, in the probable future trends of enrollments. The institutions are concerned about the practicality of expanding their facilities on a permanent basis. Parents are concerned about the opportunities for their younger children to enter college in the years that lie ahead. The members of the staff of the Division of Higher Education have been besieged with requests for predictions of future trends in college enrollments. Estimates of this nature have been prepared, with the assistance of staff members in the Research and Statistics Section. The considered opinion is that college enrollments will likely never drop below levels attained in 1946–47, and that further increases may be expected, at least during the period of the next few years when large numbers of veterans will continue to take advantage of their educational benefits under Public Laws 16 and 346.

Higher Education Periodical

Higher Education, the journal established by the Division of Higher Education, provided one of the chief means for disseminating information from the Division during the year. Eighteen issues of Higher Education were published, on a semimonthly basis, during the academic year from September through May. These were distributed to a mailing list of about 10,000 institutions, agencies, and individuals.

As a service to institutions of higher education, the Division has undertaken to keep abreast of the actions of the Congress that affect

colleges and universities. A staff member of the Division prepares notes on legislative developments, based on information appearing in the Congressional Record and other sources. These notes are published regularly as a special feature of HIGHER EDUCATION.

Land-Grant Colleges and Universities

The Division of Higher Education has a particularly close relationship to the land-grant colleges and universities, because of the responsibilities of the Office of Education, handled through this Division, for administering the land-grant college funds. Reports on the distribution of the Morrill-Nelson funds have been filed as required by law. The annual reports for the fiscal years 1944 and 1945, publication of which was delayed by wartime conditions, have now appeared, and the annual report for 1946 has been prepared.

During the year 1945–46, the most recent date for which information is available, the 69 land-grant institutions enrolled 296,077 civilian and 13,793 military students in residence, a total of 309,870. This was an increase of 116,555, or 60 percent, from the year 1944–45. The increase in the enrollment of men was 106 percent, and in the enrollment of women, 15 percent. A total of 27,474 undergraduate and first professional degrees and 4,090 graduate degrees were conferred. These numbers represent increases of 20 and 30 percent over the comparable degrees granted in the previous year.

The income of the land-grant colleges and universities for general and educational purposes for the year 1945–46 amounted to $277,646,602, a slight decrease (0.2 percent) from the income in the previous year. Of this income, 27 percent was from Federal sources. An additional amount of $38,061,194 was received for physical plant and $9,358,806 for additions to endowment.

Staff members of the Division visited six land-grant institutions in order to study their programs and learn about new developments in their organization and activities. Members of the staff attended the annual meeting of the Association of Land-Grant Colleges and Universities and the Conference of Presidents of Negro Land-Grant Colleges.

Two studies of special interest to the land-grant colleges were initiated. One is a survey of curriculums of less-than-degree length in the land-grant colleges and universities; the other is a study of trends of tuition fees. Both were in process at the end of the fiscal year.

Members of the Division are participating in the planning of a large-scale project to improve agricultural instruction in the land-grant colleges for Negroes. This project, under the general direction

of the Conference of Presidents of Negro Land-Grant Colleges, is being financed by a grant from the General Education Board.

Howard University

The Office of Education is legally charged with responsibility for an annual inspection of Howard University. However, such an inspection was not undertaken during 1946–47, pending clarification of the responsibilities of the Office in this respect.

Certain of the staff members of the Division of Higher Education participated in a survey of Howard University. Later in the year the Director of the Division, at the request of the Federal Security Administrator, submitted his review of the recommendations made in the survey report; he also outlined plans for improving the relationship between the Federal Government and Howard University.

Teacher Education

The shortage of teachers remains one of the most critical problems in the public-school systems of this country. Preparation of teachers is a function of institutions of higher education and therefore the Division of Higher Education has a deep interest in this subject.

Circular 209, *Teacher Placements, Registration, and Related Services*, has been revised and is now available. The circular entitled *Suggestions to Prospective Teachers* has also been completed. The preparation of uniform blanks on which State departments of education may request the information they need for teacher certification is close to completion. Throughout the year materials on the extent of the teacher shortage and the means to meet it were assembled and disseminated to scores of individuals and agencies interested in the problem.

Education of Negroes

The large-scale project, involving the preparation of materials and personnel for the education of Negro adult illiterates, has been successfully carried through the first year of its operation, according to schedule. This project has been financed in part by a grant from the Carnegie Corporation. It has such obviously valuable potentialities that the Carnegie Corporation has provided an additional grant of $25,000 to carry it through the second year of operation. Six institutions of higher education are cooperating directly in this project. It has attracted wide interest because of the promise it gives of developing important new materials and methods in the education of adult illiterates.

The bulletin, *Education of Negro Leaders*, has been completed for early publication. The study is an outgrowth of an analysis made in connection with the survey of Howard University.

Dental Education and Research

In March 1944, the American Association of Dental Schools adopted a comprehensive plan for the continuous study of the dental curriculum and dental teaching and appointed a standing committee to have charge of the work. Three committees—one each for histology, oral diagnosis, and radiography—have prepared reports on the teaching of these subjects in dental schools. These reports have been the subject of conferences at annual meetings of the American Association of Dental Schools. The reports and the conference proceedings have been published. The committee on teaching, under the chairmanship of a Division staff member, has supervised this work. It has also selected committees on biochemistry and orthodontics to report on instruction in these fields.

The Committee on Research of the American College of Dentists awarded grants-in-aid for research on dental problems, most of which is carried on in dental schools. The Committee on Student Recruitment considers ways of encouraging capable young people to enter colleges of dentistry. A staff member of the Division is on both committees.

The Committee on Examinations of the National Association of Dental Examiners has been studying plans for establishing a pool of examination questions for use by State dental examining boards. The same Division staff member is also on this committee. During the year it collected questions on oral pathology and reported its experience to the association.

Pharmaceutical Survey

Cooperative relations by the Division in the field of professional education are illustrated by still another project. Working on a part-time basis, a Division staff member has served as assistant director in charge of curriculum studies of the Pharmaceutical Survey, a 3-year study being conducted under the auspices of the American Council on Education. The curriculum study is one part of an extensive study of all aspects of pharmaceutical education.

Faculty Salaries

One of the critical issues in higher education has to do with the salaries of teachers. No recent data are available on faculty salaries. and to obtain such information on a complete basis would have in-

volved an expensive job of collecting original statistical data. To meet the situation, a study was undertaken during 1946–47 concerning the administration of faculty salaries. As a basis for this study, colleges and universities were asked to submit copies of their rules and regulations governing the payment of faculty salaries, including the scale for salaries in the various academic ranks, the periods for which salaries are paid, and the kinds of regular deductions made from salaries. Returns from almost 650 institutions were received and analyzed. A preliminary report has been prepared for publication in HIGHER EDUCATION in the fall of 1947.

A special study of the salary policies of the group of colleges that have engineering schools was made from the data collected, and was reported in April in a brief mimeographed circular addressed to the deans of engineering colleges. A special analysis of salary schedules and policies in colleges for Negroes was also prepared from the source material collected in the study of faculty salary administration; it was reported at the meeting of the Association of Negro College and University Business Officers and will be published in the proceedings of that organization.

Educational Directories

The preparation of the annual edition of the *Educational Directory*, Part 3, Colleges and Universities, is a responsibility of the Division of Higher Education. The 1946–47 edition, concerning 1,700 institutions of higher education, contains information that was checked for authentication by the individual institutions concerned. Of the 1,700 institutions, 783 were classified as colleges and universities, 266 as professional schools, 215 as teachers colleges and normal schools, and 436 as junior colleges. Classified according to control, 364 were under State authorities, 199 under district or city control, 445 under private boards, and 692 under the control of religious denominations. Institutions for men numbered 223; those for women 275; those for both men and women 1,202; and those for Negroes 107.

During the year a special *Directory of Institutions Offering Graduate Work* was prepared and published, in which 324 colleges and universities offering programs for the master's or doctor's degree were listed. The *Directory of Graduate Schools* has been favorably received and it is expected that a revised edition will be necessary at regular intervals hereafter.

In addition to these published directories, the Division of Higher Education maintains almost 200 different lists of institutions classified according to various criteria, such as those offering particularized curriculums, or those that have been recognized as distinguished for their graduate programs in certain specific fields of study. These lists

are in mimeographed or typewritten form and are useful in answering inquiries from persons who wish to know what institutions of particular types are available.

From time to time new lists are added as requests come in for classifications not previously compiled. The existing lists undergo constant revision as conditions change.

Engineering Education

The project for the maintenance of a clearing house for information regarding engineering and technical education, initiated during the preceding year, has been carried forward. This particularized interest in engineering education is in part an outgrowth of the cooperative relationships that were developed between the engineering colleges and the United States Office of Education during the operation of the Engineering, Science, Management War Training Program. The staff member especially concerned with engineering education has maintained close contact with the various engineering societies and has served on committees of those organizations. During the year he visited six engineering colleges to observe their programs and to obtain ideas as to the ways in which the emergency caused by the rapid increases in enrollments could be met.

Special interest has been maintained in the reporting of enrollments in engineering colleges. A staff member of the Division has served as a member of the special committee of the American Association of Engineering Education on enrollment trends. In addition to the usual reports on numbers of students in engineering colleges, statistics have been collected and compiled on the number of preengineering students in the various colleges, universities, junior colleges, teachers colleges, and other nonengineering institutions throughout the country. The data on preengineering students, which have never before been available, showed a total of approximately 77,000. These figures have proved to be of great interest to those responsible for engineering education, who need to estimate well in advance the nature and extent of the demand for instructional service at the various levels of the engineering curriculum.

Advisory and Consultative Services

A large part of the work of the Division of Higher Education consists of advisory and consultative services to individuals, institutions, and organizations. During the year the Division has rendered special services to two important temporary Federal agencies, the President's Commission on Higher Education, and the President's Advisory Commission on Universal (Military) Training. Staff members are in

touch almost daily with members of other agencies of the Federal Government who are seeking advice and information on problems related to higher education.

During 1946–47 the 7 members of the professional staff attended a total of 128 meetings of national, regional, State, and institutional groups; addresses were made before 83 of these meetings.

The Director of the Division directed a comprehensive survey of higher education in Maryland during the period between July 1946 and January 1947. This survey was made at the request of the Maryland Commission on Higher Education, appointed by the Governor of the State in pursuance to a legislative act passed in 1945. Arrangements for the direction of the survey, which was under the auspices of the American Council on Education, had been completed prior to the appointment of the new Director of the Division of Higher Education. He therefore did his work on the survey while on leave without pay from the Office of Education. The survey report has been published by the American Council in a volume of 384 pages.

The Director of the Division and the Specialist in Negro education participated, during the fall of 1946, in a survey of public higher education in Florida. This survey was part of a comprehensive study of the entire educational program in Florida under the auspices of the Citizens School Committee. On the basis of this study, the Citizens Committee has been able to bring about certain significant changes in the institutional pattern of higher education in Florida.

VETERANS EDUCATIONAL FACILITIES PROGRAM

THE ENACTMENT of the Mead bill on August 8, 1946, as Public Law 697, Seventy-ninth Congress, threw a heavy responsibility on the Office of Education for examining and approving Justifications of Need for surplus Federal properties requested by schools and colleges in order to provide a program of education for veterans. This law made the Federal Works Agency responsible for supplying surplus buildings, equipment, and supplies, as they could be made available by the War Assets Administration, wherever the Commissioner of Education certified that an urgent need existed or impended for their use in educating veterans.

Prior to the initiation of the program under Public Law 697, the Office of Education had established a Surplus Property Utilization staff which has cooperated with educational institutions and the War Assets Administration in the disposal of real property and with the Army, Navy, and other owning agencies in the disposition of property they were authorized to donate to educational institutions without regard to the enrollment of veterans. These activities are described elsewhere in this report.

Responsibility for operating the Veterans' Educational Facilities Program authorized by Public Law 697 was assigned to the Division of Higher Education. The Specialist in State-Wide Programs in this Division was named as chief of the VEFP section to direct the program. It has been organized so as to permit a decentralized administration. A small staff has been maintained in Washington, and some 35 persons were assigned to duty in 9 regions of the United States. These field staffs are housed with the staffs of the Bureau of Community Facilities, Federal Works Agency, in New York, Washington, Atlanta, Chicago, Kansas City, Fort Worth, Denver, San Francisco, and Seattle. The fact that they have power to make decisions on the requests submitted by school and college administrators has enabled educators to deal on a face to face basis with responsible representatives of the Commissioner of Education.

As of June 30, 1947, 1,650 educational institutions had submitted statements justifying their need for buildings and equipment. Of this total, 1,124 institutions had requested 33,000,000 square feet of floor space and 529 institutions had requested only equipment and supplies.

The VEFP staff had approved 20,500,000 square feet of the requested space and the Federal Works Agency had entered into agreements with the institutions to provide 13,500,000 square feet of the space that had been approved. Approximately 4,500,000 square feet of the contracted space is allocated to classrooms, 2,200,000 to laboratories, 1,000,000 to administration buildings, 1,000,000 to cafeterias, 500,000 to libraries, 300,000 to infirmaries, and 4,000,000 to a miscellaneous group of buildings.

The Seventy-ninth Congress appropriated $75,000,000 for the use of the Federal Works Agency in dismantling, removing, and reerecting buildings needed by educational institutions in providing a program of education for veterans. At the close of the fiscal year the Federal Works Agency had allocated $73,000,000 of the appropriation to construction projects. Many of these buildings are already in use on school and college campuses and it is expected that most of those for which funds have been allocated will be ready for use when schools open in the fall of 1947. In order to assure an equitable distribution of the facilities that could be provided with the above appropriation, funds were allocated for use in each State according to the ratio the veterans of a State approved for a program of education and training bore to the total number of such veterans in the United States.

The 1,650 institutions, by June 30, 1947, had filed requests for instructional and maintenance equipment which by War Assets values would aggregate $200,000,000. Slightly more than half of these requests were approved by the representatives of the Commissioner of Education. At the close of the fiscal year the War Assets Administration had transferred to the Federal Works Agency under the provisions of Public Law 697 approximately $20,000,000 worth of equipment and supplies for use in educational institutions which needed them in providing a program of education for veterans. In addition, the War Assets Administration had received purchase orders from educational institutions for $18,000,000 worth of equipment, for which they had been approved by the United States Office of Education through the Federal Works Agency. The War Assets Administration supplied this material at a 95 percent discount from its fair value.

The above transactions provided educational institutions with approximately 15,000,000 items of badly needed equipment. Electrical and metal-working machinery accounted for $7,000,000 worth of the property; electronics equipment $4,000,000; office and classroom furniture $2,000,000; professional and scientific instruments $1,000,000; lockers, filing cabinets, and other metal products equipment $500,000; motor vehicles $500,000; aircraft $500,000; plumbing and heating equipment $500,000; fire control equipment $500,000; refrigerating and air-conditioning equipment $300,000; glass, clay, and stone equip-

ment $200,000. Other items ran the gamut of equipment ordinarily used in schools and colleges.

The building program is expected to be completed by December 31, 1947, but equipment from war surplus materials is expected to be provided for educational institutions engaged in a program for veterans until June 30, 1948.

CENTRAL SERVICES

DURING THE YEAR the work of the Central Services Division was carried forward by its four constituent sections, namely, Research and Statistical Service, Information and Publications Service, Office of Education Library, and Administrative Management and Services. High-light activities of these sections are reported as follows:

Research and Statistical Service

Speed and Saving

Steps were taken by the Research and Statistical Service during the year to expedite the tabulation and reporting of vital statistics on education. Following recommendations of educators and technicians made in a national conference called by the Office of Education in October 1945, this Service changed from manual to machine tabulation and officially launched a program which should speed the supplying of statistics on American education in the future and reduce the cost.

Basic periodical statistics of public high schools and of land-grant colleges were tabulated by machine in 1947, and plans were made to use the same machine tabulation method for statistics of city schools, higher education, and university and college libraries.

Scientific Sampling

Thus for the first time in many years of statistical work, the Office of Education has been enabled to initiate a major program of statistical tabulation by machine on a large scale. The new tabulation process makes it possible for the Research and Statistical Service to do scientific sampling studies of specific use to the Nation's 27,000 public high schools, 1,700 colleges and universities, 3,000 city school systems, and 1,700 college libraries.

Renewed Emphasis

Efforts to develop more uniform records and reports, impeded during the period of war, were given new impetus during the year. Two conferences were held to stimulate uniform recording and reporting for pupil transportation and use of visual aids.

Plans were made to give continued emphasis to provision of professional statistical advice and service through use of the sampling technique, simplification of forms for adaptation to machine tablulation,

and otherwise to meet the needs of educational specialists and the profession generally for more current statistical data.

Completed

A record Nation-wide survey of college and university enrollments was completed by the Research and Statistical Service in a period of 6 weeks during the year. Statistical studies prepared by the Service and published are included in the listing reported by the Information and Publication Service.

For Research Studies

The Service participated in meetings of the Interdivisional Committee on Research and Statistics held during the year to integrate research and statistical activities of the Office of Education with the needs of the various divisions.

Cooperative statistical service was provided by the section for the following studies of other Divisions: High-School Principals; Guidance Practices in the Richmond, Va., Area; College Facilities; College Salaries; Potential Engineers; Survey of American History Teaching; and Survey of Home Economics Teachers.

Information and Publications Service

In the Public Interest

The Citizens Federal Committee on Education—which acts in an advisory relationship to the Office of Education, and consists of members selected by various groups representative of broad segments in American life—requested the Office to seek help in presenting the facts on the school crisis to the Nation. The Citizens Federal Committee, subsequently, with some assistance from the Information and Publications Service, was able to obtain the cooperation of many business firms, radio broadcasters, magazine and newspaper editors in such an effort. As a result, messages were broadcast over 700 national radio programs; articles appeared in many of the leading national magazines and in newspapers across the country—all in the public interest.

Diffusing Information

Long- and short-term recommendations for educational public relations were recommended at a national advisory conference called by the Information and Publications Service. These recommendations were made by leading educational editors and information specialists, after analysis of present United States Office of Education policies. Preliminary plans for a survey of educational journalism to discover trends and compile data for a printed report also were made by this Service.

The long-established function of this Service in preparing for printing and publishing the research findings of Office of Education specialists was continued. Approximately 2,500 printed pages were edited, and 53 publications came from the press during the year. These included bulletins and leaflets making available research information to promote education at all levels. In addition the historic biennial survey statistics for State and city school systems and of higher education were also published, as well as the *Educational Directory*, and two official periodicals—School Life and Higher Education.

Carrying further the original mandate of Congress to "diffuse such information as shall aid in the establishment and maintenance of efficient school systems . . .," the Information and Publications Service answered over 20,000 letters and 9,000 telephone requests and prepared 25 educational news releases. Specific help was given 44 different agencies of the Government in bringing information of interest to the schools and colleges.

School Life, official monthly journal of the Office, was made available to superintendents of city schools in cities of 2,500 population and over, and to all county superintendents and State education officers. Higher Education went regularly to all college and university presidents. Revision of high-school mailing lists was begun during the year so that appropriate Office of Education information may be made available to every high school in every community. The Service continued cooperation with the Superintendent of Documents in effecting Nation-wide announcement of new publications in education.

Publications off the Press During 1947

Bulletins, Leaflets, Etc.

Education in Peru. Bulletin 1946, No. 3.
Education in Costa Rica. Bulletin 1946, No. 4.
How to Build a Unit of Work. Bulletin 1946, No. 5.
Education in Colombia. Bulletin 1946, No. 6.
High-School Credit and Diplomas Through Examinations and Out-of-School Experiences. Bulletin 1946, No. 7.
A Curriculum Guide to Fire Safety. Bulletin 1946, No. 8.
Engineering Science and Management War Training—Final Report. Bulletin 1946, No. 9.
Vocational Training for War Production Workers—Final Report. Bulletin 1946, No. 10.
Rural War Production Training Program—Final Report. Bulletin 1946, No. 11.
Program of Education and Training for Young Persons Employed on Work Projects of the NYA—Final Report. Bulletin 1946, No. 12.
Training Films for Industry. Bulletin 1946, No. 13.
Student War Loans Program—Final Report. Bulletin 1946, No. 14.
Inter-American Understanding and the Preparation of Teachers. Bulletin 1946, No. 15.

Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1944. Bulletin 1946, No. 16.
Public Relations for Rural and Village Teachers, Bulletin 1946, No. 17.
Vocational Education of College Grade. Bulletin 1946, No. 18.
Planning and Equipping School Lunchrooms. Bulletin 1946, No. 19.
A Bibliography of Materials for the Teaching of English to Foreigners. Bulletin 1946, No. 20.
Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1945. Bulletin 1947, No. 1.
Visiting Teacher Services—Report of a Conference Called by the Commissioner of Education and Held in the U. S. Office of Education, Washington, D. C., June 1945. Leaflet No. 75.
Federal Government Funds for Education, 1944–45 and 1945–46. Leaflet No. 77.

Biennial Surveys of Education, 1942–44.

Statistical Summary of Education, 1943–44. Chapter I.
Statistics of State School Systems, 1943–44. Chapter II.
Statistics of City School Systems, 1943–44. Chapter III.
Statistics of Higher Education, 1943–44. Chapter IV.

Educational Directories

Associations and Directories, 1945–46. Part IV.
County and City School Officers, 1946–47. Part II.
Colleges and Universities, 1946–47. Part III.

Vocational Education

Guide to Occupational Choice and Training, Vocational Division Bulletin No. 236.
Better Homes for Negro Farm Families.
Digest of Annual Reports of State Boards for Vocational Education, Fiscal Year Ended June 30, 1946.
Homemaking Education in Secondary Schools of the United States.
Practical Nursing, Misc. No. 8.
Suggestions Relating to the Preparation of Instructional Material for Supplementary Training of Apprentices.

Miscellaneous

Annual Report of the Federal Security Agency—Section Two, U. S. Office of Education, 1946.
Expenditures per Pupil in City Schools, 1944–45.
Fellowship Program for Teachers From the Other American Republics.
Radio Script Catalog.

Periodicals

School Life (10 issues—October 1946–July 1947, inclusive).
Higher Education (18 issues—September 2, 1946–May 15, 1947, inclusive).

Reprints

School Life:

Financing the Public Schools of Kentucky. June 1946.
The Far East—Selected References for Teachers. July 1946.
The Case of Science in the Elementary Schools. July 1946.
Elementary Science Objectives. October 1946.

Techniques in Teaching Current Affairs. November 1946.
Acts of the 79th Cong., 2d sess., Relating to Education. December 1946.
Iran: Selected References. December 1946.
Elementary Science Series. Four articles, July 1946, October 1946, January 1947, April 1947.
Health Education for the Elementary School. Four articles, November 1946, January 1947, February 1947, March 1947.
Statistics on Pupil Transportation. May 1947.
Summer Study Programs in International Relations. May 1947.

HIGHER EDUCATION:

School Organization in Latin America. January 1, 1947.
Evaluation of Foreign Student Credentials by U. S. Office of Education. May 1, 1947.

American Education Illustrated

An outstanding production of the Service during the year was a 15-panel exhibit titled *Education in the United States* prepared at the request of the Department of State for display at the first general conference of the United Nations Educational, Scientific, and Cultural Organization held in Paris, France, November 19–December 10.

This demountable-panel exhibit, in color and photograph, and with captions in both English and French, dramatized American education goals, scope, opportunities, and organization for the representatives attending the conference from all nations of the world. As a traveling exhibit following the conference, this graphic display carried the story of American education to peoples of many French provinces.

Another UNESCO exhibit prepared by the Service stressed the theme of relief and rehabilitation through education. This display showed pictorially and graphically how American education has cooperated with non-Government agencies during the postwar period in helping attack such problems as housing, health, hunger, and illiteracy throughout the world.

Graphic work included the completion of 90 lay-outs, with special illustrations or format for Office publications; 27 exhibits or posters; 83 charts and maps; the filling of 53 requests for 842 educational photographs; and 117 miscellaneous jobs.

Office of Education Library

New Demands for Service

Postwar developments in education both in this country and abroad have patterned the types of service rendered by the Office of Education Library during the past year. Requests and provided service reflected the renewed national interest in education, the school crisis, veterans' education, Federal aid legislation, universal military training, UNESCO, and reestablishment of libraries abroad.

More than 65,000 books were used in the Library reading room by 8,100 readers during the year, an increase from 25,000 books used during the 1946 fiscal year. Approximately 5,700 books were circulated outside the Library, many through the 2,600 interlibrary loans recorded. Mail and telephone reference calls went over the 12,000 mark during the year. Added to the Office of Education Library collection were 11,000 books and 10,000 single issues of educational periodicals. Many book publishers and the Library of Congress cooperated in supplying 700 textbooks to keep current the Library's collection of elementary and secondary school textbooks.

To Other Countries

Through the Department of State many new catalogs of institutions of higher education in other countries were acquired for reference use in this country, and American college and university catalogs, collected by the Library specifically for the purpose, were made available for use in United States embassies, United States information offices, and other Department of State centers throughout the world. Also on the international service level, the Library cooperated with the Library of Congress in compiling a suggested purchase list of books in secondary education for the Biblioteca Central of the Consejo Nacional de Ensenanza Secundaria y Preparatoria, Montevideo, Uruguay. Another list, prepared for Chinese universities, was reviewed at the request of the American Library Association.

Providing services and facilities during the year chiefly to the Office of Education staff to further research programs, the Library also gave assistance to colleges and universities, learned societies, educators, students, and others. Also sharing in Library service were other departments of Government, the Congress, business and professional organizations, other libraries, and the general public.

Theses and Courses of Study

The Library's loan collection of theses received from colleges and universities throughout the United States was increased by 202. This collection now includes 6,996 theses from 78 institutions of higher learning. Approximately 500 courses of study from State, city, and county boards of education were received and are available for reference in the Library. During the year, 7,209 volumes were classified by the Library, and 25,000 cards were prepared and filed in the card catalog. More efficient methods put into effect helped to expedite the cataloging of acquisitions. The medium of School Life was used to announce new accessions, chiefly theses, new books and pamphlets, and courses of study.

Administrative Management and Services

Major Emphasis

Among many activities of this section during the year, all dealing with budget preparation and planning, fiscal services, personnel, and mails and files, several of the more important ones may be mentioned. These touch on plans made and steps taken to recruit professional staff members for the Office of Education, further development of plans and projects for programing work of the respective divisions and services of the Office and reporting on such work periodically, and efforts to bring the entire personnel of the Office of Education together in the Federal Security Building, headquarters of the Federal Security Agency.

Cooperating with Commission

Early in the year an Expert Examining Committee was established within the Office of Education to aid the Office personnel section in developing qualification standards and in locating and employing top-flight specialists for service to American education. Cooperating with the Civil Service Commission, this committee initially prepared an announcement for educational specialists in grades P–6 through P–8, which the Commission issued on January 14, 1947. Nation-wide response to this circular by qualified educators enabled the Civil Service Commission to establish registers from which 20 staff positions have been filled on a permanent basis, and selections made for the filling of additional positions. These new appointments are in line with the plan "to improve the services of the United States Office of Education" through a strengthened professional staff.

Also, in accordance with the organizational plan established for the Office, this section, during 1947, effected the classification of all new positions previously approved under the Office budget. Restatement of duties for many formerly established positions was made to bring such positions in line with the organizational plan.

Programing

New-type programing of Office of Education work which began last fiscal year was further developed during this fiscal year. Procedures were revised and refined to insure more comprehensive description of projects planned, the objectives, significance of problems involved, and plan of work. This kind of reporting at regular intervals will provide the Commissioner of Education with necessary data to coordinate work projects within the Office and to improve Office administration generally. Staff conferences held during the year helped to establish Office-wide goals, and clarified the purpose of adequate and uniform programing and periodic reporting.

Moving

Negotiations were begun during the year to consolidate all Office of Education offices in the Federal Security Building. For many years, and especially during the war, these offices have had several different locations. About half of the Office staff already has been moved to the Federal Security Building. Bringing all Office of Education personnel together in one building, which is also the headquarters of the Federal Security Agency, is expected to improve working relationships and Office efficiency.

Other Activities

Student war loan activities were transferred to this section during the past fiscal year. Budgets and reports were developed for Surplus Property Utilization, the Veterans' Educational Facilities Program, and the International Exchange of Persons Program. Liquidation of war activities involved the disposition of surplus property and equipment and a complete revision of property control records. The staff participated in the development of procedures to effect better systems of handling correspondence and mail distribution, and for destruction or other disposition of Office records. Advisory service to the Commissioner and to all Division directors on administrative problems was rendered as usual throughout the year.

INTERNATIONAL EDUCATIONAL RELATIONS

THE EVER-GROWING INTEREST in international affairs has been reflected in the educational world. The Division of International Educational Relations during the 1947 fiscal year has been called upon for many types of assistance. It has been in a position to cooperate with governmental agencies, educational institutions, educators, students, and others who are interested in education from every State of the Union and our outlying parts. The Division has also worked with the governments, educational institutions and associations, educators, and students of many other countries.

Evaluation of Academic Credentials

One of the major problems which confronted all of United States education at the college and university level was the heavy influx of foreign students. The growing number of students from other countries who wish to study in this country is indicated by the increase in requests made to the Division for an estimate of the foreign student's academic background and attainment so that appropriate placement could be made. Approximately 300 educational institutions in the United States requested the Division to evaluate more than 2,600 foreign academic transcripts, which represented an increase of more than 800 over the previous year. The evaluation of these records involved translations into English from 26 different languages.

Exchange of Students and Teachers

Another large and significant portion of the work of the Division was the exchange programs. More than 225 foreign academic personnel were the direct responsibility of the Division; and these professors, teachers, and students were assigned to colleges, universities, elementary and secondary schools in nearly every State in the country. The visiting educators and students participated in the following programs: Buenos Aires Convention for the Promotion of Inter-American Cultural Relations, Teacher Trainees from the other American Republics, Travel and Maintenance Grants to United States students for study in Latin America, Visiting Teachers of English from the other American Republics, Spanish Language Seminar for United States Teachers of Spanish, Interchange of Teachers between the United Kingdom and the United States, and the Interchange of Teachers between Canada and the United States.

Exchanges With American Republics

Under the provisions of the Buenos Aires Convention, 30 graduate students from 14 American Republics came to the United States. The Division assisted in the selection of these students; assisted them in finding suitable housing accommodations; arranged for their orientation, placement, and registration in 26 colleges and universities. Foreign advisers in the universities were informed of the special needs of each student. During the year the Division arranged for the payment of each student's tuition and monthly maintenance allowance; followed his progress through reports from the supervising professor; provided continuous counsel and guidance for him; and, in general, aided him in making the necessary social adjustment to a new environment.

In cooperation with the Department of State, the Division processed the applications and helped select the 13 United States graduate students and 5 alternates who received travel and maintenance grants for study and research in the other American Republics. These students came from eight different States and represented the fields of history, music, art, Spanish-American literature, Spanish, political science, economics, geography, and international relations. The grants are for a period of 6 months to a year and, in some cases, may be renewed.

In August 1944, a program in teacher education was established in cooperation with the Interdepartmental Committee of the Department of State. This program granted 6-month fellowships to a small number of teachers from the other American Republics for specialized training in the United States. Phases of education in which the need was critical were given priority. Under that program during the 1947 fiscal year, six teachers came to this country from the following republics: Cuba, 1; Panama, 1; Paraguay, 1; Colombia, 2; Peru, 1. The Division with the cooperation of specialists in the other divisions of the Office coordinated the itineraries and programs for these teachers. Reports of their activities have been received for the purpose of evaluation and future publication.

Another program in teacher education brought 23 teachers of English from 12 of the other American Republics to the United States for a 3-month scholarship for intensive training in methods of teaching English as a second language. The Division arranged with the University of Pennsylvania and Indiana University to receive these teachers in two groups for work in a 6-week course in linguistics, phonetics, and various methods of teaching the language. After 6 weeks at the universities the teachers were sent to high schools and colleges in other sections of the country for a month's stay. There they assisted our

teachers of Spanish, Portuguese, or French, and observed classes in English and other subjects of interest to them. The teachers visited New York and Washington, D. C., before their return to their homes. The enthusiastic reports from the universities and the schools which the teachers later visited indicate the value of the program. One of the teachers from Panama spoke 52 times in Philadelphia to a total of approximately 10,000 students.

The counterpart of the above program is that of the Spanish Language Seminar for United States teachers of Spanish. This program, in its fourth year, is conducted in cooperation with the National University of Mexico. The aim is to reduce the language barrier and improve the pronunciation and fluency of our teachers of Spanish. Eighty-five teachers representing 30 States and the District of Columbia attended the Seminar in Mexico City from July 1 to August 15.

Interchange of Teachers with Great Britain

This completes the first year of the interchange of teachers between the United States and Great Britain. Thirty States participated in the program, and 74 British teachers were exchanged on both the elementary and secondary levels with 74 teachers from the United States. For the coming year, plans were completed for the exchange of approximately 125 teachers from the United States with an equal number from Great Britain.

The Division also provided assistance to United States teachers in securing teaching positions in other areas of the world. From a roster of available personnel which it maintains, panels of qualified teachers and professors were submitted upon request to the Inter-American Schools Services of the American Council on Education, the Department of State, the War Department, and other public and private agencies for possible assignments in foreign countries.

Preparation and Exchange of Information on Education

During the year the Division received hundreds of requests for information on education in other countries of the world, and from abroad came inquiries for information about education in the United States. In both instances, these requests came from Government agencies, educational institutions, and individuals, and covered a wide range of information. From the United States came requests for general information on education in other countries, as well as on specific topics such as the curriculum in certain fields of study in various foreign universities, physical education, organization of literacy campaigns, teacher training, and opportunities for GI study abroad.

Preparation and Exchange of Materials for Use in Schools

To meet the needs for teaching aids and materials in the schools of the United States at all levels, the Division continued its loan-packet service, which consists of furnishing 20 different packets on various Inter-American topics. Packets were sent to approximately 2,000 schools and colleges on a 3-week loan arrangement and by giving the borrower an opportunity to examine the material, facilitated the selection of material suitable to his particular needs.

The Materials Unit also has available for loan 1,500 kodachrome slides on life in the other American Republics, together with teachers' notes giving information about each slide. Through the loan-packets and the slides, the Division has received an average of 700 requests each month for additional information and material. In addition to the loan packets more than 3,000 packets of free materials, such as maps, charts, pamphlets, and brochures were sent to teachers throughout the country. There was also a noticeable increase in the number of persons active in community affairs who made use of this service during the year. Several business firms which were carrying out some type of activity on international affairs also called on the Division for program suggestions and background information.

Another phase of the work in the exchange of materials was the Pen Pals—the correspondence initiated between young people of foreign countries and those of the United States. The bulk of foreign letters received during the year was from Germany, although there also were letters from Austria, England, France, Latin America, Australia, and other regions. Approximately 30,000 letters were received from students of all ages, from primary students to university graduates, as well as a small number from business and professional people. The Division made direct arrangements through which 21,722 of these letters from abroad were answered by school children and university students.

Education Studies and Publications

The Division of International Educational Relations has continued the preparation of basic studies on education in Central and South American countries begun in 1943 under the sponsorship of the Interdepartmental Committee on Cultural and Scientific Cooperation of the Department of State. During the year reports on education in Colombia, Costa Rica, and Peru were published; reports on five countries—Dominican Republic, Ecuador, El Salvador, Guatemala, and Nicaragua—were sent to press; the manuscripts of three others—Haiti, Panama, and Venezuela—were completed; and the field study of Education in Bolivia has been completed and the report is being prepared.

Members of the Division staff prepared 27 articles for publication on various phases of international education. These appeared in School Life, Higher Education, *The NEA Journal*, *Association of Secondary School Principals' Bulletin*, *The Elementary School Journal*, *Phi Delta Kappan*. A number of these articles were republished in other publications, such as the Department of State Official Record, and in the Spanish and Portuguese Bulletins of the Pan American Union.

Staff members were repeatedly called upon to fill speaking engagements and act as discussion leaders before educational conferences, civic organizations, elementary and secondary schools, colleges and universities, church groups, libraries, and parent-teacher associations. More than 50 such engagements were filled.

Foreign Visitors

The gradual resumption of international travel brought more than 500 visitors from foreign countries to the Division during the year. These included members of Ministries of Education, school officials, members of diplomatic missions and government agencies, and teachers and students. The staff of the Division helped them obtain information about our schools and school systems; made appointments for them with other agencies of the Government and private organizations; assisted them in making itineraries to include specific types of institutions and study centers; directed them to sources of material and equipment for schools; and helped them with personal problems.

AUXILIARY SERVICES

Service to Libraries Section

THE ADEQUACY OF LIBRARIES is frequently taken for granted, and at other times the significance of libraries for good citizenship and intelligent thinking is overlooked. Partly as a result of these attitudes, library services and facilities still fall far short of fulfilling their functions in the educational program of the Nation. It is nearly 100 years since Edward Everett hailed the founding of the first large public library in Boston as a landmark in completing our public educational system. Nevertheless, 23,000,000 persons are being served today by public libraries with an annual operating income of only 25 cents per capita, and another 35,000,000 persons have no public library service. Furthermore, it is probably a conservative estimate to state that 60 percent of the public schools have either inadequate library facilities or none at all. Surveys show likewise that many institutions of higher education do not have adequate library facilities to support their instructional programs.

Two major problems emerge: One, the improvement of existing libraries so that they will be able to perform their proper role in the educational program of the States; and the other, the extension of library services to regions and communities now without these essential educational facilities.

Improvement and extension of library facilities, whether they be school, college, or public libraries, involves among other things: (1) Accurate data on the current status of libraries; (2) reasonable standards of service; (3) increased competence of library workers; (4) successful recruiting of new personnel; (5) efficient library quarters and equipment; (6) adequate financial support; and (7) an awareness on the part of policy-making bodies, administrators, and citizens, of the value of libraries.

During the fiscal year 1947, the Service to Libraries Section directed its attention in varying degrees to the preceding major problems. In the matter of making available basic data on libraries, the Section tabulated and interpreted statistics from some 6,000 public library systems covering the fiscal year 1945. Preliminary circulars issued for the various size-groups of libraries were used by governing bodies and administrators of libraries and by national planning committees. Certain summary data were called for by the Senate Subcommittee

on Education of the Committee on Labor and Public Welfare at the hearings on the Public Library Demonstration bill (S. 48). With a view to assuring the economical collection of the most urgently needed data for other types of libraries, staff members maintained contacts with school library supervisors, college librarians, professional associations, and State library agencies.

The Section rendered assistance in the establishment of library standards. The specialist for school and children's library work served as consultant to the South Carolina Education Association in its program of setting up school library supervision in the State Department of Education, a program which has already become effective. This same specialist also aided the committee of the American Library Association's Young People's Reading Round Table which was concerned with formulating standards for youth service in public libraries. In addition, special summaries of data were supplied to American Library Association's Committee on Postwar Planning for its consideration of standards. A staff member participated on a committee of the Association of College and Reference Libraries which is revising the standards for the classification and pay plans of the libraries of the institutions of higher education.

The Service to Libraries Section contributed directly to the in-service training of library personnel. At the meeting of the Southeastern Library Association in October 1946 and at the Library Leadership Conference held at Tallahassee, Fla., in March 1947, the specialist for school and children's library work participated in the planning and conduct of programs to develop procedures for the in-service training of personnel and to orient persons responsible for developing library programs. This service resulted in a publication and in a series of workshops conducted in the Southeastern States during the summer of 1947.

Perhaps of equal importance with in-service training of library personnel is the problem of recruiting for the profession. Two specific activities should be noted in this connection. Consultative service was rendered on the problem of recruitment at the Library Leadership Conference in Florida, and assistance was given also to the Activities Committee of the Special Libraries Association, Washington Chapter, in its formulation of a program to recruit potential special librarians.

In the area of advice on efficient library quarters and equipment, the specialist for college libraries advised a representative of the American Institute of Architects in preparing *Building Type Reference Guide* for the July 1947 Bulletin of the Institute. This guide sets forth fundamental principles in planning library buildings. The specialist for school libraries likewise rendered assistance to the National Council on Schoolhouse Construction on the school library section of its *Guide for Planning School Plants.*

In the matter of securing adequate financial support for libraries, the activity of the section took the form of compiling and publishing special tables which showed the present woeful lack of operating funds for public library services. It also supplied to library administrators comparative circulation, personnel, and financial data for use in preparing budget requests.

With the object of making policy-forming bodies, administrators, and others aware of the essentiality of adequate library service, members of the section prepared various articles and columns. In each issue of School Life, the section was responsible for the column, "Library Services," which reported the significant progress and activities of libraries. The specialist for school libraries prepared the library chapter, Children's Literature Adapted to World Good Will in *Strengthening World Organization Through Elementary Education*, a publication resulting from a workshop held at Syracuse University for elementary school principals. Another staff member contributed an article, Development of Adequate Library Resources in Rural Communities. In order that the section might be fully aware of the needs of the field, the Commissioner invited a group of laymen and librarians to Washington in June 1947 to consider problems of library development and to make recommendations for long-term planning.

Since library problems in this country were so numerous, a relatively small share of the section's time was given to those abroad. The section did help the Department of State on library school curricula for foreign countries, on foreign exchange students, and other matters. Several staff members participated in the Assembly of the Librarians of the Americas at the Library of Congress, and one specialist assisted in the preparation of the UNESCO book exhibit sent to Paris.

Educational Uses of Radio

Services to the General Field of Education By Radio

The Radio Section serves as a "clearing house" for news of developments involving the production, use, and evaluation of educationally useful radio broadcasts and program recordings, and for information concerning important events and trends in the field of education by radio. Such information is distributed through the media of the Federal Radio Education Committee's *Frec Service Bulletin*, a variety of FREC informational booklets, the regular publications of the United States Office of Education, personal contacts with leaders in this field, and through day-by-day correspondence.

Members of the Radio Section's professional staff work closely with the several professional organizations in the field of education by

radio, either as members, or in the capacity of consultants, and serve as speakers at various local, regional, and national meetings of professional and service organizations concerned with the use of radio in education.

Participation, by the Radio Section, in the basic program of the Federal Radio Education Committee is directed toward keeping commercial broadcasters and school people each continuously informed of the needs, interests, and purposes of the other. For the same reasons, close liaison relationships are maintained with the Federal Communications Commission and other Federal agencies and departments concerned with the production or use of educational broadcasts; with trade associations of broadcasters and radio-equipment manufacturers; and with the major educational, civic, cultural, and religious groups and organizations interested in education by radio.

Finally, the Radio Section assists various educational institutions in the planning and development of in-service training programs to prepare teachers to use radio effectively, and, each year, it publishes a *Directory of College Courses in Radio* for distribution, on request, as a guide to school people interested in specializing in this field.

Services Involving the Use of Educational Radio Programs and Recordings

Each month of the school year, the Radio Section prepares, for publication in the *Scholastic Teacher* magazine, a classified list of network radio programs selected by a special FREC Program-Evaluation Committee as suitable for classroom and recommended home listening by students. Informational materials are prepared, from time to time, for distribution in response to requests from teachers and supervisors concerning the use of radio and educational program recordings. In addition, recommendations as to teaching methods to be used in special situations are provided to individual school people by correspondence.

Services Involving Educational-Program Availabilities and Production

Best known of the Radio Section's services in this category include operation of its FREC Educational Program Script and Transcription Exchange, publication of periodically revised catalogs listing programs available in script and transcription form from the Exchange, and announcing, in the *FREC Service Bulletin*, scripts and transcriptions available to schools from other sources. In addition, the Radio Section prepares various informational aids to educational program production, for distribution, on request, to local schools and college program-producing groups; and, from time to time, members of its professional staff are asked to consult with educational program directors of networks and commercial radio stations concerning the kinds of programs likely to be most immediately helpful to schools.

TABLE 4.—*Services provided by the Educational Uses of Radio Section, fiscal year 1946–47*

Materials or services provided on request	1946–47	1945–46	Grand total to date
1	2	3	4
SUPPLEMENTAL (INFORMATIONAL) MATERIALS:			
Radio program production aids	1,484	1,175	2,659
Radio bibliography	1,945	3,096	12,606
Directory of college courses in radio	1,016	1,850	6,975
Technical publications (loan circulation)	139	134	6,557
FM for Education (Misc. No. 7)	300	5,027	8,302
Standards for college courses in radio	500	2,000	2,500
Information bulletins on State-wide coordination of educational FM station planning	2,880	1,640	5,079
Information bulletins on educational station planning	500	351	851
Sound systems (Joint Committee's First Report):			
Mailings in response to requests	4,350	----	4,350
General mailing by FSA	24,000	----	24,000
Teaching with radio programs and transcriptions	1,750	----	1,750
All other free publications	6,706	----	6,706
Total	45,570	15,273	82,335
CATALOGS:			
Fifth edition script catalog	2,926	----	2,926
Transcription catalog	3,203	----	3,203
Previous catalog editions	----	2,551	38,238
Total	6,129	2,551	44,367
MISCELLANEOUS:			
Transcription circulation (program loans)	3,482	2,481	16,542
Script circulation (program loans)	9,265	6,329	361,651
FREC Service Bulletin (total copies)	50,000	49,166	439,666
FREC program-listing service (*Scholastic Teacher*)	50,000	9,300	69,198
Requests filled for technical advice, etc	525	502	2,416
States given requested FM system planning assistance	12	10	38
Individual requests for one or more services	21,001	16,438	124,240
Separate pieces of outgoing mail (exclusive of sound system booklets mailed by FSA)	47,553	37,815	----

Services Involving Administrative Planning for the Use of Radio

Each year, the Radio Section receives a great many requests from school administrators, supervisors, and local directors of education by radio for advice and recommendations involving administrative problems ranging all the way from that of fitting the use of radio broadcasts and recordings into the local school curriculum, to that of planning the development of a local educational FM broadcast station and deciding what its services should be.

Now, due to the steadily mounting interest in developing school-owned FM broadcast stations, the Radio Section receives an increasingly heavy demand for consultation service to State departments of education and to State-wide educational FM-station planning-coordination committees.

Services Involving Design, Selection, and Use of School Audio Facilities

Requests for assistance and advice related to the selection of audio equipment items needed for specialized educational applications are increasing in volume each year. Some of these can be handled through routine correspondence. Others require suggestions of special arrangements and modifications to meet conditions of use peculiar to individ-

ual schools, or even the re-design of standard equipment items. Manufacturers, too, are asking increasingly for assistance involving such things as suggestions for the development of new audio-equipment items for schools, and the improvement of existing items. In addition, the work of the *USOE–RMA Joint Committee on Standards for School Audio Equipment*, now in its third year, is continuing at an accelerating pace, with a second major report, *Recorders and Recorded Program Players for Schools*, now being printed for distribution in early October of 1947, and two new studies in progress.

Visual Education Section

The fiscal year 1947 marks the first full year of operation of the Visual Education Section on a permanent peacetime basis. The establishment of this section is in keeping with the early and continuing interest of the Office of Education in the newer tools of instruction. More than 15 years ago, the Office of Education pioneered in educational radio; later a specialist in Radio and Visual Education was added to the staff and a national survey was undertaken in cooperation with the American Council on Education. As a result of this survey, several publications were issued on the location of visual aids equipment, the utilization practices of schools, and the sources of teacher education in the field of visual education. For a time also the United States Film Service came under the administration of the Office of Education. As a part of the war training program, the Office of Education established the Division of Visual Aids for War Training, the primary responsibility of which was the production of visual aids to expedite the training of war production workers.

The establishment of the present Visual Education Section as the immediate successor to the Division of Visual Aids for War Training is, therefore, a logical manifestation of the interest the Office of Education has long had in the application of visual aids to education.

Visual aids in general may be defined as those instructional tools that combine instructional content and method and which present their content primarily through pictorial representations which may or may not use spoken or printed words. These include the sound and silent motion pictures, the sound and silent filmstrip, slides, charts, posters, and diagrams. Some authorities in the field would also include in this definition such things as excursions, school journeys, mockups, working models, and the like.

Visual aids taken as a whole offer a new medium of communication comparable in scope and content with the more traditional verbal language communication. This new medium of communication enables the educator to teach effectively content that heretofore was either

impossible or difficult to teach, and it enables the student to receive communication with a minimum of preparation.

The application of these aids to classroom instruction is generally called "visual education." Visual education includes all the problems involved in applying pictorial representation of content to instruction and more specifically includes the production, distribution, evaluation, administration, and utilization of motion pictures, filmstrips, slides, charts, posters, still photographs, and the like on all grade levels and in all subject-matter areas.

Visual aids when considered in relation to education pose many problems. These problems derive from (1) the newness and general lack of understanding of pictorial forms of communication; (2) the unique requirements of visual education in terms of buildings, equipment, personnel; (3) the complexity of the application of visual education to all the phases of educational work; and (4) the nature of the medium itself.

The long-range objectives of the Visual Education Section, in keeping with the functions and policies of the Office of Education are:

1. To promote the development of a body of research, statistics, and information that will indicate sound and effective lines of development.
2. To promote the study of the most effective principles of utilization and assist in the establishment of training courses in these principles for teachers and instructors.
3. To promote establishment of principles of production that make for more effective and efficient materials of visual education.
4. To seek the establishment of sound and effective procedures for the selection and training of the personnel who will serve as leaders in the field.
5. To promote the study and the formulation of principles regarding the most effective role of distribution of visual materials.
6. To provide the basic clearing house for educational institutions to secure information relative to all phases of visual education.
7. To provide the consultation, assistance, and guidance necessary to education to secure the optimum benefits through the use of visual aids.

These are long-range objectives. The immediate work of the section is dictated by the requests for information, guidance, and assistance that come from educational institutions and other organizations directly concerned. During the fiscal year 1947, the following represent the major accomplishments of the Visual Education Section:

Distribution of Films

The Visual Education Section continued the distribution of the visual aids produced by the Division of Visual Aids for War Training during the war period. Most of these films are directly applicable to the peacetime problems of vocational training and the demand for them continues without lessening. The appropriation act which

authorized the production of these visual aids provided that the prints should be sold at a price sufficient to return the cost of production. The following table shows the sales and the returns to the Government during the fiscal year 1946–47:

TABLE 5.—*Sales of OE films for the fiscal year 1946–47*

Date	Number of—		Money received
	Motion pictures	Filmstrips	
1	2	3	4
1946			
July	337	396	$1,799.15
August	1,119	703	6,680.30
September	615	469	3,700.40
October	540	910	3,423.50
November	673	748	3,795.05
December	161	107	963.20
1947			
January	1,113	1,112	6,788.95
February	823	1,646	5,308.35
March	548	820	3,438.00
April	427	879	2,762.90
May	635	981	3,994.60
June	753	751	4,592.60
Total	7,744	9,522	47,247.00

The total sales to schools, industrial organizations, and foreign governments of the production program are given in the following table:

TABLE 6.—*A summary of the sales during previous years*

Fiscal year	Number of prints sold		Sums returned to the Treasury
	Motion pictures	Filmstrips	
1	2	3	4
1941–42–43	28,112	0	0
1944	3,038	1,250	$12,951.75
1945	7,542	5,907	52,380.15
1946	6,990	7,662	42,420.50
1947	7,744	9,522	47,247.00
Total	53,426	24,341	154,999.40

All of these films are distributed through a commercial distributor awarded a distribution contract through Procurement Division of the Treasury Department on the basis of providing the greatest service to the schools at the lowest cost to the Government and to the schools.

The Visual Education Section has made available to the schools of this country, in addition to the visual aids produced by the Office of Education, approximately 713 sound motion pictures and 544 filmstrips produced by other governmental agencies for their own imme-

diate use but which are, nevertheless, of interest to schools. Approximately 5,000 such prints were purchased by the schools of the country during the past year.

The distribution of films requires the preparation and publication of catalogs, and during the fiscal year 1947 approximately 75,000 catalogs were mailed to schools and to groups interested in training. In addition there were approximately 110,000 mailings of specialized lists of titles specially selected for their application to specific courses of study.

The demand from foreign governments and organizations for films is constantly increasing, and the task of securing the necessary certification for import duty-free entry abroad has grown in size. During the year there were shipments of films to some 20 foreign nations.

Inquiries

During the year the staff handled a total of nearly 5,000 inquiries for information on the location of films, guidance in study in the field, location of institutions giving courses, guidance in developing teacher-training courses, suggestions on problems of school administration, and the like.

Advisory and Consultative Service

During the past year, representatives of the Visual Education Section served in an advisory and consultative capacity at audio-visual conferences, teachers' meetings, and study groups sponsored by educational institutions and professional organizations throughout the Nation. In addition, the chief of the section participated, as consultant and adviser, in several international conferences dealing with (1) the international exchange of educational film and audio-visual material on a duty-free basis, and (2) the role of educational visual materials in the development of international understanding.

Summary

The year 1947 was a year rich in development on both the national and international level, with a new awareness on the part of schools of the potentialities of audio-visual aids in education, and with a new understanding of the problems of the field of visual education.

SCHOOL ADMINISTRATION

OVER 31,000 MEN AND WOMEN are engaged in the administration of public-school education in this country. These administrators direct annually the expenditure of more than 3½ billion dollars, the management of more than 8 billion dollars worth of school property, the employment of a million teachers and tens of thousands of other employees. Even more important, they are vitally concerned with the education of over 25 million boys and girls in an ever-expanding educational program that reaches from the nursery school through college to adult education. The administration of perhaps no other enterprise in America is so important to the progress and welfare of the citizens of this country.

The problems of school administration have so multiplied in recent years as to tax the ingenuity of our most competent administrators. Since the war, educational programs required adjustment because of returning veterans and youthful war workers. Other problems faced the administrator: The development of nursery school programs; the broadening of adult education; the redirection of vocational education; and the reorganization of curricula to provide an education for youth suitable to the modern world which is rapidly changing as a result of new developments in such areas as air transportation, electronics, radio, and atomic energy. Every phase of the changing educational program presents a challenge to the administrator which must be met. No program of education can advance far beyond the vision or the resources of technical skill and knowledge which the responsible administrator has at his command.

In an effort to improve the administration of education in the Nation, the Division of School Administration has made available, within its staff limitations, its resources of technical skill and knowledge to assist the States and in turn the localities with their administrative problems. The 1946–47 fiscal year was a busy one—44 State legislatures were in session. Thousands of administration problems required solutions. A multitude of new educational laws were passed by the several State legislatures. The resources in the Division of School Administration which provided technical consultative services on school legislation, pupil transportation, business management, finance, State school organization and administration, education of professional administrators, and school housing were taxed to the utmost, and the Division was able to meet only a small fraction of the requests from the field for greatly needed services.

Cooperative Working Relations with the Chief State School Officers

The United States Office of Education for many years has maintained an official and direct relationship with each chief State school officer and with each State department of education. The cooperative spirit which has developed during this time provides mutual advantages and real benefits to education. Such a relationship enables the Office of Education to exercise national leadership in the coordination of the study and activities of State departments of education on problems of common concern. This relationship is important because of the unique position of the chief State school officer and the State department of education in our democratic system of education.

The chief State school officer is the head of the public schools of the State, and with his staff is responsible for long-range planning and professional leadership on matters pertaining to education within the State. No other official agency is in the position to wield such influence for the improvement and advancement of education. The growth of State educational leadership has been one of the most significant developments in the history of American education. Its continuous improvement constitutes one of the major objectives of the United States Office of Education.

In addition to the regular relationships with the chief State school officers and State departments of education, the Division of School Administration has close working relationships with the National Council of Chief State School Officers, its executive committee and officers, and the Study Commission of the Council.

All chief State school officers are members of the National Council of Chief State School Officers. Through this organization it is possible to bring to bear the coordinated and unified efforts of those individuals officially responsible for education in the several States. The executive committee of the council meets several times each year and the council as a whole convenes once a year. The Director of the Division of School Administration serves as the liaison officer between the National Council and the Office of Education. During the year he met frequently with the officers and the executive committee and served as their consultant on plans and programs for the improvement of State systems of education and other problems of common interest.

More intensive study of current educational problems of Nation-wide interest is carried on through the Study Commission of the National Council. This Commission is composed of a State department of education staff member from each State, who has been designated by his chief State school officer. Members of the Division staff act as consultants to the committees of the Study Commission as they work

on individual studies. During 1947 the Study Commission and the Division of School Administration planned jointly two major projects: (1) The organization, functions, and services of State departments of education—a 3-year study; and (2) the reorganization of the entire record and reporting systems of schools involving the coordination of the local, State, and Federal systems—a 5-year study.

The program of research and study undertaken by the Commission during the year included the development of general policies and principles for (*a*) vocational education, (*b*) teacher education, (*c*) veterans' education, (*d*) guidance, and (*e*) education of exceptional children. In the prosecution of these studies, staff members of various divisions of the Office of Education provided consultative service to the committees of the Study Commission. The completed reports were approved by the National Council of Chief State School Officers at its annual conference and were published in the April and May 1947 issues of SCHOOL LIFE.

Education of Children Living on Federal Reservations

For many years the problem of the education of children living on Federal reservations and other Federally owned property has been left unanswered, with the result that thousands of school-age children were left to makeshift and inadequate educational arrangements. The number of such children increased rapidly during the war period because of the many acquisitions of land throughout the Nation by the Federal Government. Eleven Federal agencies with such properties under their jurisdiction were vitally concerned with this situation. At the request of a number of these agencies, the Office of Education held a series of 9 work conferences over a period of 2½ months for the purpose of formulating a satisfactory plan for the education of such children. Proposals for the solution of this problem growing out of the conference studies were incorporated by Members of Congress in bills introduced in the first session of the 80th Congress.

A comprehensive and detailed study of the entire problem of education of children on Federal reservations prepared by members of the staff of the Division of School Administration is contained in the document entitled *Emergency Educational Aid for Government Reservations. Hearings Before the Committee on Education and Labor, House of Representatives, Eightieth Congress, First Session, May 1947.*

State Department of Education Surveys

At the request of the Chief State School Officer of Rhode Island, the staff of the Division (1) made an appraisal of the existing organization and functions of the State Department of Education of Rhode Island;

and (2) outlined a program for the development and improvement of the services of the Department with a view to meeting long-term postwar educational needs of the State. The report, entitled "*Improving Education in Rhode Island*," was made to the Chief State School Officer in pursuance of the established policy of providing consultative service to the States.

A request for a study of the organization and services of the State Department of Education was received from the Chief State School Officer of Missouri. This study was initiated during the latter part of June 1947.

School Housing Services

It will require an estimated 6 to 8 billion dollars to provide urgently needed school plant facilities for the public elementary and secondary schools of this Nation. Because of manpower and material shortages during the war it was impossible to erect many new buildings and to properly maintain old ones. In consequence there is now a widespread demand for new facilities in areas of population growth, and for replacement of old and obsolete structures. It seems probable that in the years immediately ahead new construction demands will exceed those of any other period in our history. Probably in no other areas in school expenditures will there be such great need for adequate professional, technical, administrative, and consultative services.

Among the school housing services provided during the year were the following:

1. Assistance in the planning and preparation of a *Guide for Planning School Plants*, a publication of the National Council of Schoolhouse Construction.
2. Consultative services and assistance for 16 regional school housing conferences at which more than 5,100 officials of State and local school systems and colleges and universities participated. These conferences were devoted to school plant planning programs, surveys, plant insurance, custodial services, standards, heating and ventilating, lighting, and other school housing problems significant to the particular region.
3. Consultative services and assistance in the preparation of a *Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education.*
4. Participation in plant planning conferences for urban colleges and universities.
5. Development of school plant planning programs with public-school business officials, the National Council of Schoolhouse Construction, and the American Association of School Administrators.
6. Completion of a study and the preparation of three articles upon *School Plant Safety.*
7. Completion of a study and the preparation of a bulletin on *Fire Exit Drills.*

8. Preparation of a bibliography on school plants.
9. Completion of a study on school maintenance.
10. Consultative services to State and local school officials on plant planning and on the types of services and materials available. The School Housing Section maintains close liaison with various specialists and associations such as: American Institute of Architects; National Fire Protection Association; National Board of Fire Underwriters; illuminating, heating and ventilating, and acoustical engineers; sanitary and plumbing specialists; and material and equipment supply dealers; and advises them of the types of materials and services needed for school plants.

At the request of the War Department, a member of the staff spent 10 weeks in Germany and Austria making a survey of the school-plant situation in these two countries. The report of this survey was used as one of the factors in determining educational programs in these occupied countries.

The program of services provided by the School Housing Section is geared to assist States in the development of State-wide school-plant programs; in the improvement in the selection of school sites; in the development of State and local standards for educational buildings and equipment and sound methods of financing new construction; and in the development of State and local maintenance, rehabilitation, safety, and operating programs.

School Finance Services

During recent years State school systems have been faced with great complexities not previously met in financing public schools. In the days when school programs were limited to short terms and a few subjects, and were designed for only a small number of children, problems of State school finance were relatively simple. Since that time, however, schools have been progressively expanded to meet the needs of all children and youth. The services they render are now a major function of government in every State, and funds for education constitute a major part of the State's revenues. In the wake of the war the problems of State school finance have been magnified and have become more difficult because of such complicating factors as the decrease in the value of the dollar; the larger share of the tax dollar which is taken by the Federal Government to pay for the costs of the war; extended and broader educational programs that must be carried on by the States; and increased enrollments. The problems of school finance are thus major and acute in every State in the Nation. The need for greater participation by the State in financing local programs must be recognized.

An awareness of this need resulted in the study by the Specialist in School Finance entitled, "*The Essential Features of a State Plan for*

Financing Schools." In addition to preparing this bulletin, progress was made in the project involving the description of the systems of school finance prevailing in the 48 States. Studies of 6 individual States were completed during the year. A bibliography on *State School Finance* which is an important tool for those concerned with the reorganization of State school finance programs was undertaken and partially completed.

The urgent need to modify and to reorganize their fiscal systems for education brought many requests to the Division of Administration for consultative service from individual States. As a consequence much time of the Specialist in School Finance was devoted to this important service.

Pupil Transportation Services

The safe and efficient transportation of 5 million school children involves the expenditure of more than 130 million dollars annually and constitutes a problem of the top rank in school administration. Moreover, in the years ahead all evidence points to a sharp increase in the number of pupils to be transported and in the amount of funds necessary to provide for this service.

Because of the relatively recent growth of pupil transportation services there are many parts of the Nation in which school administrators have not been able to plan adequately for them. It is vitally important that planning be done to increase the safety of the pupils being transported and to decrease transportation costs.

The Specialist in Pupil Transportation had as his objective the promotion, improvement, and development of sound State programs for the organization and supervision of pupil transportation; and during the year he has sought to collect and disseminate information and to provide consultative service which would assist States in the attainment of these ends.

During the fiscal year 1946–47 some of the major activities and projects in this field included:

1. Completion of a study and the preparation of a bulletin on *School Bus Maintenance.*
2. Completion of the surveys of pupil transportation in two counties in Florida, for the purpose of developing guides in survey techniques for use of State departments of education.
3. Completion and publication of the statistical study of pupil transportation in wartime from the records of the Office of Defense Transportation.
4. Consultative services for conferences of 11 Midwestern States studying special problems in the field of transportation.
5. Initiation and the planning of a project for the development of adequate records and reports on pupil transportation.

6. Improvement of materials in the Office of Education loan packets on pupil transportation. These materials which contain the information on best practices in the several States were made available to 46 State officials concerned with the administration of pupil transportation.
7. Participation in 2 State department of education work shops on pupil transportation.
8. Cooperation with the Research Division of the National Education Association in the preparation for publication of a bulletin on *Insurance in Pupil Transportation.*

School Legislation Services

The Specialist in School Legislation provided consultative service on many phases of school legislation to Federal, State, and local school officials, and to lay organizations and interested groups. He participated in many inter-Departmental conferences where legislative matters affecting education were under consideration. One such series of conferences was called by a committee of the Department of Justice to consider the development of model State legislation to facilitate the administration of the Federal lunch program in schools. The specialist also attended the annual meeting of the Legislative Committee of the Council of State Governments in Chicago for this same purpose. Another series of conferences was held to consider the problems of adequate educational facilities for children on Federal reservations and to formulate appropriate policies with respect to the education of such children.

The specialist served in an advisory capacity to State school officials in the planning of a survey of State legislation affecting the education of handicapped children. This conference was called by the Division of Elementary Education.

A research program in school legislation and its interpretation resulted in the gathering of information on the following subjects:

1. Enactments of the Seventy-ninth Congress relating to education.
2. High lights of 1946 State enactments relating to education.
3. Educational measures before the Eightieth Congress.
4. Issues in education as passed upon by the United States Supreme Court.

Teacher Salary Schedule Services

The exodus of teachers from public schools since 1940 has been without parallel in American history. Between the years 1940–41 and 1944–45, 350,000 teachers, in addition to the normal turn-over of 10 percent, left the public schools. This situation became a national hazard.

An underlying cause of this state of affairs involves teacher salaries and salary schedules. The need for the development of guides to assist

State and local school officials in making and implementing salary schedules became apparent. In order to be of assistance in this national problem, the Division of School Administration took steps to gather information, to develop over-all principles, and to provide consultative services which would be helpful to State and local authorities in solving the problem. As a consequence, a national work conference was held for the purpose of defining the basic principles of salary schedule making and to set forth the necessary steps for implementing a sound salary schedule program. The results of the work conference are being made available. Already, since this new service was inaugurated, more requests for consultative and advisory service have been received than can be handled.

Other Services

Other services provided by the Division of School Administration during the fiscal year 1946–47 included:

1. Preparation of Part I of the Educational Directory *Federal and State School Officers.*
2. Staff assistance in the establishment of a Veterans' Information Clearance Service in each State for the purpose of providing veterans with information regarding curriculum vacancies and housing accommodations in schools and colleges within each State.
3. Handling the school records of students who attended War Relocation Center Schools. More than 750 requests for the records of such students, chiefly from universities and colleges, were received and answered during the year.
4. Preparation of a number of articles and several bibliographies for publication in SCHOOL LIFE or other educational journals, bulletins, and yearbooks.
5. Assistance in the program involving the disposal of surplus property to the schools and colleges of the Nation as set forth in the following pages.

SURPLUS PROPERTY PROGRAM

THE DIVISION OF SURPLUS PROPERTY UTILIZATION, during the first quarter of the fiscal year 1947, and its successor, the Surplus Property Utilization Program in the Division of School Administration, during the last 3 quarters of the fiscal year, provided professional and technical services to the War Assets Administration, the Army, the Navy, and the 48 State Educational Agencies for Surplus Property in the disposal of federally owned surplus and donable property, both real and personal, to both public tax-supported and private nonprofit tax-exempt educational institutions of all levels. A staff of 200 was employed during the first quarter and 100 during the last three quarters.

Professional and technical services to the War Assets Administration were furnished in the various special discount programs, and in the disposal of real property to educational institutions. The services included the furnishing of data relative to the needs of educational institutions for personal property and the determination of the adaptability, utilization, and need for real property requested by individual institutions.

Professional and technical services were furnished to the Army and Navy in locating, screening, and freezing excess donable property for educational claimants. Allocations were made between States of all such available property, and applications approved on the basis of need and utilization. Several special programs were maintained for the Signal Corps, the Chemical Corps, and the Army Air Forces.

Advisory services were furnished to the 48 State Educational Agencies for Surplus Property in their continuous revision and adaptation of procedures necessitated by changes in WAA, Army, and Navy regulations, and in the development of procedures by the State Educational Agencies for consolidated State purchases by means of revolving funds and the establishment of central warehouses.

Real Property

During the fiscal year 1947 approximately 800 applications, submitted by educational claimants for real property, were reviewed and recommendations made to War Assets Administration on the basis of independent investigations and surveys to determine the need for and the utilization of the real property for educational use. The appli-

cations included both intact transfers (transfers of land and buildings, including personalty) and war housing transfers (buildings to be moved off site).

Consultative and Advisory Services to War Assets Administration, Army and Navy

Continuous services were rendered during the fiscal year 1947 to the War Assets Administration relative to the acquisition of surplus property by eligible educational institutions. These services included professional advice in regard to: Kinds of property which schools could effectively utilize; procedures by which eligible claimants could acquire surplus property most effectively, particularly through the State Educational Agencies for Surplus Property; and potential needs of eligible claimants. Professional services were rendered to the War Assets Administration in special programs such as the nominal pricing programs for self-recording theodolites, metal-working machinery, child-care equipment, optical instruments and accessories, tracing paper, and maps.

Army and Navy Donation Program

The Army and the Navy donation programs also were implemented. Approximately 400 "accredited assistants" were assigned by the Office of Education to assist its field representatives in the location, screening, and freezing of donable Army and Navy equipment at approximately 500 Army and Navy installations. These "accredited assistants," under the supervision of the field representatives, prepared lists of donable property to be allocated to the various States and then to the institutions within the States. Property reported on these lists was allocated to 48 States and the District of Columbia. The estimated acquisition value of the donable Army and Navy property contained in these lists was $150,000,000.

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Annual Report of the

FEDERAL SECURITY AGENCY

1948

Office of Education

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FEDERAL SECURITY AGENCY

Oscar R. Ewing, *Administrator*

OFFICE OF EDUCATION

Rall I. Grigsby, *Acting Commissioner*

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Letter of Transmittal

FEDERAL SECURITY AGENCY,
OFFICE OF EDUCATION,
Washington D, C., November 1, 1948.

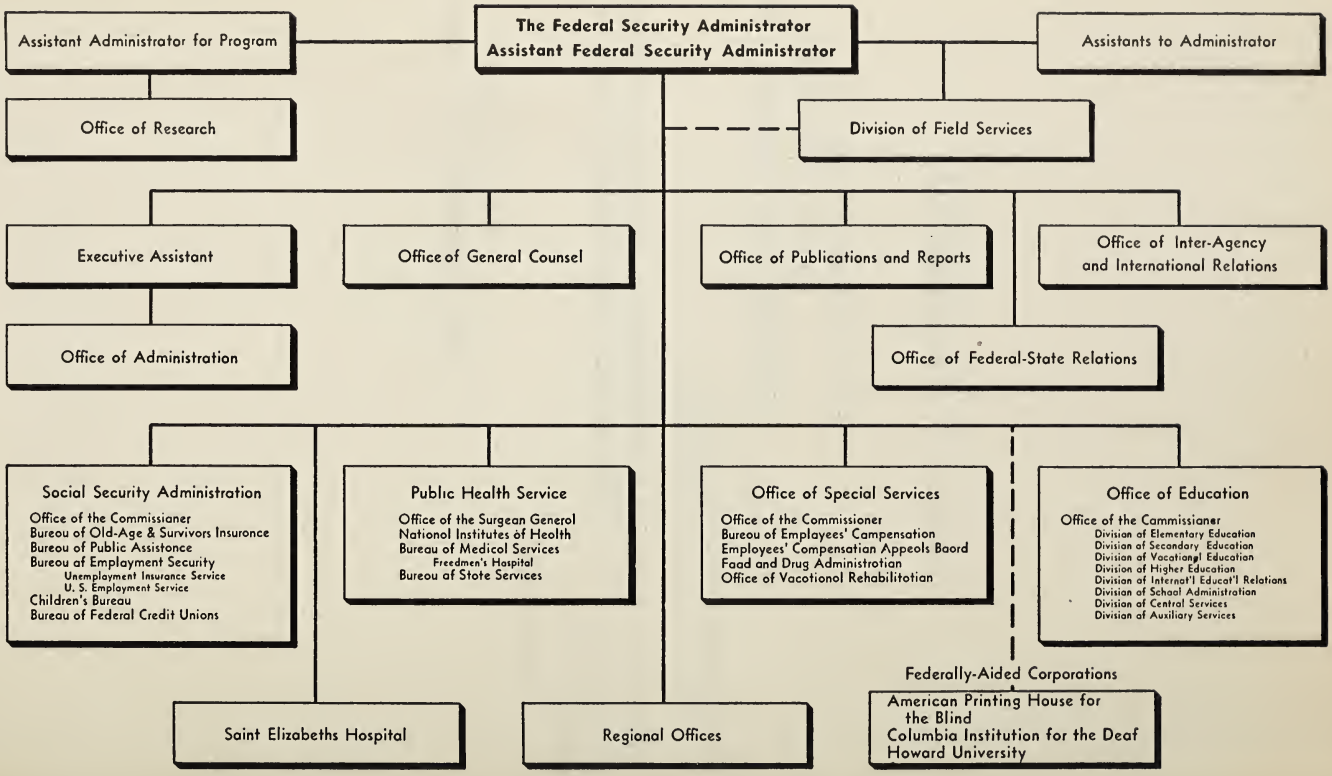
The Honorable OSCAR R. EWING
Federal Security Administrator.

DEAR MR. EWING: I herewith submit the annual report embracing the activities of the Office of Education for the fiscal year ending June 30, 1948.

Respectfully,

RALL I. GRIGSBY,
Acting Commissioner of Education.

Federal Security Agency



Federal Security Agency

The Federal Security Agency was established on July 1, 1939, by Reorganization Plan No. 1 of 1939. The objective of the Plan, the President said, was to group together those agencies of the Government whose major purpose was to promote social and economic security, educational opportunity, and the health of the citizens of the Nation. Among the agencies so grouped by that Plan and by Reorganization Plan No. 2 of 1939 were the Social Security Board (including the United States Employment Service), the Office of Education, the Public Health Service, and the Federal functions of the American Printing House for the Blind.

Reorganization Plan No. 4 of 1940, effective June 30, transferred to the Agency the Food and Drug Administration, St. Elizabeths Hospital, Freedmen's Hospital, and the Federal functions relating to Howard University and to the Columbia Institution for the Deaf.

During the war the Agency became the center around which numerous war activities were developed. In addition to other war functions, the Federal Security Administrator became Chairman of the War Manpower Commission, established in September 1942. When the Commission was abolished at the end of the war, the United States Employment Service, transferred from the Agency to the Commission on its establishment, was then transferred to the Department of Labor.

The Agency was further expanded by Reorganization Plan No. 2 of 1946. Among other things this plan, effective July 16, abolished the Social Security Board and transferred to the Administrator all the functions of the Board and of its Chairman; transferred to the Agency the Children's Bureau with all its functions except those relating to child labor; and abolished the Employees' Compensation Commission and transferred its functions to the Administrator. As of the same date, the Administrator established the Social Security Administration, comprising the program bureaus formerly in the Social Security Board and also the Children's Bureau.

Legislative enactments of June 1948 again transferred the United States Employment Service to the Agency, as of July 1, and administration of the Federal Credit Union Act, as of July 29. The Employment Service was placed in the Bureau of Employment Security of the Social Security Administration, and the Bureau of Federal Credit Unions also was placed within that Administration.

The organization of the Agency at the close of the fiscal year 1948, plus the transfers effective in July, is shown on the accompanying chart.

Foreword

HIGHLIGHTED in this report of the Office of Education are significant facts about American education—information which relates to school and college programs in every State as they touch the lives of children and adults alike.

The Annual Report of the Commissioner of Education focuses attention upon educational problems and progress. It brings together in one volume an overview of progress made during the year in our schools and colleges. It reports the present status of organized education. It points out both continuing and new needs.

It is our hope that this Annual Report may serve to stimulate thought and action in behalf of schools and colleges across the land; that the statistics and facts presented may result in promotion of the cause of American education.

RALL I. GRIGSBY,
Acting Commissioner of Education.

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Office of Education

For the purpose "of collecting such statistics and facts as shall show the condition and progress of education . . . and of diffusing such information . . . as shall aid the people . . . and otherwise promote the cause of education . . ." the Office of Education was established. Accordingly the Office has developed a variety of supporting services to aid the schools and colleges of the Nation.

It follows that, in addition to the publication of statistics and facts collected, the divisions and staff members of the Office serve in a consultative capacity. Although not operating educational systems or institutions, the Office affects education in the United States with and through the agencies that do operate educational systems and institutions.

In this sense, therefore, developments in American education are somewhat keyed to the work of the Office of Education; and conversely, the emphases of the Office mirror the problems and achievements of American education. Because of the nature of this relationship, the two stories are intertwined. This is not to say that the State and local authorities are not responsible for the administration, curriculum, and other phases of school operation. Such an assertion would belie the nature of the educational system which exists in this country.

Nonetheless, in this report, the trends in education are viewed broadly. Here are told major developments of the past fiscal year and the part played by the Office in them.

Administration of Schools and Colleges

REPORT OF THE PRESIDENT'S COMMISSION ON HIGHER EDUCATION

The President's Commission on Higher Education, consisting of 28 citizens appointed in July 1946, finished its work in December 1947. Its report was published in six volumes, under the title of *Higher Education for Democracy*, with subtitles as follows: Vol. I "Establishing the Goals"; Vol. II "Equalizing and Expanding Individual Opportunity"; Vol. III "Organizing Higher Education"; Vol. IV "Staffing Higher Education"; Vol. V "Financing Higher Education"; and Vol. VI "Resource Data."

The Report first considers the value and necessity of educating our population to the fullest possible extent. It argues that "Equal educational opportunity for all persons to the maximum of their individual abilities and without regard to economic status, race, creed, color, sex, national origin or ancestry, is a major goal of American democracy."

Stress is given to the fact that this is a time of crisis. Three principal goals for higher education are given top priority. "They are to bring to all the people of the Nation: (1) education for a fuller realization of democracy in every phase of living; (2) education directly and explicitly for international understanding and cooperation; (3) education for the application of creative imagination and trained intelligence to the solution of social problems and to the administration of public affairs."

Perhaps the most challenging idea in the entire Report concerns the number of young people who should be educated at the post-secondary level. The President's Commission does not prophesy the numbers of students who *will* be enrolled in college and university courses in the future. Instead, it answers the question of how many young people *ought* to be educated beyond the high school. The calculation is based on statistical studies of the mental ability of the population, as shown by the Army General Classification Test.

Within the next 12 years, the Commission says, this country ought to be educating approximately twice as many as were attending college in 1947–48, or more than three times as many as were enrolled at the prewar peak in 1940. The goal set is 4.6 million students in 1960, the number who are deemed to have ability to pursue courses beyond the high-school level.

But what is the capacity of our country to absorb the product of such an extended system of higher education? The Commission implies that much of the additional schooling will not be for particular occupational purposes, but for citizenship and for daily living. It is

obvious that this type of education cannot be overproduced in a democratic society. The conclusions indicate that overproduction of college-trained persons in the professional fields is not likely to occur in our expanding economy.

The barriers to higher educational opportunities and the means of removing them receive extensive treatment in the Report. The first barrier to equal opportunity is economic. This is shown to operate both in the family of the individual student and also in entire communities. Recommendation is made that publicly controlled institutions eliminate all fees for students through the 14th grade, or its equivalent, and roll back fees for other phases of higher education to the 1939 level. The hope is expressed that private colleges will do all in their power to keep costs to students as low as possible.

A major proposal of the Commission is for a system of scholarships and fellowships financed by Federal funds. Scholarships would be provided to 20 percent of all nonveteran students. The amount allowed each recipient would depend on his needs, up to a maximum of $800 for an academic year. The grants would be administered by State agencies. The total appropriation would start at $120 million and would be increased in subsequent years. The fellowship plan would provide stipends of $1,500 annually for graduate students selected by a national competitive examination, beginning with 10,000 grants the first year, then 20,000, and in the third year reaching the maximum of 30,000.

A second barrier is discrimination in admissions. Racial discrimination is discussed primarily with respect to the Negro student. A majority of the Commission concludes "that there will be no fundamental correction of the total condition until segregation legislation is repealed." Pending this action, the Commission "urges that the separate educational institutions for Negroes be made truly equal in facilities and quality to those for white students." A dissenting opinion to the section on racial discrimination is entered by 4 of the 28 members of the Commission.

Religious discrimination is discussed, especially as it relates to Jewish students. Two recommendations are made: (1) removal from application forms of all questions pertaining to religion, color, and national or racial origin; (2) support of anti-discrimination legislation in the States. Other arbitrary discriminations in the admission of students that the Commission condemns are those with respect to sex, geographic barriers, nonveteran status, unwarranted academic requirements, and fixed number quotas by accrediting organizations in certain professional fields. The lack of adequate guidance is also cited as a real barrier.

The development of junior college facilities in local areas is endorsed.

The name "community college" is advocated as carrying the appropriate connotations for the type of institution needed.

The Commission recommends that State education departments be strengthened and given centralized authority over higher education, with adequate staff for the purpose. In States where this cannot be accomplished immediately, the Commission recommends as an intermediate step the creation of a central controlling State commission on higher education.

At the national level the Commission recommends the strengthening of the Office of Education. Various alternatives are reviewed, without definite recommendations, for the administrative placing of the Office of Education in the organization of the Federal Government. It is also recommended that an interdepartmental committee on higher education be set up representing all interested agencies in the Federal Government, with the Commissioner of Education as chairman.

The Commission indicates that the present college-level teaching staff of approximately 155,000 must be doubled by 1952, and that an additional 50,000 must be added by 1960. Improvements in the professional preparation of college faculty members are urged. The present programs of the graduate schools are sharply criticized because they provide inadequate opportunity for professional preparation for college teaching. Data are presented showing the present unfavorable condition in faculty salaries, and recommendation is made for "salary increases such as to provide income commensurate with those earned in other fields requiring similar preparation."

The Commission outlines a program of financial support for realizing the goals set forth. To provide for the 4.6 million students and 350,000 faculty members in 1960, the Commission estimates a total annual current income for educational purposes of $2,587,000,000 will be required, about two and one-half times the expenditures for higher education in 1946–47. The physical plants for higher education, estimated now valued at approximately $4,000,000,000, will require more than twice that amount for additional capital investment, bringing the total value of the plants in 1960 up to $12,834,000,000. Practically all the increase in enrollments, according to the Commission, will have to be carried in publicly controlled institutions.

The bulk of the increased funds required must, according to the Commission, come from the Federal Government. The Commission recommends that public appropriations for education be limited to publicly controlled institutions; two members of the Commission enter a dissent on this point.

The Commission does not want higher education strengthened at the expense of the elementary and secondary levels of the public-school system. The Commission also makes it clear that, in proposing

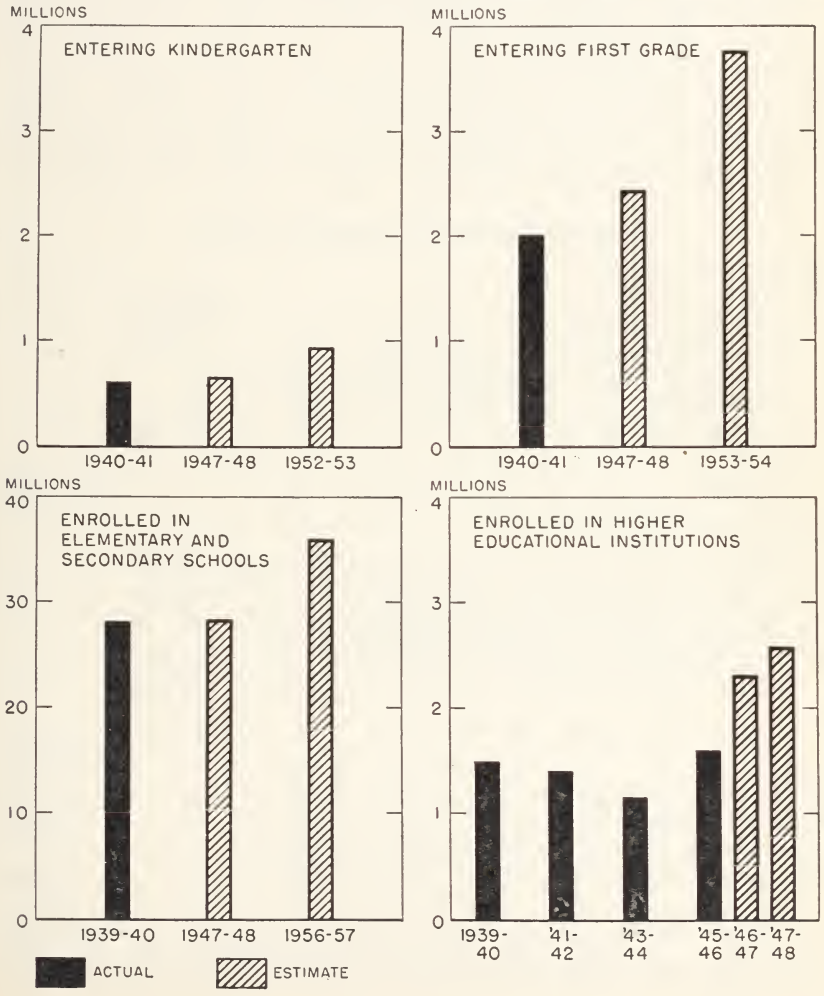
extensive Federal support for higher education, it in no way advocates a change in the long-established pattern by which the States, not the Federal Government, control the program.

The Commission's responsibility and its activities terminated with the publication of its report. At the end of the fiscal year, no organized group had been assigned responsibility for the implementation of the recommendations.

ENROLLMENTS

Of the estimated total population of the United States of 146,571,000 (including armed forces overseas) on July 1, 1948, about 31¼ million,

Chart 1.—*School enrollments by type of school, selected years 1939–48*



or 21.3 percent, had been enrolled in full-time day schools in the school year which had just closed, not including those in private trade and vocational schools, in part-time, evening, and summer schools; and in correspondence education. The percentage enrolled is low owing to the relatively large proportion of preschool age children in the 1947–48 total population.

In the fall of 1947, approximately 2.4 million children entered the first grade and about 655,000 entered kindergarten.

The high wartime births had begun to increase the kindergarten and first-grade enrollments, but the low births of the 1930's were still decreasing the secondary school enrollment in 1947–48. Total elementary school enrollment increased 895,000 over the previous year and secondary enrollment decreased 46,000, making a net increase of 849,000. The school year 1947–48 saw the second high year, and probably the peak, of veteran enrollments in the colleges. In the fall of 1947 there were 1,122,738 veterans in college, 48 percent of the total students. In the estimated 2.5 million total college enrollment for the year, there were more women than ever before (700,000).

TABLE 1.—*Estimated enrollments, 1947–48* [1]

ELEMENTARY SCHOOLS		
Public	19,395,000	
Private and parochial	2,538,000	
Residential schools for exceptional children	59,000	
Elementary grades in colleges (teacher-training schools)	51,000	
Federal schools for Indians	29,000	
Total		22,072,000
SECONDARY SCHOOLS		
Public	5,603,000	
Private and parochial	562,000	
Residential schools for exceptional children	19,000	
Secondary grades in colleges (preparatory and teacher-training schools)	46,000	
Federal schools for Indians	6,000	
Total		6,236,000
UNIVERSITIES, COLLEGES, AND PROFESSIONAL SCHOOLS		2,570,000
PRIVATE COMMERCIAL SCHOOLS		300,000
NURSE TRAINING SCHOOLS (not affiliated with colleges and universities)		100,000
Grand total		31,278,000

[1] See section on vocational education for enrollments in vocational fields, which are included in the figures given in this table.

The 3.9 million births in 1947, the largest number so far recorded for 1 year, will mean approximately 1 million children entering kindergarten in September 1952 and 3¾ million entering the first grade in September 1953 compared with approximately 2 million in 1940. It looks now as though the maximum effect of the recent population increases would be felt in the elementary and secondary schools in 1956–57, when almost 36 million students will be enrolled.

PLANT FACILITIES

The Nation is faced with the worst school and college building crisis in its history. This situation is due to a combination of factors, related for the most part to World War II, including higher birth rates, population shifts, expanded school offerings, and deferred construction.

Enrollments.—Table 1 indicates over-all national enrollment estimates, but in many spot surveys the figures based on actual child count show percentage increases three times the national increase. Then there are 2 million 5-year-olds and 4.5 million 16- to 19-year-olds not now attending school. With increased interest in kindergarten education and postwar emphasis on continuation and terminal educational programs for youth, it may be expected that the 1954–55 enrollment in public elementary and secondary schools will exceed the 1947–48 enrollment by 6.2 million. This one factor alone will require more than 200,000 new elementary and secondary classrooms.

Population shifts and district reorganization.—The war resulted in the greatest population shift in American history, and this shifting and reshifting is continuing as the economy adjusts to a peacetime basis and housing becomes available. In many cases the population has moved away from sections which were served by old shool buildings into sections where there are few if any school facilities. In most States the small inefficient school district is giving way to larger and more efficient administrative units and attendance areas; this requires modern consolidated plants to replace the often dilapidated little school houses that were running in the red.

Expanded offerings.—Social and economic changes during and following the war have accelerated curricular changes in the schools and colleges. New and broader objectives, new and diversified courses, and new methods have rendered many educational facilities obsolete as well as inadequate. Schools and colleges more and more are becoming educational, cultural, recreational, and service centers for the community. Greater community use of educational plants requires expansion and alteration of existing facilities.

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Deferred construction and maintenance.—The country was short of educational facilities even at the close of the 1930's. Relatively few new school and college plants have been erected since 1940, and regular maintenance programs have been neglected owing to manpower and material shortages. Thousands of buildings which normally would have been replaced have been continued in service and allowed to fall into a poor state of repair. As a result, many educational plants now in use are obsolete, unhealthful, and unsafe.

Planning trends.—There are distinct trends in plant planning which point toward: (1) functional plants which will house modern educational and community programs more adequately; (2) larger sites for recreational use; (3) larger teaching areas to permit more activity in the learning process; (4) facilities for convenient storage and use of more instructional supplies and aids; (5) better seeing conditions by improved interior decoration and natural and artificial lighting; (6) one-story open-type plans rather than massive structures; and (7) maximum provision for adaptability to changing conditions.

Educational plant needs.—During the year the Office of Education conducted studies of school and college building needs, in cooperation with the National Council of Chief State School Officers, and with college officials, respectively. Table 2 is based on data from these studies and indicates the cost of needed land, buildings, and equipment to replace or modernize unsafe and obsolete educational facilities, and to provide new facilities to accommodate present educational programs and enrollments predicted for the immediate future.

TABLE 2.—*Plant needs (as reported, fall of 1947)*

By type of institution	*Estimated costs in billions of dollars*
Elementary and secondary schools:	
Public	6.6
Nonpublic	.8
Higher education: Public and nonpublic	3.6
Total	11.0
By type of facility	
New buildings and additions	7.9
Remodeling and rehabilitation	1.3
Equipment	1.2
Sites	.6
Total	11.0

The Office study of college and university building needs revealed that these institutions had 341.5 million square feet of building space and needed an additional 255 million square feet to accommodate

enrollments anticipated by 1950. This 78 percent increase for college and university buildings would be equivalent to 133 Empire State buildings.

Costs and financing.—The average building cost index for the first 6 months of 1948 was 331.21 on a 1913 base of 100, as compared with 228.75 in 1943, 239.14 in 1945, and 307.68 in 1947. There seems to be no indication that costs will come down any time soon. Without State financial assistance thousands of localities cannot provide urgently needed school facilities from local sources and bonding capacities. Several States are not able to provide their minimum school plant needs without additional financial assistance.

State school plant assistance.—There are 32 States that have State school plant regulations and/or require State approval of plans for all or certain types of districts. Only 27 States, however, provide school plant specialists in the State departments of education. There is a trend toward State aid for capital outlay. Nineteen States now provide some financial assistance to local school districts for capital outlay. Ten of these State-aid programs are significant in the amount of money provided. Several States not now providing this assistance are reported to be contemplating legislation for this purpose in 1949.

PUPIL TRANSPORTATION

Pupil transportation continues slowly but steadily to increase in extent. The last complete report for all States (1945–46) showed that more than 5 million pupils in the public elementary and secondary schools were being transported to and from school. The few State reports available for 1947–48 indicate that this number has increased in the last 2 years by another 2 to 3 percent. Costs have gone up in proportion to other school costs. Drivers' salaries have increased sharply and the cost of equipment and supplies has also increased to some extent. Per pupil cost for transportation for the Nation as a whole was slightly in excess of $25.50 in 1945–46. It is estimated, on the basis of a few State reports, that it may exceed $30 for 1947–48.

One problem which continued to plague school administrators during 1947–48 was the shortage of school busses. During 1946 some school bus body manufacturers estimated that they were a year behind on filling orders. This shortage continued acute during 1947, but began to ease by the early part of 1948. By midsummer of 1948, it was possible to buy busses for delivery within a few weeks.

Another wartime problem now somewhat less acute is that of obtaining school bus drivers. Some States which were forced to relax their standards for school bus drivers during the war are begin-

ning to enforce them again. Likewise those States which during the latter part of the war discontinued training programs for their school bus drivers are beginning to resume these programs.

Plans were begun during 1947–48 for the third National Conference on Pupil Transportation to be held in October of 1948. This conference is sponsored by the National Council of Chief State School Officers, the Department of Rural Education, and the American Association of School Administrators of the National Education Association, and the Office of Education. It will be conducted by the National Commission on Safety Education of the National Education Association. The conference will devote attention to school bus standards, records and reports for pupil transportation, uniform traffic laws for passing school busses, and standards and training programs for school bus drivers.

During 1948, the Office of Education prepared the bulletin, *School Bus Maintenance*, and collaborated with the National Education Association in publication of a bulletin on *School Transportation Insurance*.

SCHOOL FINANCE

Legislation of unusual importance to school finance enacted in 1947 in several States and amendments to State constitutions voted by the electors in at least 3 States became effective during the year ended June 30, 1948. These legislative and constitutional amending provisions increased the annual amount of State funds for the schools, raised salary standards for teachers, and expanded the scope of State participation in school support. In a few instances, legislation enacted in 1948 will have similar effect during the school year 1948–49.

State governments have recently assumed an increasing amount of responsibility for school finance either as a new responsibility or as an expanded one. This State financial aid extends to school building and pupil transportation facilities, to schools for children of kindergarten age, for handicapped children, and for emergency population situations, to retirement plans for school employees, to new or more complete plans for the equalization of school costs, and to assistance for junior colleges. The majority of States report substantial progress during the past year in the improvement of plans for financing public education, including provision for increasing the salaries of its public-school teachers.

Examples of changes in State plans which occurred, or became effective, during the year under review follow.

Increase in State school funds.—By an amendment to the California Constitution voted in November of 1946, the amount of State funds

for annual apportionment to the public schools has been increased from a basic amount of $80 per pupil in grades 1 through 8 and $90 in grades 9 through 14 to $120 per pupil in all grades (kindergarten through grade 14). Supporting legislation enacted in 1947 established a foundation program for the public schools and fixed the cost thereof at $145 per pupil in elementary schools, $175 in high schools, and at $200 in junior colleges; and provided for the use of State funds to equalize such cost. All became effective in 1947–48.

By legislation enacted in New Hampshire in 1947, the amount of funds for apportionment to local school districts was increased from $400,000 annually to $2,000,000 for each year of the 1947–49 biennium. In commenting on the fivefold increase, the State Commissioner of Education stated that in addition to the $1,600,000 increase in State money, school districts raised by local taxations $1,229,085.72 more for the support of schools in 1947–48 than they did for the preceding year.

Among the other States which provided significantly more funds for distribution to their public schools in 1947–48 than previously are Florida, Nevada, and West Virginia—where the amounts were nearly doubled; Georgia, Virginia, and Washington—with increases of approximately 50 percent; and Arizona, Connecticut, Delaware, Illinois, Indiana, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Nebraska, New York, Ohio, Oregon, South Carolina, Pennsylvania, Tennessee, Texas, Utah, Vermont, and Wisconsin—each showing substantial increases.

Increased salaries for teachers.—One of the most frequent purposes in providing for increased State funds was to raise the salaries of teachers. California, Nevada, and Washington fixed the minimum salary at $2,400 per year for any full-time teacher. Indiana and Oregon fixed this same amount for a teacher holding a bachelor's degree, with somewhat lower amounts for those with lower qualifications. Louisiana provided that a large part of her greatly increased appropriation for 1947–48 should be used for raising the salary of teachers. Pennsylvania established a new minimum salary rate of $1,950 for all public-school teachers, with five yearly increments of $150 each. The large increase in State school aid appropriated by the Virginia Legislature for 1947–48 over the amount for the preceding year specifies that it is to enable districts to increase teachers' salaries. Delaware, Georgia, New York, Ohio, and South Carolina are among the other States which specifically provided for increasing salaries for 1947–48.

State aid for specified school services and equalization.—Among the States which provided funds for the first time or increased the amount for the school year 1947–48 over previous years for special school

services or projects are Delaware, New Hampshire, Pennsylvania, and Washington—expense of school buildings; Michigan, Mississippi, and Utah—school transportation service; Minnesota, Pennsylvania, and South Dakota—schools for handicapped children; California, Mississippi, and Virginia—junior college education; and California, Illinois, New Hampshire, Ohio, Oregon, Utah, Virginia, and Washington—for equalizing school expenditures.

The Office of Education made detailed studies of 4 State plans for financing education (one of which was published in SCHOOL LIFE), and prepared a report on *Federal Government Funds for Education, 1946–47 and 1947–48.*

LOCAL SCHOOL UNIT REORGANIZATION

One of the most serious and persistent problems in American education today concerns the structure and services of local school administrative units. The need for broadening the educational offerings of the small school district to meet current needs has led to State-wide programs of local unit reorganization in many States in recent years. Increased impetus was given to the study of this problem in 1947–48 in California, Illinois, Iowa, Minnesota, New Mexico, North Carolina, and North Dakota. In those and some other States (Colorado, Idaho, Kansas, Missouri, New York, South Carolina, Washington, and Wisconsin) county and other school survey committees, with assistance from State commissions on reorganization, and with State department of education leadership, made studies of school organization and recommendations for more adequate units of school administration.

Typically these studies verified the fact that many of the existing school districts cannot provide essential administrative, supervisory, and teaching services; a broad curriculum offering including vocational training and work experiences; medical and dental services; and teachers capable of providing all of the types of special training needed. They also showed that in many rural areas the present organization of administrative units is inadequate both in population and in wealth to operate and maintain efficiently a satisfactory educational program.

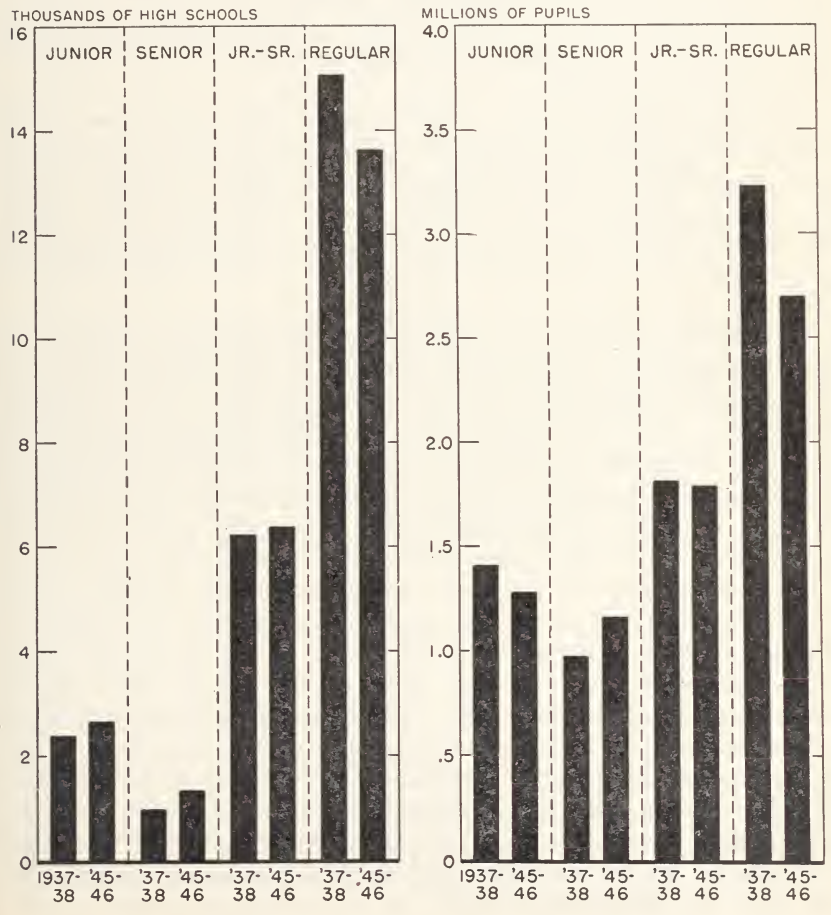
Although the number of administrative units in the United States has been reduced in the last 10 years by about 25,000 and today numbers approximately 102,000, many units still are not adequate to provide satisfactory programs and service. With the decrease in the number of school boards by this reduction in units there is a tendency toward strengthening the county and the supervisory unit and other intermediate units.

HIGH-SCHOOL ORGANIZATION

Information released by the Office during the year shows that from 1938 to 1946 the total number of high schools decreased by 643 and the number of reorganized high schools, i. e., those deviating from the regular 4-year pattern, increased by 788. This change in number of schools was absorbed by the regular high schools, which decreased by 1,431. The senior high schools showed the greatest gain in numbers during the 8-year period.

Correspondingly there were a half million fewer pupils in the high schools in 1946 than in 1938. Again, the regular high schools absorbed this loss. The senior high schools showed a notable increase in enrollment; the junior and junior-senior schools had some loss. The

Chart 2.—*Number of high schools and of pupils, by type of school, 1937–45*



number of pupils in reorganized high schools increased slightly despite the over-all enrollment loss of a half million.

COMMUNITY COLLEGES

The expansion of educational opportunities beyond high school for all youth is one of the major areas of concern to educators, to communities, and to the Nation. The Report of the President's Commission on Higher Education emphasized the importance of providing such opportunities and recommended an increase in the number of community colleges and expansion of their activities.

The term "community college" is relatively new in the educational vocabulary. Better known is the older term "junior college". The essential characteristics of the community college are local control and educational service continuously adapted to the needs of the entire community. It should offer varied programs including general and vocational education at the post-high-school level, and serve as a center of adult education.

Since the beginning of the present century, the development of the junior college has been phenomenal. For the year 1947–48 the American Association of Junior Colleges lists 653 junior colleges serving various communities in the United States. The geographic distribution of the service, however, is not uniform, since approximately one-fifth of the institutions are located in two States (California and Texas).

The National Council of Chief State School Officers, during the year, formulated a statement of the State's responsibilities for the expansion of educational services in the thirteenth and fourteenth years. The Council approved a policy that programs should be provided for the five groups of students identified by the Educational Policies Commission and should be offered in tuition-free community colleges under the general supervision of the State department of education. These community colleges should be located according to criteria established by the State within commuting distance of all youth of the State. Other provisions of the statement of policy are: State departments should set standards governing the approval and placement of curricula; the law should provide for close articulation of the program of the community college with those of the supporting high schools; the establishment of community colleges should give due regard to existing private institutions; a program of teacher preparation for these institutions should be fostered by the States. Finally, the Council recommended that enabling legislation should encourage community colleges through adequate State financial support distributed on an equalization basis.

The Office of Education, recognizing the potential expansion of the community college, has recently provided for a specialist in this area. Assistance has been given by the Office at the request of three States (Florida, Maryland, and Pennsylvania) in the conduct of State surveys.

FEDERAL LEGISLATION AND COURT DECISIONS

International Education

Several items of legislation reflected the concern of the Congress to provide better international educational and cultural relations. Public Law No. 369 of the 80th Congress created "The Institute of International Educational Affairs," for the purpose of strengthening friendship and understanding among the peoples of the American Republics through cooperation with other governments in planning and executing programs of public health, agriculture, and education.

Public Law No. 402, "the United States Information and Exchange Act of 1948" was designed to promote better understanding of the United States among the peoples of the world through the dissemination abroad of information concerning the United States and services in the field of education, arts, and sciences. The 80th Congress also appropriated $3,772,775 for carrying out the purposes of the United Nations Educational, Scientific and Cultural Organization (Public Law No. 597).

The International Aviation Facilities Act (Public Law No. 647) authorized the Secretary of State, the Administrator of Civil Aeronautics, and the Chief of the Weather Bureau to train foreign nationals directly (or in conjunction with other public or private agencies, or international organizations) in aeronautical and related subjects. Congress also (Public Law No. 564) authorized courses of instruction in the United States Naval and Military Academies be given to a limited number of persons in the American Republics and Canada.

Higher Education

Public Law No. 795 provided that the Federal Works Administrator may transfer to any educational institutions, without monetary consideration, all property rights to temporary houses on land owned by the educational institution. This Act included the provision that student veterans be given preference in filling vacancies in such housing.

Two measures relating to research were enacted by the 80th Congress: Public Law No. 655 established in the Public Health Service a National Heart Institute to conduct and foster research relating to the causes, prevention, and treatment of heart diseases; and Public Law No. 755 established in the Public Health Service a National

Institute of Dental Research to promote research in the causes, prevention, and treatment of dental diseases. Each of these Acts included provisions for research fellowships and traineeships through grants-in-aid to nonprofit educational and research institutions.

In passing the National Selective Service Act of 1948, Congress provided for deferment from military service of high-school and college students under certain conditions, and authorized the President to provide for the deferment of other categories of students.

Veterans' Education

Congress has provided wide educational opportunities for veterans of World War II. Public Law No. 115 of the 80th Congress authroized to be appropriated $3,000,000 (in lieu of the $1,500,000 formerly authorized) for use by the Veterans Administration as a revolving fund to make advancements to veterans taking courses in vocational rehabilitation. Public Law No. 377 modified the Veterans Administration program by including and defining institutional on-farm training courses.

The 80th Congress, 2d Session, enacted two additional measures of special interest to veterans:

1. Public Law No. 411 authorized to veterans pursuing educational courses an increase in subsistence allowance from $65 to $75 per month if without dependent; from $90 to $105 per month if with one dependent; and $120 per month if with more than one dependent.

2. Public Law No. 512 provided additional subsistence allowance for veterans pursuing on-the-job training courses, but limited it so that allowance plus compensation may not exceed $210 per month for a veteran without dependent; or $270 per month with one dependent; or $290 per month with two or more dependents.

Utilization of Surplus Property for Education

The 80th Congress enacted three measures to facilitate the disposal of surplus property for educational purposes. Public Law No. 616 provided that the War Assets Administrator may transfer to any State, including political subdivisions (school districts implied), any surplus land, including improvements and equipment which, in the opinion of the Secretary of the Interior, is suitable and desirable for use as a public park or recreation area.

Public Law No. 655 authorized the War Assets Administrator to dispose of to States or their political subdivisions (school districts implied), to public and governmental institutions, or to nonprofit educational institutions any surplus personal property suitable for use in athletic sports or games, without charge except for shipping costs.

Public Law No. 889 authorized the Secretaries of the Army, Navy, and the Air Forces to donate for educational purposes without cost, other than for packing and transportation, equipment, books, and other supplies which may be obsolete or no longer needed by the Army, Navy, or Air Forces and which any of the Secretaries or the Commissioner of Education considers usable for educational purposes. With a few exceptions, the approval of the Commissioner of Education is required as a prerequisite to all such donations to educational institutions. The Office of Education advises the Armed Services concerning educational needs, screens the property on the basis of educational suitability, and maintains fair and equitable distribution among the several States.

Supreme Court Decisions Relating to Education

In recent years an increasing number of decisions by the United States Supreme Court have affected education among the several States. Three decisions are of particular significance. Early in 1947 the Supreme Court in a New Jersey case held that the use of public tax funds by school districts for paying the transportation of children attending a parochial school was not in violation of any provision of the Constitution of the United States (*Everson* v. *Board of Education of the Township of Ewing*, 67 S. Ct. 504).

In January 1948 the Supreme Court reversed a decision of the highest court of Oklahoma and held that the State of Oklahoma, in conformity with the equal protection clause of the fourteenth amendment, was required to provide qualified Negro applicants with professional legal education equal to that afforded by the State institution for white students, and also that where admission was denied solely on the ground of color, mandamus would lie to compel admission. (*Seipel* v. *University of Oklahoma*, 68 S. Ct. 299.)

On March 8, 1948, the Supreme Court rendered its decision in the case of *McCollum* v. *Board of Education* arising in Champaign, Illinois. The Court held that sectarian religious instruction on public-school premises during school time was not permissible under the first amendment of the United States Constitution. (69 S. Ct. 461.)

Curricular Developments

CURRICULA BASED ON CHILDREN'S NEEDS

The current emphasis in elementary education turns the telescope on the child as an individual, as a personality, who in the process of being educated has some share, as well as his teachers, parents,

and school administrators, in developing the program. This is the point of view accepted by many individual educators and by the majority of organized professional groups working in elementary education. The publication in 1945 of *Helping Teachers Understand Children* by the Commission on Teacher Education, American Council on Education, defined this whole area more clearly than in the past and served as a springboard to further study and activity. Concurrent with the development and publication of this report were other emphases such as the Delaware program in mental hygiene and the production of films on problems in understanding children by colleges and universities, and commercial companies.

The Office of Education has encouraged the adoption of the child-development point of view by lending its support to the pronouncements of committees, by jointly sponsoring publications of organizations, or by bringing together both professional and citizen groups on a common meeting ground for clarification of issues and ideas.

The year 1948 was significant for the publication by the Educational Policies Commission of the volume entitled *Education for* ALL *American Children*. This report, based upon visits of committees to 84 elementary schools selected as outstanding by educators in various parts of the United States, recognizes the principles of child growth and development by emphasizing the uniqueness of the individual, learning and continuous growth of the child as affected by both a sense of security and of adventure, and the ways in which learning takes place. Several members of the Office served as consultants in the planning stages of this project.

Significant in 1948 were several reports of the National Council of State Consultants in Elementary Education published in cooperation with the Office of Education. This organization speaks for the elementary staff members of State departments of education in the 48 States. Two of these reports emphasize the importance of the child in the total educational process. The first, entitled *Modern Trends in State-Wide Curriculum Programs*, highlights such statements as those which indicate that State staff members are helping local communities "to develop curriculums which serve the particular needs of the children and the community." The report identifies as a trend the basing of the curriculum upon the little used but definitely known facts of child development by recommending children's participation in planning in ways that are appropriate to them—defining purposes, learning techniques, developing bases for evaluating progress, learning respect for mature judgment, and sharing in improved planning.

The second publication of the Council, entitled *Programs for Children Below Six*, describes the need for such programs, and presents the

characteristics of the experiences which children should have at these age levels.

In the leadership conference held by the Elementary Division of the Office in June 1948, representatives of 31 professional and citizen organizations discussed how we in the United States can get better education for children of elementary school age. One of the first steps recommended was that which called for organizations to "examine their programs and evaluate them in the light of bringing child development, subject matter areas and special services into focus in planning programs which affect the elementary school child." Another question discussed was: "What are the ways of identifying the problems or situations which are real and important to children and which need to be considered in planning their educational experiences?"

Another approach to the problem of the importance of the child in the school program was made through a 2-week work conference for staff members of State departments of education, sponsored by the Elementary Division of the Office. More than 50 persons from 21 States studied problems of evaluating the school program, in-service and pre-service education of teachers, and curriculum problems from the child-development point of view.

Such programs as these indicate that elementary education is moving forward on a broad front in the definition of purposes and principles.

There is still a gap between what educators recognize as good and desirable for children, and actual practice in the schools. The elementary school population is made up of children who are rich, poor, bright, dull, healthy, physically handicapped, rural, and urban. To meet their needs schools must look at children's experiences in their individual communities. Common to all are certain needs: (1) skills that are functional; (2) home and family living experiences; (3) citizenship and community service; (4) earning money and making wise use of it; (5) fun and recreation; (6) clubs and group activities; (7) conservation of human and natural resources; and others. There are curriculum materials which are built on these emphases. But many school systems have replaced stress on production of courses of study with workshops for teachers for the study of children and their needs, with implications for the curriculum.

Elementary education is big business measured by the numbers of children involved. Since elementary enrollments in the public schools are the largest, and since these same children are in a most formative period of growth, increasing attention must be focused upon the importance of these early years.

LIFE ADJUSTMENT EDUCATION

During 1947–48 there was cumulative national concern with the reorganization of curricula in the high schools so as better to serve the vital needs of all youth of high-school age. Originally designed for the relatively small number of students who were going on to college—in most instances to prepare for the professions—high-school curricula were later broadened to include specific vocational training programs, designed to prepare youth for agriculture, trades and industry, the distributive occupations, and home economics. Now that upwards of two-thirds of all American youth attend secondary schools, neither the precollegiate nor the specific vocational type of program seems appropriate for many students who do not have definite vocational goals for which they can prepare in high school.

Many local schools and many groups of schools under State or regional leadership are restudying their curricula. They define their objectives in different ways. Some say they are placing an emphasis on education for present living as opposed to education which puts knowledge in cold storage for future use; some are reorganizing the content of courses to replace that which is least useful with content which promises to be more functional; some are widening the scope of the school to include activities which build social skills and wholesome character and personality traits as well as intellectual competencies. All are attempting to make high-school activities more purposeful in terms of life and the aims of our society. Many are attempting to meet the present needs of youth. Many are taking into account the steps by which youth grow and develop.

The Annual Reports for 1946 and 1947 carried accounts of activities of the Office of Education in providing leadership for improving the high-school curriculum. The fundamental aim is to accelerate desirable activities already under way. The particular objective is to meet the needs of youth bound neither for college nor for vocations requiring systematic occupational training. Some of these youth are in school but many have dropped out. The Office enterprise has come to be known as "Life Adjustment Education for Youth."

The Commission on Life Adjustment Education for Youth.—During the year a Commission on Life Adjustment Education for Youth was appointed and held 3 meetings for an aggregate of 9 days. In advising the Office of Education this Commission works through a steering committee in the Office of which the directors of the Divisions of Secondary Education (Chairman), Vocational Education, and Higher Education are members. The assistant director of the Division of Secondary Education is secretary to both the Commission and the steering committee.

During 1947–48 a publication entitled *Life Adjustment Education for Every Youth* was issued and widely distributed. It contained reports on regional conferences which were held during the calendar year 1946, and on the National Conference of May 1947. It also contained a statement of common understandings for a program of action and suggestions for uses of the document by local school systems and teacher-education institutions. Manuscript for a briefer descriptive bulletin also was completed during the spring of 1948.

At the year's end, the following activities were under way:

1. A study of the characteristics of high-school students.
2. Plans for a work conference of leaders from Indiana and 6 adjoining States at Indiana University in July 1948.
3. Plans for enlisting the support of chief State school officers and State directors of vocational education at four regional conferences in July and August 1948.
4. Plans for a national conference of State and local leaders during October 1948.

All members of the Division of Secondary Education contributed to the program either by studies or by field services.

COLLEGE CURRICULAR TRENDS

Although there have been significant curricular developments in certain institutions, in the main these have not been sufficiently numerous to indicate a trend. In December 1947, inquiries were made by the Office of Education of 707 colleges and universities about their activities "for education in democratic ideals and practices." Of the 180 institutions replying, 18 percent reported curricular revisions and nearly 42 percent reported the inauguration of new courses to achieve this goal. Of those reporting new courses related to democracy, 13 percent indicated that these were being required.

The establishment of a Latin American area-study program at Tulane University (the fourth in a 5-year cooperative arrangement), the inauguration of a European area-study program at Columbia, the Dartmouth experiment with a "Great Issues" course, the University of Kansas experiment with a required reading course on Western Civilization, and the introduction of a public relations curriculum at Ohio State University (one of the few in the country), all should be noted, although it is too early to know what effect these programs may have on curricula elsewhere.

There has been an increasing emphasis on international relations,

particularly on study of the United Nations and its affiliated agencies. Workshop courses on the teaching of the UN were held at 13 universities or teachers colleges in the summer of 1948, and several in-service courses for teachers are being established for the current academic year. American educators have also been experimenting with the development of new methods and techniques for use at all levels in helping to train a more world-minded citizenry.

To a certain extent, curricular changes reflect the current demands of students, and these demands in turn reflect the needs of business and the professions or the developments on the international front. There is, for example, an increasing emphasis upon Russian language, literature, and history. There has also been a marked student interest in professional and preprofessional courses and in such tool subjects as accounting. Veterans enrolled in college have shown an especial interest in engineering, in business, and in business law as it relates to real estate, insurance, and actuarial problems. The American Statistical Association, in cooperation with certain universities, is conducting a job analysis of statistical work in the Federal Government, to the end that improvements may be made in statistics curricula and that students may be better prepared in the kind of statistical skills and procedures required in the different bureaus and agencies.

In engineering education, there is a growing emphasis upon the fundamental sciences, leaving to the graduate school or to practical experience the more specialized applications of science. There has also been a greater liberalization of the engineering curriculum, effected in some instances by adding a fifth year, and in others by substituting humanistic for certain technical courses. On the graduate level a marked increase in engineering education has resulted from the demands of industry for trained research scientists, both theoretical and practical.

In teachers colleges, three curricular developments are noteworthy: First, a tendency toward consolidation of methods courses; second, a closer adaptation of the curriculum to the end of happier living; and, third, the adoption of a functional approach in the various professional courses. The first of these rules out the special and separate methods courses in history, mathematics, English, and the like, in favor of a more generalized methods course useful in various subject-matter areas; the second emphasizes vocational and general education; and the third gives new emphasis to child-development problems and community relationships in teacher preparation. The preprofessional and general educational curricula of the teachers colleges have attracted many students who do not plan to teach. In some of the teachers colleges, general education and preprofessional students greatly outnumber those whose professional goal is teaching.

In the preparation for various professions, more emphasis is being placed on general education, especially in the social sciences. This is true for example in such diverse fields as engineering, journalism, and librarianship. The broad effect is to devote more time during the undergraduate years to general education, thereby requiring that technical phases of professional preparation be gained in graduate programs, as happened earlier in medicine and law.

In junior colleges, and to some extent in teachers colleges also, there has been, increasingly, an integration of courses in the social sciences, in the physical sciences, and in the biological sciences. These and other general courses appeal to the prospective senior-college student and to the terminal-curriculum student alike. There is a growing interest in terminal curricula embracing semiprofessional courses which prepare students for immediate entry into business or industry. A recent study shows, moreover, that 25 percent of the junior colleges offer one or more courses related to some phase of family-life education.

In the liberal arts colleges and in the universities, the integration of courses in large subject-matter areas has lagged somewhat, although at Harvard and Columbia an integration of the social sciences has been undertaken in the lower division and the resulting courses have been placed on the required list.

College and university faculties are, in general, slow to change the academic patterns under which they and their students have operated. A sample check of institutional offerings indicates that, despite curricular developments, such as these just reviewed, there is no indication of a trend toward a thorough-going overhauling of curricula. Traditional requirements for graduation still hold, and tendencies toward multiplication of courses seem as pronounced as ever.

GENERAL ADULT AND POST-HIGH-SCHOOL EDUCATION

The Gallup Poll (July 1947) indicated that 41 percent of all adults desired further education. In 1944 only 34 percent claimed such an interest. The public schools and junior colleges of California in 1947–48 enrolled an estimated million adults which was a 50-percent increase over the previous year. While national data are not complete, enrollment reports from other States and localities reflect a similar growing interest.

In an effort to document the extent of adult and out-of-school youth education and to identify the types and locations of activities in the field, the Office initiated a national survey which carries over into 1949. Likewise a start was made in developing a formula for the quantitative measurement of adult education programs.

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Evidence thus far indicates that the public schools are much further ahead in some States than in others in recognizing and meeting the educational needs of out-of-school youth and adults. Thirteen State education departments have full-time and 8 more have part-time directors of adult education. A study by the Office revealed that 21 States provide financial aid to local districts for adult education; 3 States expanded their aid during the year. Undoubtedly difficulties in financing adequate elementary and secondary programs have handicapped the further extension of aid to adult education.

A study started during the year revealed that the public schools are rapidly broadening their activities and approaches beyond the evening school in an effort to meet more of the educational needs of adults. Film-forums, conducted excursions, group conferences, workshops, community center activities, little theaters, consultation services to club leaders, educational services to community organizations, adult guidance services, and young adult programs have made forward strides during the year.

A study of postgraduate education in high schools showed a general decline in this form of post-high-school education which can probably be attributed to the expansion of adult education programs, junior colleges, and higher education institutions, and to the high level of employment.

The expansion of adult education in higher education institutions received much attention. The National University Extension Association devoted its annual meeting to the subject. In a number of junior colleges the adult programs already enroll more than the regular programs for youth. The President's Commission on Higher Education, the National Council of Chief State School Officers, and the Temporary Commission on the Need for a State University (New York) all called for the development of community colleges with extensive adult education functions. New York passed a law authorizing the establishment of community colleges.

Adult education and community development are achieving a closer integration. A committee of the American Association for Adult Education issued a report pointing up this close relationship. In Connecticut, Georgia, Kentucky, Michigan, New York, and other States adult education plays important roles in broad community planning and development activities.

Problems.—Problems abound in this growing field. One increasingly recognized as paramount by professional workers is that of better methods for identifying educational needs together with the development of suitable approaches which will involve more adults in learning activities. The problems and tempo of our culture make

it imperative that all adults continue their learning throughout life. Traditional methods of identifying those needs and of serving them have involved only a small segment of the population. The Office specialist has been working with a committee in Baltimore in an effort to adapt marketing and consumer research techniques to this problem. The shortage of trained and experienced leaders continues to handicap expansion of the field, even though training opportunities are growing. Most traditional public-school methods have limited applicability with adults. More leaders are being drawn from fields outside the teaching profession, but the newer findings of psychology, sociology, discussion methods, group work, group dynamics, and the other arts and sciences bearing on leadership are too infrequently incorporated into the preparation of those working in the field. California embarked upon an extensive program of in-service training during the year.

Inadequate materials, especially those suitable to the lower educational levels, continue to be a limiting factor although progress is being made. Materials with more diverse and practical content at simpler language levels are particularly needed.

While most attention has been given to the public schools, the high interest and rapid growth of adult education make it even more imperative that all organizations and agencies for community betterment combine their efforts toward common ends. The school as the social agency primarily concerned with education has an unsurpassed opportunity during these years of expansion for exerting leadership and serving many of the educational needs of adults. However, even with all the expansion that the public school should make, it cannot and should not attempt to do the total job.

HELPING THE UNDEREDUCATED

Fundamental education.—The diffusion of ideas through increased contacts among peoples and through modern means of communication has caused a fermentation among the underprivileged throughout the world, and they are beginning to demand improvement in their status. In response to this demand, and as a result of a growing social conscience among national leaders, there have sprung up in various places educational efforts to raise the educational and cultural standards of less privileged groups.

UNESCO has taken cognizance of these efforts, has labeled them "fundamental education," and has developed a project, by that name, with a view to spreading its benefits throughout the world. The over-all purpose of Fundamental Education as conceived by UNESCO is "to enable men and women to live fuller and happier lives in adjustment with their changing environment, to develop the best elements

in their own culture, and to achieve the economic and social progress which will enable them to take their place in the modern world, achieving the aim of the United Nations to live together in peace."

Literacy education.—Literacy education is one phase of fundamental education. Its need is indicated by the fact that "55 percent of the world's population can neither read nor write." Ten million adults 25 years of age and over in the United States are functionally illiterate (have not advanced beyond the fourth grade). In some States the illiteracy among adults is as high as 35 percent. All sections of the population are affected by this illiteracy. More than 4 million are native whites; more than 3 million are foreign-born whites; and nearly 3 million are Negroes.

The greatest incidence of poverty, disease, and personal maladjustments in occupational, home, and civic life is found among the least educated. From the standpoint of the national welfare, so large a mass of citizens with little or no schooling becomes a drag on the entire population. The resulting loss of national strength and wealth is incalculable. Furthermore, our democratic way of life is weakened and becomes vulnerable to attack from foreign ideologies and native demagogues to the extent that our citizens are uninformed and lack the tools of learning with which to become informed. The eradication and prevention of illiteracy among our citizens can no longer be left to the unprepared, the immature, or the mere well-wishers; nor can it be left to voluntary and unprofessional effort.

With this in mind the Office of Education in 1946 undertook the sponsorship of a demonstration project to attack the problem. The Carnegie Corporation of New York assisted in financing the project, and six institutions of higher learning and three public-school systems participated in its operation. Numerous persons and organizations cooperated, including the American Association of Adult Education and the National Conference on Adult Education and the Negro.

Inquiries and requests for help have been received from professional and lay leaders from practically every State and from as many as 25 foreign countries. Recently, the Panel on Fundamental Education of the American Commission of UNESCO nominated the project to be one of its associated projects.

RURAL EDUCATION

Efforts to improve the rural school curriculum are of three types: (1) Broadening educational services to rural youth; (2) making these services more functional; and (3) providing educational experiences more nearly in keeping with the needs and interests of rural children and youth.

Since rural schools are as a rule small, employing few teachers and providing a limited number of specialized services, the responsibilities of each teacher are enormous and are growing in scope. It is increasingly recognized that the objectives of the rural school cannot be attained through the traditional methods of teaching. The last few years, and especially the year 1947–48, have seen a lessening of stress on the textbook teaching of school subjects and more emphasis upon teaching boys and girls for life itself in a rural environment. As a result, the rural schools are more and more going into their communities for curriculum materials, selecting problems needing study, and then doing what they can either in solving or in arousing the communities to the importance of solving these problems. In short, the rural schools are seeking to utilize learning experiences in the homes, on the farms, in community organizations and industries, and in cooperating with other community agencies.

Improvement projects.—These efforts emphasize using the resources of the community for educational purposes, drawing upon available community leaders, and enlisting the interests of youth in studying economic and social problems and improving local diets, sanitary conditions, and the like. Illustrative of these efforts are: (1) the Project in Applied Economics sponsored by the Alfred P. Sloan Foundation which is accelerating its program through which small rural schools can help boys and girls and their families to improve their diets, their homes, and their clothing; (2) the Southern Rural Life Conference at George Peabody College for Teachers which is helping rural schools to improve social and economic conditions in their communities; (3) the Southern Work Conferences and the Committee on Southern Regional Studies and Education which are studying ways of using community resources and conservation projects to make education functional; and (4) hundreds of workshops, curriculum improvement projects, and other experiments by which local elementary and secondary school leaders may learn how to teach in terms of rural life problems. Such experiments as the core—or common learnings—curriculum, school and community cooperatives, and such social and economic service projects as community canneries, freezer lockers, school-community-owned power machinery, soil improvement programs, nutrition education and improvement projects, home beautification experiments illustrate this approach.

During 1947–48, the Office of Education assisted in improving rural education by publishing information relating to these experiments, by describing outstanding schools, and by providing consultative and research services to State, county, and local leaders in rural education.

Activities of farm and other organizations.—During 1947–48, parents and lay groups studied rural school problems and made changes needed in the reorganization of school districts, in finance programs, in teacher-education plans and personnel problems, and in the educational facilities and services.

The National Grange formulated a program of "Needed improvement in rural education with local control" for the guidance of its members. Various farm organizations cooperated through the American Institute of Cooperation in eight regional conferences of agricultural and educational leaders to discuss what agricultural leaders want the schools to teach. Conference reports were published under the title *Farm Leaders and Teachers Plan Together.* In Florida, for example, various lay groups joined with professional educators in reorganizing the educational services and helped bring about an increase in financial support.

EDUCATION FOR HOME AND FAMILY LIVING

To provide systematically for education for home and family living is one of the major responsibilities of the American public-school system. Education for home and family living is that part of total education which equips individuals for effective membership in the family. Homemaking education is that part of education for home and family living which is centered on home activities and relationships. The total program includes, as major areas of instruction: Foods and nutrition, home management, housing, home furnishings and home equipment, clothing, child development, family health, family economics, and family and community relationships.

In the curriculum this year, the following trends were apparent:

1. *A growing interest in "total" programs of education for home and family living which meet the needs of family members of both sexes and all ages.*—One contribution of the Office of Education to such "total" programs of education and family living this year is publication of the bulletin, *Life Adjustment Education for Every Youth,* described elsewhere in this report. Here education for homemaking and family living is recognized as an essential part of the basic education of all American citizens.

The Office has emphasized in all its work with the States the importance of teaching *all* aspects of high-school homemaking from the family point of view and of teaching family relationships in connection with every part of the curriculum.

2. *A growing demand for high-school and college courses in marriage and family living for both boys and girls.*—Young people on the thresh-

old of adult life should be competently instructed in the nature of family responsibilities. This is the view of the many persons who write to the Office asking about courses in home and family living for high schools.

Staff members of the Office in home economics education, social studies, and health education have all had some part in helping the States to provide for premarriage education in the schools and colleges. The Office also undertook a study of courses in home and family living currently offered in selected high schools. As part of a long-range cooperative plan, initiated 3 years ago, for enriching college work in family life education, a workshop was conducted and a regional conference held for teachers of family relations in college departments of home economics.

3. *An increasing awareness of the need for enriching and expanding education in home and family living for adults.*—Responsibility for helping the States to meet the needs of adults wishing to study problems of family life was shared by specialists in four divisions of the Office of Education. A member of the staff of the Division of Elementary Education prepared a discussion guide on ways of teaching democracy in the home, entitled *Growing Into Democracy.* The adult education specialist of the Office made a national survey of public-school offerings in adult education, including courses and classes in family life education. Another staff specialist prepared simple reading materials on family life for use in the Negro adult education project described elsewhere in this report. In the Division of Vocational Education, home economics and agricultural education staff members worked together on programs of homemaking education for rural families.

4. *Increasing interest in utilizing student experiences as an integral part of this curriculum.*—The richest programs in home and family living are those in which class work is correlated with other activities in the lives of students. During this past year, the school-lunch and home-economics-club programs provided opportunities for vitalizing instruction in several aspects of homemaking and family living in the schools.

Through its Inter-divisional Committee on School Lunches, the Office of Education has continued to work with the States this year on educational aspects of the school-lunch program. All State departments of education now employ persons giving full or part time to this work, 32 of these supervisors being home economists. These consultants help schools to use the school lunch for laboratory experience in the study of foods, nutrition, family health, child development, and family relationships.

In 1947–48 there was further growth in the two organizations for high-school girls studying home economics—The Future Homemakers and the New Homemakers of America (for Negro students in the 17 States providing separate schools). These organizations, sponsored jointly by the Office of Education and the American Home Economics Association, have a combined membership of approximately 270,000 girls and boys, compared with 245,000 in the previous year, in 45 States, Puerto Rico, and Hawaii. In carrying out club projects, members have opportunities for practical experience with many of the homemaking problems studied in class.

5. *Increasing recognition of the importance of democratic procedures in curriculum development.*—One of the primary objectives in education for home and family living is to help families teach the democratic way of life. It is essential therefore that procedures used in this program should provide for widespread participation. Such participation was exemplified in many ways.

The Office of Education has cooperated with a committee of State consultants in elementary education in the writing of a bulletin on *Programs for Children Below Six* which is helping both parents and teachers to understand better what they can do to prepare young children for living successfully in the world of today. The Office also cooperated in a study of trends in organization and supervision in elementary schools in 52 cities, giving special attention to school-community relationships.

The Office assisted the National Conference on Family Life (see below) in the writing of *A Guide to the Study of Home-School Relationships,* a compilation of materials sent in by cooperating groups.

6. *A growing concern about evaluation.*—Throughout the year, there has been a steady demand from the States for information about techniques and procedures for evaluating work done in family life education. Such procedures have been developed in workshops and conferences with State supervisors and teacher-trainers.

7. *A growing awareness of the need for strengthening both pre-service and in-service training of teachers in all branches of education for home and family living.*—The family life education movement requires good leaders. A shortage of teachers of home and family living exists, but efforts are being made by the Office to help the States discover new leadership and strengthen their training programs.

Conferences were held with the faculties of home economics departments in 15 colleges to consider ways of strengthening total home economics programs. Interregional and regional conferences have also been held for State supervisors and teacher trainers to dis-

cuss in-service education. These groups were given demonstrations of new teaching methods and techniques, with special emphasis on procedures for teaching family relationships and for conducting group discussions.

8. *The inclusion of more work in family living, family relationships, and child development in the pre-service training of all teachers.*—This is one of the chief recommendations of the National Conference on Family Life mentioned later. Materials which the Office of Education helped prepare for this conference were widely used during the summer of 1948 in workshops and courses for teachers.

9. *A growing interest in community organization for education in home and family living.*—The Office this year helped 17 communities in 11 States to form or strengthen family life councils or advisory committees. In this work, emphasis has been placed on two points—the importance of helping families to take increasing responsibility for satisfying their own educational needs, and the need for conserving and developing the resources of agencies through cooperative planning.

Four experimental community programs, initiated by the Office in 1938, have given assistance to other centers organizing family life activities this year.

10. *A growing tendency by national and State organizations interested in education for home and family living to share experiences, discuss common goals, and organize cooperative projects.*—The National Conference on Family Life, the first held in this country, brought together delegates representing 125 national organizations to consider problems facing American families today and ways of meeting them. More than 20 members of the staff worked on materials and helped in other ways with the program.

The document *Education and the American Family*, prepared for the conference by the Office, gives a comprehensive picture of educational facilities available to American families. Copies of this material have been sent to chief State school officers and supervisors of home economics in all States.

SOCIAL STUDIES AND SOCIAL SCIENCE

In content the social studies program is little changed from that of the early 1940's. In organization, the most common approach above the primary grades remains that of a sequence of discrete subjects. Core curricula and programs providing integration of social studies and other school subjects are still the exception.

The situation in the social studies field, however, is not static.

Intergroup relations, citizenship education, international affairs, and cultures of other peoples have received continued emphasis. There has been at elementary and secondary levels a widened effort to approach these topics as part of the broad problem of improving human relations, rather than to study isolated parts of them. The publication *Education for International Understanding in American Schools* (National Education Association) is evidence of this trend, as is the emphasis on the child development–human relations approach to problems of civic education exemplified by the Detroit Citizenship Study. National concern for a vitalized civic education was reflected in the *Zeal for American Democracy* program, described elsewhere in this report.

In many schools, social studies teachers are participating in curriculum revision programs which center on such significant trends as the following: (1) Increased attention to child-development research as a basis for the social studies curriculum. (2) Increased use of teacher committees in curriculum revision. This reflects the growing realization that the social studies program will benefit more from in-service education of teachers than through an elaborate printed syllabus. (3) Increased attention to the 12-year program as a whole study of scope and sequence in the social studies program. One concomitant of this trend is the absorption into the program of many "special" materials, such as those on intergroup relations and international understanding, which achieves a more effective, balanced treatment than can be obtained through special courses on these topics. (4) Flexibility within the curricular framework is provided so that teacher-pupil planning may help meet the needs of a specific classroom group. (5) Increased attention to principles of group dynamics and to democratic procedures. This emphasis has come from the realization that by applying these, social studies teachers may work toward multiple goals including: (*a*) Better human relations; (*b*) more effective citizenship; (*c*) more opportunity for individual development; (*d*) a more functional social studies program, reflecting current needs and problems.

In colleges and universities, as in the secondary schools, the movement toward fusion courses has not been pronounced. New materials brought into the program were introduced, for the most part, in the form of new courses; and the creation of social science departments or divisions, a quite common development in teachers colleges, has more often been for administrative purposes than for the purpose of fusing or even appreciably reorganizing social science courses. Area-study programs have been introduced, continued, or expanded at various universities, including Vanderbilt, Tulane, North Carolina, Texas, Syracuse, and Columbia. There has also been an increasing interest in Russian and Latin-American history and institutions and in inter-

national relations, especially as the subject touches the United Nations organization. The social sciences have been given a larger place in the law-school curricula at Chicago and Yale, a development in harmony with that in certain other professional schools, such as engineering, journalism, and library science. A development which may have increased significance is the use in some college classes of the Brookings Institution's study guide and "problem papers" on American foreign policy, so organized as to facilitate the use of the problem method.

ZEAL FOR AMERICAN DEMOCRACY

During 1947–48, the Office of Education inaugurated the *Zeal for American Democracy* program, designed to vitalize and improve education in the ideals and benefits of democracy and to reveal the character and tactics of totalitarianism. In this program the permanent staff of the Office of Education was strengthened by the addition of specialists in the social studies at elementary, secondary, and higher education levels.

The Office of Education, in giving leadership and stimulation to the *Zeal for American Democracy* program, has worked with and through the States in a service relationship. The main emphasis has been upon increasing in the States the awareness of the need for improved citizenship education and bringing to them examples of ways in which such improvement might be accomplished.

A Cooperative Procedure

The Office of Education does not conceive it to be its function to interpret democracy for educators of the Nation or to tell the States their duties in respect to education for citizenship. But it did seem fitting that the Office focus educational attention on the need for a patriotic emphasis on the privileges and responsibilities of our way of life. The Citizens Federal Committee on Education, an advisory group of representatives of various segments of American life, set forth a declaration of principles entitled "Education for a Free Society."

The National Council of Chief State School Officers also gave official recognition of the need for strengthening the bulwarks of our democratic faith and urged its members to take action within their respective States. The National Council for the Social Studies, in its 1947 annual convention, also pledged its assistance in promoting *Zeal for American Democracy.*

In March 1948, a group of educators representing different sections of the country and various educational levels met in Washington to determine how American education could better serve the needs of

democracy. From the conference came many suggestions for activities by State systems and professional organizations, as well as for the Office of Education.

What Has Been Done

The Office of Education has stimulated considerable State activity in the *Zeal for American Democracy* program through publications, conferences, and cooperative enterprises.

Publications.—

1. The February 1948 issue of SCHOOL LIFE, official monthly publication of the Office of Education, was devoted to the *Zeal for American Democracy* program. It has been a Government "best seller"; at the end of the fiscal year approximately 35,000 copies had been sold.

2. *Growing into Democracy*, a series of pamphlets prepared by the Division of Elementary Education, shows how the principles of our democracy may be inculcated in children through precept and experience.

3. The Division of Higher Education devoted the May 1, 1948, issue of its magazine, HIGHER EDUCATION, to *Zeal for American Democracy*. A survey of what the colleges and universities were doing to strengthen democracy was the major article in the issue.

4. Two issues of *Pointers* have been distributed to key educators. This is a clearing house news letter which keeps school people abreast of activities to improve citizenship education.

5. Study guides for both secondary school and college classes have been prepared by specialists in the Office as an aid to the use of *The Strategy and Tactics of World Communism* issued by the 80th Congress.

6. *Making Democracy Work and Grow*, another Office publication, contains suggestions for students, teachers, administrators, and other community leaders in their efforts to improve local programs of citizenship preparation.

Cooperative enterprises.—In addition, the Office of Education has cooperated with governmental and nongovernmental agencies in preparing other worth-while materials to be offered the schools and colleges. Specialists of the Office worked with the staff of the Library of Congress, in accordance with a congressional resolution, in the preparation of a booklet suitable for study by high-school seniors on the principles and practices of communism. They have consulted with the National Council on the Social Studies in its current effort to define and validate the meaning of American democracy. The

Office held a meeting with representatives of test-making concerns in an attempt to stimulate the commercial production of tests to be used in evaluating programs of citizenship education.

Voice of Democracy contest.—In an effort to make democracy a conscious force in the lives of American school students "What Democracy Means to Me" was selected as the theme of a Nation-wide contest for junior and senior high school students. The contest was sponsored by the National Association of Broadcasters, the Radio Manufacturers Association, and locally by the United States Junior Chamber of Commerce, and was endorsed by the Office of Education, which served as consultant.

Approximately 20,000 students in 500 communities took part in the contest which called for 5-minute presentations in local, State, and national competition. The four regional winners each received a $500 college scholarship and other awards.

Field service.—Specialists have served as consultants at State meetings and educational conferences designed to stimulate activity within the States.

During June, eight regional conferences with chief State school officers or their representatives were held. The Office of Education passed on suggestions and accumulated materials to these key people and gathered information concerning the citizenship efforts going on within the States. Several State legislatures have given mandates to their school officers to strengthen citizenship education.

WORLD-MINDEDNESS

At the same time that they have been trying to inculcate a deeper appreciation of the advantages of citizenship in a free society, America's schools have been trying to encourage world-mindedness among their pupils. The Office of Education, along with other educational groups, has undertaken projects designed to that end.

For example, the Office prepared an annotated bibliography of books for young people descriptive of the United Nations and of its member nations, indicating the grade levels at which each book will be most useful. The bibliography enumerates criteria to help teachers, students, and librarians in selecting books to promote international understanding.

The Office is further encouraging teaching about world affairs by distributing to schools and colleges sets of the verbatim records of the second session of the first assembly of the United Nations. These historical documents may be used as source material for research in college, for exhibits and special study projects in the schools, and for

fostering general community interest in the United Nations. The Office also distributes letters from foreign students and adults to teachers, schools, colleges, adult groups, and individual citizens throughout the country.

Other organizations have likewise promoted world-mindedness among students. The National Education Association has collected samples of the materials used in the schools to illustrate international problems, for exhibition throughout the United States. An NEA report entitled *Education for International Understanding in American Schools* describes examples of actual learning experiences which have contributed to the world-mindedness of American school children. The Association has distributed to teachers kits containing pamphlets, leaflets, and posters dealing with methods for teaching international understanding. It also sponsors some 300 high-school international relations clubs.

Local units of the American Federation of Teachers have undertaken a critical evaluation of the place of the UN in courses of study in certain city schools. This project includes the gathering and analysis of "lesson plans," special programs, and source materials now used, and recommendations of textbooks.

A number of teachers colleges now offer experimental workshop courses on the teaching of world affairs.

The American Council on Education sponsored a study entitled "Improvement of Textbooks and Other Teaching Materials for the Promotion of International Understanding." The Council also organized and sponsored a number of national, regional, and local conferences that brought together educators for the purpose of furthering interest in world affairs.

Results of the emphasis on world-mindedness in the Nation's educational system are indicated in a study made by the American Association of University Women of more than 1,500 schools and junior colleges. About 86 percent of the communities surveyed reported some instruction on the United Nations in the elementary schools, 18 percent in the junior high schools, 96.5 percent in the senior high schools, and 55 percent in junior colleges. Usually such instruction is incorporated in the regular social studies program.

SCIENCE IN EDUCATION

The Reports on Science and Public Policy of the President's Scientific Research Board (1947) emphasized the need for an ample number of potential scientists annually to enter our colleges and universities and to receive advanced scientific training. These reports urged a Federal program of assistance to aid able students pursuing scientific

careers and the establishment of a National Science Foundation to increase the number of adequately trained scientists. Volume IV of that report points out that many potential scientists are now lost in our elementary and secondary schools owing to a lack of proper guidance concerning scientific careers. These reports substantiate the general belief among scientists and educators that our national security and welfare depend on an increased number of well-trained scientists and on a citizenry adequately informed concerning science and its social implications. Improvements in science teaching in elementary and secondary schools will help to discover and nurture more potential scientists. Such improvements will also provide a basic science education of all our people so that they may better understand the problems, often critical, that accompany scientific developments, and thus be able to help intelligently in their solution.

Science in elementary education.—The increased emphasis on science at the elementary school level presents two major problems: Training teachers in science subject matter and in methods of instruction; and preparing curriculum material to guide the instruction and assist teachers in relating science to their over-all program.

To assist State education departments, teachers colleges, city schools, and county units with these two considerations, the Office of Education during the past year published a bulletin, *Teaching Elementary Science, Suggestions for Classroom Teachers*, and articles on methods of elementary science instruction in education magazines; and provided consultants to State departments of education and local school systems engaged in in-service training of teachers and in preparing materials for elementary science instruction.

Science in the secondary school.—On the secondary school level, science education for specialization and science education for effective citizenship present some clear patterns of curriculum organization and methods of teaching. At the junior high-school level many boys and girls identify their special interests and abilities. Therefore science courses on this level may effectively offer varied activities for youth to experience science as a constantly developing field concerned with personal, home, and community life and opportunities for useful, interesting, and rewarding careers.

Although some schools are developing general physical science courses, most high schools offer separate courses in physics and chemistry. Only a few schools provide specialized courses in biological science. Many high schools, especially smaller ones, have the problem of attracting and holding teachers who can teach science courses designed for the general student body and who can also help the career-seeking student. There is the problem of providing room

facilities and equipment for experimentation, project work, wide reading, use of visual and auditory aids, and consideration of community resources.

To aid State education departments and local systems in solving their problems, the Office of Education provided the services of two specialists for science to work with teachers, supervisors, and educational leaders in work conferences, curriculum revision projects, and in-service training sessions and to cooperate with professional and scientific organizations endeavoring to improve high-school science teaching. A research project was launched to discover the condition of science teaching in the high schools and to identify the most troublesome problems. Leaflets were prepared to help State leaders and science teachers in colleges and universities, and in schools.

Science in higher education.—Science instruction in institutions of higher learning is concerned with the offering of introductory survey courses in biologic and physical sciences to students at the freshman and sophomore level in programs of general education, and with specialized courses, both elementary and advanced, for students following curricula designed to prepare them for careers as doctors of medicine, engineers, chemists, biologists, physicists, entomologists, and specialists in other scientific fields.

Bachelors' degrees in these fields constituted about 42 percent of all bachelors' degrees granted by American colleges and universities in 1948. From such students as these will come our future research scientists who will advance the frontiers of knowledge, our future doctors, engineers, and industrial scientists who will develop practical application of their discoveries which will enhance our general health, welfare, comfort, and security and raise our standards of living; and our future teachers of theoretical and applied science who will help educate the oncoming students in these fields.

There is a pronounced trend toward the unification of science, toward a break-down of the former rather rigid boundaries between such fields as chemistry, physics, and biology. As research increases scientific knowledge, it is found that the distinctions between them become quite tenuous. Consequently, there is growing recognition of such specialties as physical chemistry, biochemistry, biophysics, geophysics, and biogeography.

The importance to our national economy of an adequate supply of well-trained scientists, the increasing complexity of each of the specialties, and their growing interdependence have led the colleges and universities to increased efforts in interesting superior youths in careers in science, toward supplying them with an effective and authoritative guidance service at the college level, and toward assisting the secondary schools in similar efforts.

AVIATION EDUCATION

The growing need for and importance of aviation education in American schools was brought out in two reports and in statistics gathered from latest official records.

One of the reports, issued by the President's Air Policy Commission, concerns itself with the problems of national survival in the air age and makes recommendations for the national defense. The other was by the Congressional Aviation Policy Board, which independently investigated and reported on a desirable aviation policy for the United States. Among other recommendations are: "An aeronautical educational program should be established throughout the public school system in order that the basic problems of the air age—global geography, meteorology, navigation, mechanics, communications and the rudiments of flight—are well understood by future generations."

To meet the needs of the air age, universities and colleges are undertaking to provide advanced training for scientists and engineering specialists. Vocational schools and classes are offering training in aircraft mechanics in an increasing number of States. At year's end the Office was engaged in a survey of the technical school training of the Air Training Command, U. S. Air Force.

Progress is also being made in implementing the recommendations of the Congressional Aviation Policy Board in the curricula of elementary and secondary schools. Teacher-training institutions, to meet the needs of teachers in training, are offering new air age education courses. The Civil Aeronautics Administration reports that such summer Air Age Education activities reached a new high of more than 100 workshops, enrolling approximately 15,000 teachers.

The Office of Education cooperated in furthering the development of effective programs in aviation education, especially in the secondary schools, by participation in a national air age education conference and in conferences and projects of the Civil Aeronautics Administration and the American Council on Education dealing with aviation education. Its specialist on aviation education prepared a statement for SCHOOL LIFE suggesting ways of introducing aviation education in the curriculum of the secondary schools. Also published was an annotated bibliography of aviation periodicals intended to help teachers and pupils.

HEALTH AND PHYSICAL EDUCATION

During the past year there has been increased interest in the health of the school child. Thought is being given to the role that the schools should play in two respects: The preparation of healthy,

informed citizens for peacetime activities; and the health and physical development of secondary school students in anticipation of possible military service.

Health education.—There has been a noticeable increase in interest in health instruction on all levels—elementary school through college. In the secondary school the trend is to offer health instruction in concentrated courses rather than in the 1-hour-per-week plan.

There is a need for qualified teachers in health instruction. A study by the Office of Education indicates that only about 10 teachers colleges are offering a major in this field on the undergraduate level, although others are planning to start such programs. More teachers colleges are giving consideration to the inclusion of health education in multiple-subject combinations as an aid to small high schools. Increased recognition is being given to the desirability of all teachers having a basic preparation in health education.

The need for in-service preparation in health education is pressing. Some three hundred health education workshops and institutes which were held throughout the country during the past year are evidence of this need and interest.

A regional demonstration workshop on teacher education for health in the secondary schools, sponsored and directed by the Office of Education, was held in June at the University of New Mexico. Participants from State teachers colleges and State departments of education came from a 4-State area.

Physical education.—The state of physical fitness of the American people, brought to light during the war, resulted in widespread interest in physical education and in more concern for the physical development of children during their formative years. The new Selective Service Act has revitalized interest in this aspect. The values of a graded, progressive program of physical education during the elementary school years are also more generally understood. The "child growth and development" movement throughout the Nation has focused attention upon *boys* and *girls* and their needs for protection, guidance, and developmental activities.

In pre-service and in-service experiences, more attention than heretofore is being given to the preparation of elementary teachers to give instruction and guidance in physical education.

There is a tremendous growth of competitive athletics involving children of elementary and junior high school age and sponsored by schools or nonschool agencies. Such programs create the problem of retaining the values of appropriate sports participation, while avoiding high-pressure competition, and its undesirable concomitants, with the normal interests and maturity levels of children. The Office of

Education in cooperation with other national organizations is studying this matter.

The number of teachers in training in physical education is comparatively large. The supply of men teachers should soon meet the normal demand. There is still a need for women physical educators and for those who specialize in physical education for the elementary school.

In July 1947, world-wide attention was given to physical education at the Tenth International Conference on Public Education, Geneva, Switzerland, at which the Office of Education was represented. The Conference considered "that physical education should play an important role in all stages of education" and that "physical education has for the development of human beings a real value which is not merely physical but also moral and social."

The Office of Education also took an active part in the National Conference on Undergraduate Professional Preparation for Health Education, Physical Education, and Recreation, the first of its kind, held at Jackson's Mill, West Virginia, in May 1948. Its report is aimed to help colleges better to prepare teachers in these fields.

Outdoor educational experiences.—There is an ever-increasing need for real and direct learning experiences in the educational development of youth. Many such learning experiences can be more effectively provided outside than inside the classroom, and in many instances can only be achieved outside the classroom.

Last year witnessed a growth of school-sponsored outdoor activities, including day camps, week-end hikes and excursions, longer-term camps, field trips, and the like. Local and State systems have given thought to extending school services on a year-round basis with more opportunity for outdoor education. The Office of Education gave leadership to several conferences on this subject.

The general areas to which the school camp can make major educational contributions are: (1) Social living; (2) healthful living; (3) outdoor science and nature study; (4) work experiences; and (5) recreational living.

For the elementary school the camp period varies from short trips in day camping to 2-week periods distributed on a year-round basis. The children and the teacher go to camp, live and learn together, and explore new experiences not available in the classroom.

For secondary and post-secondary youth groups, the camp periods may be longer. The program is stepped up in certain respects, with particular emphasis upon citizenship in the camp community-conservation-centered work projects, health and physical development, and recreation. There are also many applications of secondary school

subjects and activities, such as those associated with science, shop, and homemaking. Experiences in conservation are joined with work projects that can be provided on large land areas and which represent service in the public interest. Such experiences may also help to prepare youths for adjustment involved in military service.

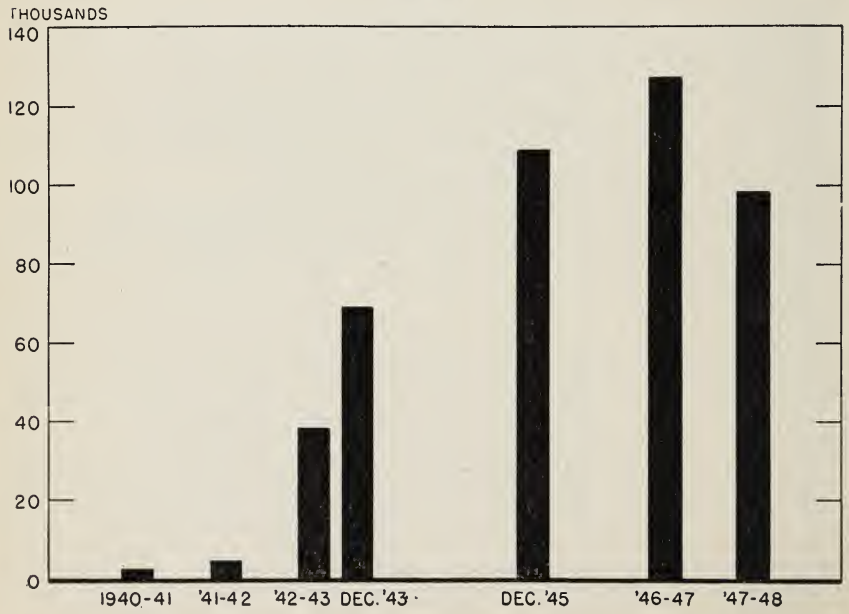
Teaching Personnel

TEACHER SUPPLY

The foremost problem in teacher personnel administration during the year was the continued shortage of teachers. Gains in staffing the public shools and colleges were spotty and unexpectedly slow. Recovery was made in many cities, and in most academic high-school subjects; but in elementary and rural schools, and in a few special and vocational subjects, it was often nonexistent. Recovery was slowest in areas where the need for it is greatest and where personnel with substandard qualifications have long been employed.

In 1947–48, the total number of holders of emergency permits was estimated by the Office of Education to be nearly 100,000. One

Chart 3.—*Number of emergency teaching permits in use in selected years, 1940–48*



teacher in every 7 or 8 was unable to meet the requirements for regular certification that have prevailed with almost no change for the past 5 years. There was some encouragement, however, in these figures, for they signified the continuance of a favorable trend that began in 1946–47. The number of permit holders, instead of decreasing when the war ended, continued to increase until 1946–47, when the total reached a high point of 127,016. It is probable that the decline last year will continue, although at a far slower rate than the Nation's generally favorable economic condition and its needs for improved educational services would seem to justify.

To assist in meeting this "number one problem" of American teacher personnel, several specialists of the Office participated in national, regional, State, and institutional meetings and conferences on teacher supply and demand problems; prepared circulars, articles, press releases, advertisers' copy, and other materials showing the nature and extent of the shortage; and otherwise participated in efforts to reduce the over-all shortage of teachers.

One of the most difficult problems of the public schools has been the great differences among States in the ability to purchase teaching services. There is a variation in the minimum requirements for the regular certification of elementary school teachers among States, ranging from high-school graduation or less preparation to 4 years of college work. The average level of the scholastic qualifications of emergency teachers in some States is higher than the average qualifications of regularly certificated teachers in other States. Some schools have reported as many as 2, 3, or even 4 years' difference between the qualifications of emergency and of regular teachers. States such as New York, New Jersey, and Rhode Island, which issue relatively small percentages of emergency permits, not only have high standards, but also pay above-average salaries to their teachers. They usually maintain satisfactory teacher retirement systems, and are otherwise favored with economic, social, or educational conditions that place teaching in a favorable competitive condition with other vocations in the employment market.

High certification standards have an influence of their own in attracting and holding teachers. The profession undoubtedly has greater prestige in the minds of prospective teachers and of the public in high-standard than in low-standard States. Degree graduates stay in teaching longer than teachers with little or no college preparation, thus reducing turn-over and demand for new teachers in high-standard States.

The wide differences in educational opportunities resulting from differences in ability to support education, including adequately prepared teachers, led to continued efforts by the Office to help upbuild

the qualifications of teachers. Circulars on teacher-certification requirements were prepared, data on rural and other substandard schools were collected, and studies of the financing of local and State school systems were made to provide useful information to field workers concerned with this problem.

An important cause of the teacher shortage has been continued reduction in the source of supply of prospective teachers. Until the last year or two, the supply was drying up at its sources in colleges and universities. At one time during the war, enrollments in teachers colleges were cut in half. During the year, prewar enrollments were largely regained, but approximately three-fifths of the students were veterans, many of whom did not plan to teach.

The need for much fact-finding by national agencies, including the Office of Education, concerning the distribution of students and graduates among the various teaching fields, is shown by the poor distribution of graduates among such fields. In 1948 the total supply of newly prepared elementary school teachers, including those that graduated from short 1-, 2-, and 3-year curricula, as well as from 4-year curricula, was only 73 percent of the supply in 1941. The supply of newly prepared high-school teachers, however, was 105 percent of that in 1941. Nearly two-thirds of the prospective teachers to be graduated this year are preparing for service in the high schools, whereas approximately two-thirds of all public-school teachers in service are in the elementary schools. School officers in several States report that a normal supply of elementary school teachers cannot be expected in their States for some years.

Approximately a million more children were born in 1946 than in 1935. The "hump" in the school enrollment curve, passing successively through the several elementary and high-school grades and college years, will add appreciably to the future demands for new teachers on every school level. The National Education Association estimates that about 130,000 additional elementary teachers will be required in 1952 over the number required in 1947. A substantial increase in the need for high-school teachers will follow.

Even the supply of elementary teachers that is available is, to a large extent, a supply of underqualified teachers. Nearly half of the supply consists of certificated elementary teachers who are not college graduates. Almost one-third of the supply has no more than 1 or 2 years of college preparation. To bring the qualifications of more than a half-million teachers up to standard requires a major effort in which national, State, and local agencies will need to cooperate over a period of many years.

Although the total supply of prospective high-school teachers is increasing rapidly, serious disparities still exist in the supply of

teachers of the various high-school subjects. More than one-third of the States foresee an oversupply of teachers holding standard high-school certificates in one or more of the social studies, English, and physical education for men. Foreign languages, in which surpluses of teachers were often reported before the war, may later be added to the list. The number of college graduates prepared to teach the natural and social science subjects, physical education for men, industrial arts, and certain other subjects is now significantly in excess of the number in 1941. In contrast, the number of graduates prepared to teach home economics is only 74 percent of the number in 1941. Other vocational or special subjects in which the supply of trained graduates is still less than in 1941 are commerce, library science, agriculture, and music.

These conditions call for an intensification of student guidance activities, the effectiveness of which in turn depends largely upon the dissemination of reliable teacher supply and demand information at the national and State levels. The Office through its specialists, including its guidance service, participated in disseminating such information in printed materials, public addresses, work conferences, and consultations.

The Office also assisted in teacher-recruitment activities during the year by publishing a bulletin titled *Teaching as a Career*. Provision of scholarships, drives for students, "guidance" activities, inspirational publications, and like devices are temporarily effective and have their place in the recruitment for the teaching profession. But experiences with teacher shortages in recent years make it clear that it is relatively futile to recruit teachers if the profession of teaching is not sufficiently attractive to hold them after they are recruited. The activities of the Office were therefore directed as much as possible toward the improvement of the working and service conditions in teaching, and to the upbuilding of the prestige of the profession. In addition to modest gains in teachers' salaries during the past decade, the number of States having teacher-retirement or pension systems increased greatly until all States now have such systems. During the year, approximately half of the States liberalized their retirement provisions, and a few completely revised their retirement laws. The attainment of improved conditions in teaching constituted a solid and enduring means of recruitment in which the Office has had some part throughout the recent years of teacher shortage.

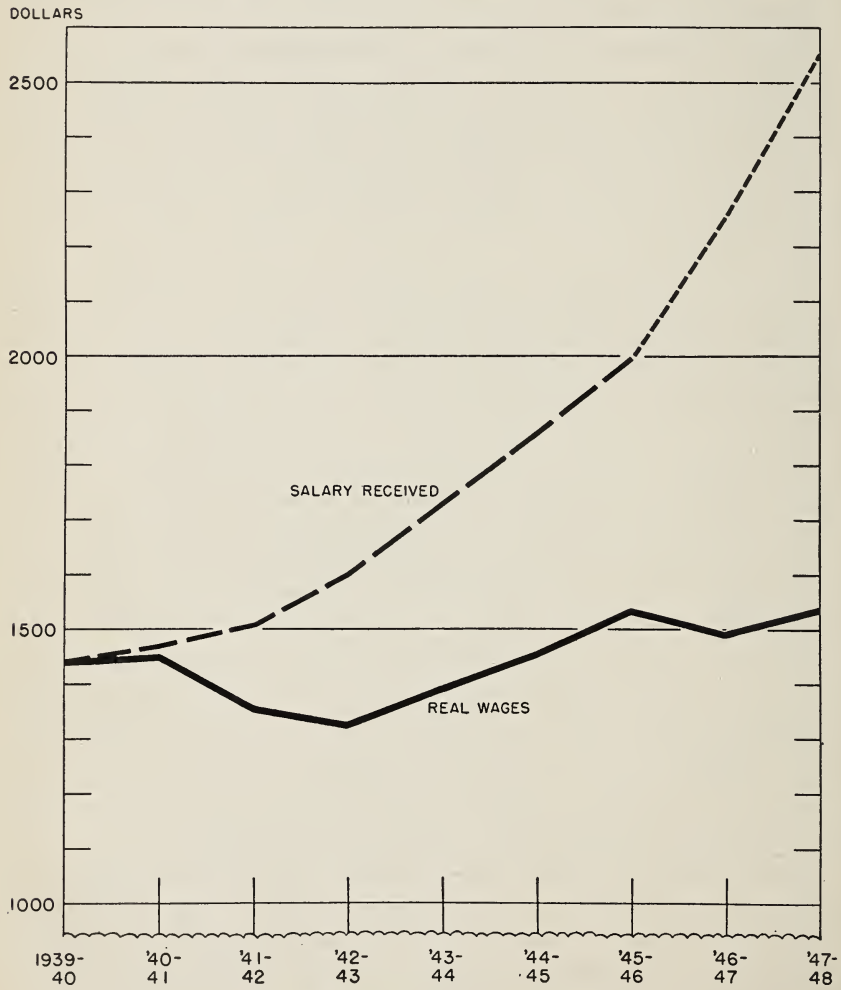
At the higher education level, teacher shortages are perhaps not numerically serious for the profession as a whole. They are a grave problem, however, in certain of the social sciences, the physical sciences, and other fields in which competition of industry is a factor. Furthermore, the time-lag which commonly occurs between changes

in economic conditions and in salaries serves as a deterrent to many qualified persons who might otherwise enter the profession. The frequent appointment of teaching assistants with little preparation and with little or no experience points clearly to a serious shortage, in certain fields, of qualified teachers.

TEACHERS' SALARIES

As a result of vigorous programs of public information conducted cooperatively by many lay, professional, and governmental agencies,

Chart 4.—*Actual salary and real wages* [1] *of teachers, 1939–48*



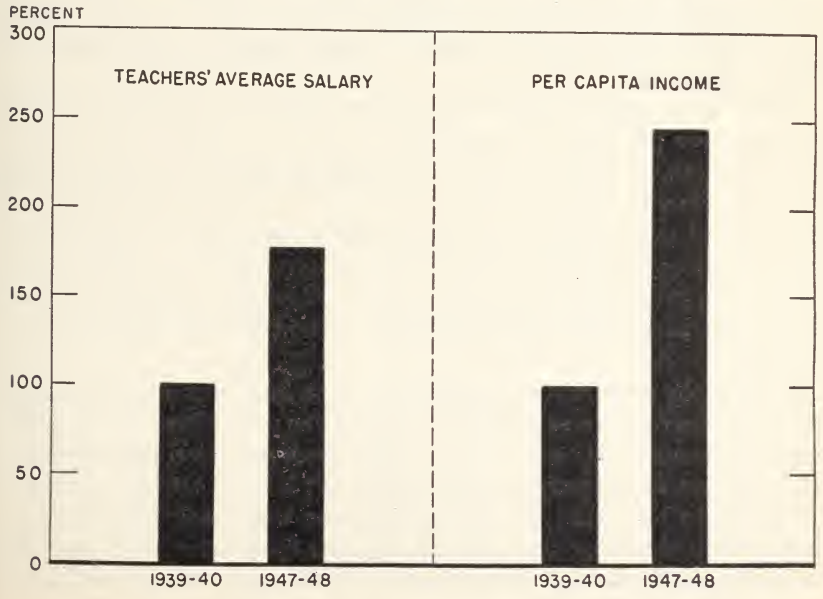
[1] Actual salaries adjusted to consumers' price index.

including the Office of Education, teachers' salaries were increased more than 10 percent during the year. The increase was made in a number of States, and in thousands of city and other school systems. Nevertheless, the increasing costs of living wiped out most of the gains. As one result, the serious shortage of elementary teachers that has persisted for more than 5 years continued with little or no improvement.

Although the average salary of public-school instructional staff increased from $1,440 in 1939–40 to an estimated $2,550 in 1947–48, the value of the dollar decreased during the same period to such an extent that the salaries paid in nearly half of the teaching positions in this country are still not worth as much in purchasing power as they were in 1939–40. Moreover, this 77 percent increase in the number of dollars paid teachers is exceeded considerably by the percentage of increase in the average salaries and wages paid in private employment. The disparity has caused the loss of several hundred thousand teachers during recent years.

Teachers' salaries differ greatly among different groups of teachers, among the several States, and among school systems within States. Teachers in cities average nearly twice the salaries of teachers in rural areas. Average salaries paid in some States are nearly three times those paid in certain other States.

Chart 5.—*Salaries of teachers and per capita income, 1939–40 and 1947–48*



Larger salaries are paid to high-school than to elementary school teachers, on the average, although progress is being made toward an equalization of pay for these two groups. This inequality partially accounts for the continuance of a shortage of elementary school teachers. Improved salaries for high-school teachers assisted greatly in restoring a fairly normal supply of teachers of academic subjects.

Improvements were made in minimum as well as average salaries. At least 4 States reached a minimum $2,400 annual salary during the year, and more than one-third of the States and many local school systems raised previous minimums.

There are indications of a general increase in salaries paid teachers in colleges and universities. For 1947–48, the increase seems to have averaged about 12 percent over the previous year. Compared with the increase during the year of about 23 percent in the cost of living, salary increases for college teachers were not enough to keep pace. A study of salary administration made by the Office of Education during the year brought out the great emphasis placed by many colleges on academic training and seniority rather than on teaching ability as criteria in appointing and promoting college teachers.

TEACHER EDUCATION

Problems of teacher education center on the preparation of more than 90,000 teachers annually, improvement in qualifications of several hundred thousand teachers in service, the extension of the body of professional subject matter, and the improvement of procedures in teacher education.

The Office staff in teacher education assisted during the year in solving these problems in cooperation with institutions approved for the education of teachers; with State departments of education; with local schools and school systems; with national, regional, State, and local school organizations; and with other agencies. The areas in which services were rendered included the improvement of the organization, administration, student and staff personnel management, curricula, instruction, and plant facilities of the teacher-education institutions.

Most of the problems in teacher education have increased in magnitude because of adverse wartime and postwar conditions. The shortage of personnel has been serious. The necessary diversion of educational efforts to the purposes of the war left a huge backlog of peacetime jobs to be done. Almost no progress was made between 1941 and 1947 in elevating the low requirements for teachers. In fact, in 1 State recently, half of all teachers could not meet the relatively low

prewar standards of certification because of inadequate preparation.

Teachers for rural schools present a somewhat special problem. Because of the variety of circumstances they meet, rural teachers must receive much of their preparation in the form of in-service training. This calls for supervisors who can help them on the job. Recent reports show that the number of supervisors has practically doubled during the past year or so. The Office has assisted in workshops, conferences, summer schools, and the like, designed to increase the effectiveness of the supervisors.

Improvements in the preparation of instructors for colleges and universities have been demanded more or less continuously for at least two decades, with almost no results. Recently, however, renewed interest has been shown in the education of college teachers, and the evidence indicates that at last some action is likely. The Report of the President's Commission on Higher Education stressed the need for reconsidering the program of the graduate school insofar as it is used to prepare college-level instructors. The Commission outlined the needed reforms, emphasizing broad scholarship and knowledge of the basic skills for transmitting knowledge to others, as well as competence in a special field, and recommending an internship experience.

Another special study of the preparation of college teachers is being made by a committee of the American Association of Colleges for Teacher Education. A few universities, among them Syracuse, Harvard, Columbia, and Chicago, have either instituted or are considering the setting up of new graduate curriculum specifically designed to prepare college teachers. The outcome of these efforts may mark the beginning of a new trend in the professional preparation of college teachers.

EDUCATION OF NEGRO LEADERS

If society is to survive and advance, it must provide itself with leaders. One of the most effective ways to provide the kind and number of leaders needed in our modern age is through graduate and professional instruction in our colleges and universities. It has only recently been recognized that the limitation of opportunities for Negroes to prepare themselves on the graduate and professional levels deprives the Nation of developed powers, talents, and skills which are so greatly needed in the effort to make progress and in the struggle to maintain our position of leadership.

Because of the growing interest in this matter, the Office of Education in 1947–48 undertook a study of the problem, and a publication based thereon, *The Education of Negro Leaders*, was completed.

This study makes it clear that there are many factors contributing to the need of increased opportunities for education leadership for Negroes; among them are the reduction of illiteracy and the increase in school enrollment, attendance, and graduation. These mean that (1) the source of supply of Negro graduates and professional students is growing at an accelerating rate; (2) greater numbers of students are remaining in high school and college until graduation; (3) there is an atmosphere among Negroes increasingly conducive to intellectual pursuits; (4) the educational advance among Negroes calls for an ever-growing number of persons trained on the graduate and professional levels; and (5) the rising educational level of Negroes makes them more desirous of and capable of using professional services. They will probably be more able to pay for such services, which in turn may serve as an incentive to further graduate and professional study on both a pre-service and in-service basis.

In addition to educational factors, economic and social factors, such as scientific and technological development, indicate a need for an increase in the number and quality of Negro leaders. The mechanization of agriculture, for instance, has resulted in mass migration of hundreds of thousands of Negroes from rural to urban areas and from the South to the North and West. The Bureau of Agricultural Economics, United States Department of Agriculture, estimated that by the early 1950's more than one-half million persons, many of whom are Negroes, will be "pushed" from the farms in the Southeastern States alone. In 1940, more than 600,000 nonwhite urban migrants (97 percent of whom were Negroes) had been rural residents in 1935. Practically every Southern State lost heavily in Negro population during the decade from 1930 to 1940. In 1940, for example, 200,000 Negroes who were born in Georgia were living in 6 Northern States alone, and 58,000 who were born in South Carolina were living in New York. This mass migration not only creates rural and urban problems calling for wise leadership, but the growing urbanization increases the demand for types of services which only highly trained persons can render, especially in the fields of education, social welfare, housing, health, and recreation.

Technological developments and the tendencies toward fuller participation by Negroes in American economic life are also opening up opportunities in activities such as aviation, refrigeration, radio, physical and biological chemistry, business, and public service. To prepare properly for these opportunities calls for improved opportunities for higher education for Negroes. Far-visioned leaders are beginning to recognize this need and to realize its importance for national progress and democratic world accord.

CITIZENS FEDERAL COMMITTEE ON EDUCATION

Two years ago the Citizens Federal Committee on Education was organized to advise the Office on the broad national aspects of educational problems. One of its first tasks was to present the facts about the crisis in education to the American people. Through the intensive services of the Advertising Council of America—a public service organization representing all phases of the advertising business—the Committee continued during the past year to foster its highly successful Nation-wide "Improve Our Schools" campaign. Many millions of American citizens heard education messages broadcast on almost a thousand network radio programs and read hundreds of advertisements in magazines and newspapers.

The Citizens Federal Committee also called the public's attention to the need for school improvements by publishing a progress report titled *Citizens Look at Education* in late 1947. Prepared by the Committee's Subcommittee on the Teacher in America, the report said in part: "The present school year marks the beginning of a turn for the better in education in the United States. We have made real progress. There has perhaps never been a time when citizens were more willing to support necessary improvements to the schools. But interest may wane if people get the false impression that the gains of the past year spell the end of the educational crisis. That is why any progress report must also stress what remains to be done." Nor has there been any slackening in the Committee's efforts in behalf of American education in view of the continued increase in the cost of living.

The relationship between this vigorous campaign and the fact that almost all State legislatures have taken decisive action to improve their schools since the campaign began may only be coincidental, but the relationship undoubtedly does exist.

Educational Services and Facilities

HEALTH SERVICES

School health services received increasing attention from a large number of sources, both educational and noneducational during 1947–48. The National Health Assembly held in Washington in May 1948, made these, among other recommendations: That a national conference on school health be called; that similar State conferences be called; that local full-time public health units be sponsored because of the contribution they can make to the health of the school-age child; that teachers be better trained in functional health and physical education; that the mental hygiene program be extended.

The planning meeting for the 1950 White House Conference on Child Health and Protection laid the groundwork for emphasis on the health of the school-age child at the Conference. Representatives of the Office participated in this planning.

The American Medical Association in the fall of 1947 held a conference on the physician and the school health and physical education program. Besides members of the Office of Education participating in this conference were representatives of a large number of official and nonofficial agencies. The objective was to implement the policies agreed upon by the joint committee of the American Medical Association and the National Education Association. The conference did much to make for a better understanding of the part that various organizations and individuals play in the school health program. The report was published as *The Physician and the Schools* by the American Medical Association.

The American Dental Association increased its emphasis on the preventive dental program among school children, and on the education of parents, children, teachers, and dentists in steps to minimize dental disease and to care properly for the teeth, particularly of children. Sodium fluoride experiments in the prevention of dental caries were expanded, partly by increased appropriations for this purpose through the Public Health Service.

There have been a number of conferences and workshops on a national, State, and regional basis dealing with health service, health teaching, mental hygiene, and healthful living in schools, teacher-training institutions, and colleges. The Office of Education participated in the planning and carrying out of several of these conferences. There has been shown a marked interest in the mental hygiene training of teachers and the mental hygiene program in schools and colleges. The preventive side of mental hygiene is beginning to be understood better and teachers are alerted for early signs of personality difficulties and undue emotional disturbances among pupils.

Experimental work in vision testing in schools was started in the St. Louis schools where the education and health departments are cooperating with national agencies, such as the American Society for the Prevention of Blindness, the American Academy of Ophthalmology, and the Children's Bureau. Among other studies is one started in Oneonta, New York, where a comparison is being made between the Wetzel-Grid and the Stuart-Meredith systems of weight and measurements as a screening device to detect pupils who need more skilled health advice and medical attention.

An indication of the increased interest by schools in health programs is shown by the increase in the number of school nurses employed by boards of education in 1948 as compared to 1947. There

was an increase from 4,637 in 1947 to 5,019 in 1948, or 8.2 percent. In 1947 the schools employed 30.5 percent of the public health nurses employed by local official agencies, and in 1948 employed 30.8 percent. The continued shortage of personnel in the health field is shown by the many unfilled positions for school doctors, nurses, and dental hygienists.

AUDIO-VISUAL SERVICES

Radio

The past fiscal year was a period of continuing progress in the use of radio and related audio media in education. Not only were there increasing indications that schools are coming to regard the use of these media as an integral part of the over-all curriculum, but teachers, themselves, are tending, more and more, to look upon training in the use of audio devices and materials as an essential part of their professional preparation. This is evidenced by the fact that registrations in summer teacher-training courses in radio reached a record total of 5,000. Equally significant is the fact that the number of radio stations owned and operated by schools and colleges has more than doubled since the war, now totaling 79; and that student radio-production workshops in schools and colleges have now increased to a point where local production of worth-while educational and community-service programs is fairly common in all sections of the country.

With this added interest have come increasingly heavy demands upon the staff and the resources of the Office to provide practical assistance to schools and colleges in program planning and production, in developing and refining instructional techniques for use with radio programs and program-recordings, and in relation to problems involving audio-equipment selection and use. Pertinent technical developments and new trends in program planning and production were studied continuously by the office professional staff, and many of their findings reported in the monthly FREC Service Bulletin (Federal Radio Education Committee) and in publications of the Office.

The revised edition of the Office publication, *FM For Education*, gives extensive information on administrative problems involved in planning an educational FM broadcast station. *School Sound Systems* and *School Sound Recording and Playback Equipment*, published by the Office of Education—Radio Manufacturers Association Joint Committee on Standards For School Audio Equipment, provide guidance to teachers and school administrators in the selection and

use of audio equipment items. The periodically revised script and transcription catalogs carry annotated lists of educational programs available through the Radio Section of the Office. Script loans for the year totaled nearly 12,000, an increase of 30 percent over the preceding year, and transcription loans totaled approximately 3,000. In response to the demand from teachers, for information concerning colleges offering specialized training in these newer instructional media, the Radio Section, each year, publishes a revised *Directory of College Radio and Television Courses.*

Visual Education

After a rapid growth in visual education during the first 2 postwar years, stimulated by the experience of the Armed Forces with visual aids, there was a tendency toward stabilization in the year 1947–48. The shortage of projectors became less acute as supply caught up with demand. Sales of films fell off, as other demands cut into school budgets. In general, there was a healthy reappraisal and readjustment to the realities and the potentialities of visual education.

Sales of Office of Education training films decreased 6.5 percent from the previous year. These films—457 motion pictures and 432 filmstrips—produced as part of the war-training program during 1941–45 have had a greater postwar than wartime demand.

Since 1944 the Office has collected a royalty on each film sold, and more than $175,000 has been returned to the U. S. Treasury. As in previous years, Castle Films, Division of United World Films, Inc., was awarded upon a competitive bid basis the contract for the distribution of Office films.

Table 3.—*Sales of Office of Education training films*

Fiscal year	Number of prints sold		
	Motion pictures	Filmstrips	Total
1941–42	9,700	0	9,700
1942–43	7,973	0	7,973
1943–44	3,027	1,250	4,277
1944–45	7,200	5,509	12,709
1945–46	7,135	8,192	15,327
1946–47	7,745	8,724	16,469
1947–48	5,673	9,728	15,401

The Office of Education continued to act, during 1947–48, as a service agency in facilitating the release, for educational purposes, of films produced by other Government agencies. This service was started in 1943 when the Navy Department and the Army Air Corps released training films to the Office of Education for use in pre-induction and pre-flight training courses; and the Office in turn made the

films available to the public through its distribution contract. At the end of 1947–48, the Office of Education was handling 1,051 films and filmstrips of 10 different Government agencies. Of this number, 62 were released during 1947–48.

Approximately half of the buyers of Office of Education and other Government films during 1947–48 were schools and colleges. World-wide interest in visual education is indicated by the fact that 25 percent of the sales were to foreign countries.

A number of research projects devoted to visual education were inaugurated. Financed and directed by the Navy Department, a series of research studies were undertaken at Pennsylvania State College and the University of North Carolina. A study in the use of motion pictures in rural education was undertaken at the University of Nebraska, and one in teacher training in the use of visual aids at Washington State College. Thirty-five doctoral investigations in audio-visual education were reported being made in 1947–48. In the spring of 1948 the Office began an analysis and evaluation of all research in visual education which had been done since 1940. A provocative study, sponsored by seven book publishers and made by a market analyst, to determine the school market for educational films showed a comparatively small market and advised publishers against entering the educational film field.

There is, however, an increased interest in visual education. Membership in the Division of Audio-Visual Instruction of the National Education Association doubled that of the previous year, which in turn had doubled that of 1945–46. Attendance at the Division's meetings held in connection with both the American Association of School Administrators and the NEA Convention doubled that of the previous year.

This growth in interest was also evidenced in a 100 percent increase in the number of inquiries and requests for information on visual aids answered by the Office of Education. To answer inquiries and to help teachers, school administrators, and community leaders locate and obtain educational films, the Office compiled and published a directory of 16-mm film libraries and a descriptive bibliography of the film catalogs of various agencies of the Government.

The Office, in May 1948, as part of its *Zeal for American Democracy* program, began to prepare for publication a bibliography of motion pictures on democracy.

GUIDANCE

In the elementary schools, guidance techniques are being used to identify pupil traits. The facts discovered are employed to adapt

the teacher's methods and objectives of instruction more closely to the children's needs. The trend is for teacher-training institutions and supervisory officials to stress anew the technical means of discovering factors of the child's growth and development, with the principal object of making each day in school a step in individual progress. The guidance program becomes an important weapon in attacking certain evils of mass education.

At the secondary level the trend is for the guidance program on the one hand to outline itself more clearly as a set of workable procedures. On the other hand, the guidance program is being required to yield results both for the individual pupil, and for the school in making the whole curriculum respond to the pupils' identified needs, abilities, and interests, and to the community's requirements. These trends have reflected themselves in many specific forms of organized guidance programs. They have also been reflected in a steady effort to have all members of the school staff participate in extending the purposes of the program and in carrying out appropriate techniques in the daily contacts of teachers with individual pupils and with their classes. These objectives call for trained guidance specialists, and instructional and administrative staffs who understand and can take advantage of guidance services.

Several professional activities, all aided in various ways by the Office of Education staff, illustrate guidance developments. At least three different groups are dealing with counselor training. These are the National Vocational Guidance Association, the American Psychological Association, and the National Association of Supervisors of Guidance Services. Reports from these three groups indicate considerable agreement in recommending training geared to the duties counselors perform and based on sound professional content and method.

A second activity is that of evaluating both guidance practices and guidance results. The Cooperative Study of Secondary School Standards has begun a revision of its criteria, one of which is designed to measure the extent of provisions for guidance in secondary schools. Meanwhile a comprehensive study of the same subject has been undertaken by the National Association of Supervisors of Guidance Services which has evolved a set of criteria for experimentation in schools before a final report is made. One State-wide study in Virginia measured the changes which may have occurred in the individual's habits, attitudes, and adjustment as a result of counseling services—a more difficult kind of research. Endeavors of this sort indicate a wholesome trend toward discovering to what extent the guidance program as a whole shows returns on the time and money invested in it.

A third activity has been the organization of State guidance programs under the provisions of the George-Barden Act. Forty-four States have made proposals for establishing counselor training, supervision, and local counseling, reimbursed in part by Federal funds. The development of these programs is beginning slowly, waiting upon further Federal appropriations and State and local organization and administration, to emerge into full growth.

The many diverse interests which this brief account indicates are involved in the widespread guidance movement require coordination and reconciliation. Leadership in this task may well be regarded as one of the greatest potential contributions of the Office of Education to the guidance field.

EXCEPTIONAL CHILDREN AND YOUTH

Never before has the spotlight of public attention been focused so directly upon the needs of children who are intellectually far below or far above normal, or who suffer from severe social or emotional maladjustments. Federal projects, State programs, and teacher-education plans have centered on them. Voluntary agencies, too, have contributed to the realization of more nearly adequate services for the approximately 4 million exceptional children in the Nation. The Office of Education has worked closely with all the major efforts.

State programs.—By far the greatest advance in special education for exceptional children has been made through State programs. In 1940, 16 States reported at least one person in the State education department responsible for the supervision of special education; in 1948, 34 States, the District of Columbia, and the Territory of Hawaii—an increase of more than 100 percent. Some States now employ from 5 to 10 persons for this service. With the collaboration of the Conference of State Directors and Supervisors of Special Education, the Office of Education is making a comprehensive analysis of State legislation in this field.

During the year, members of the staff have, upon request, worked with State authorities to establish, improve, or expand State programs for exceptional children. A publication entitled *Crippled Children in School* shows what an adequate school program for crippled children is like. Another planned publication points out what education can mean for children physically unable to go to school.

Teacher-education plans.—With the passage of legislation providing for the education of exceptional children, there must also be provision for the preparation of teachers equipped to adapt procedures and curricula to their needs. Teacher-education institutions have accepted

the challenge, and there has been an unprecedented growth of special education courses in our colleges and universities. Members of the Office of Education have assisted with workshops and other programs for preparing teachers. With the cooperation of the National Society for Crippled Children and Adults and of seven selected teacher-education institutions, the Office of Education is analyzing the offerings in colleges and universities to prepare teachers of exceptional children.

Voluntary agencies.—In addition to the voluntary agencies already mentioned, the Office of Education has worked with the following: The National Congress of Parents and Teachers; the National Foundation for Infantile Paralysis in a conference on the education of children in hospitals; the National Tuberculosis Association in revising its pamphlet on *The Physically Below-Par Child;* and the National Society for the Study of Education, in planning its 1950 yearbook on exceptional children. The American Association for Gifted Children also will devote its yearbook to exceptional children. All these projects add impetus to the well-established movement in which Federal, State, community, and voluntary agencies combine to reach every child who needs special educational care.

LIBRARY SERVICES

In the educational program of the Nation, libraries are essential agencies for the dissemination of knowledge, information, and ideas. At present, the United States is served by 7,500 municipal and county public libraries, 1,700 college and university libraries, and more than 20,000 centralized school libraries, exclusive of innumerable classroom collections. In addition, there are some 250 Federal and State libraries, and at least 1,500 specialized libraries serving business, industrial, financial, and technical concerns.

During the past year, librarians have worked out a Nation-wide library program which, although focusing to a considerable extent on the needed future expansion of services, does set down the details for the more effective utilization of existing facilities. The *National Plan for Public Library Service*, for example, issued early in 1948 by the American Library Association, furnishes to the States a comprehensive blueprint with general specifications for bookstocks, personnel, buildings, finances, and organization needed to bring "an adequate, purposeful library . . . into the life of every American." With due recognition of the importance of local initiative, the national program is laying stress upon larger administrative units of public library service as a key to the problem, and is recommending that 1,200 large

and well-supported public library units will give the citizens of the United States better service than the existing 7,500 units. Many States are adapting the national plan to their special needs, and are making progress towards attaining the goals set forth; other States are taking steps to do so. Similar developments are occurring in both the school and college library fields.

In all this activity, the Office of Education has been an important source for data used in drawing up the national plans. It has served also in an advisory capacity for the implementation of those plans, and has figured in the research studies involved in the fulfillment of the objectives.

As the implementation of the program has required not only more librarians, but more competent librarians, there has been a searching revaluation of education for librarianship and of plans for recruiting librarians. To meet current needs in the practice of librarianship, curricula in the library schools have been revised, courses have been revamped to stress the professional aspects of librarianship, and the training program changed to conform to existing trends.

The Office assisted this movement by service at workshops where problems of education for librarianship, especially school librarians, were considered, by active participation in the evaluation of the new program for the training of school librarians, and by making an extended review of the current trends and problems in education for professional librarianship.

Noteworthy advances have taken place currently in the school library field. For instance, there are now 22 States, an increase of 40 percent since 1945, which have State supervisors devoting their full time to the development and improvement of school libraries. Without losing sight of the needs of secondary school libraries, increasing attention has been paid by State authorities to the significance of the elementary school library. The Office has been active in this movement for the establishment of school library supervision at the State level and for assisting the State school library supervisors in formulating their programs.

In the spring of 1948, librarians embarked upon a program of action for all citizens. Under the auspices of the American Library Association, librarians were called upon not merely to relate their services to the critical local, national, and international problems, but to change the "intensity, direction, and even the nature of their services so that what the library does will contribute directly to . . . solutions [of these problems]." Without attempting to tell people what the conclusions should be, librarians are spotlighting the crucial issues and are seeing to it, in cooperation with other agencies of information and education,

that our leaders and all citizens have complete and reliable facts upon which to base judgments and take action.

SURPLUS PROPERTY UTILIZATION PROGRAM

The Surplus Property Utilization program during the fiscal year provided professional and technical services to the War Assets Administration, the Army, the Navy, and the 48 State educational agencies for surplus property in the disposal of federally owned surplus and donable property, both real and personal, to public tax-supported and private nonprofit tax-exempt educational institutions of all levels. Advisory services were furnished to the 48 State educational agencies for surplus property in their continuous revision of procedures necessitated by changes in WAA, Army, and Navy regulations, and the development of facilities within the various States for the expeditious handling and distribution of surplus property.

Real property.—During the fiscal year, approximately 2,400 applications, submitted by educational claimants for real property, were reviewed; and recommendations were made to the War Assets Administration on the basis of independent investigations and surveys to determine the need for and the utilization of the real property for educational use. As the result of recommendations made, 12,743 surplus buildings and 44,610 acres of land, involving an acquisition cost to the Federal Government of $217,893,083, were transferred to schools at a net cost to educational claimants of $635,406.

Army, Navy, and Air Force Donation Program.—On the basis of allocations made by field representatives of the program, property with an estimated acquisition value of $175,000,000 was made available by donation during the fiscal year to approximately 20,000 schools, colleges, and universities located in the 48 States and the District of Columbia.

VETERANS' EDUCATIONAL FACILITIES

Few educators or legislators foresaw in 1944 that a year after the end of the war a tide of veterans would flood our colleges. It then seemed fantastic to envision a million veterans attending college at one time. Nevertheless, in the fall of 1947 about 1,123,000 veterans (one-third with families) and an equal number of nonveteran students were enrolled.

The 2¼ million students were crammed into facilities that had never accommodated more than 1¼ million students. These facilities had deteriorated from enforced neglect during the war years, but

even in their prime they were considered by many college administrators as inadequate for as many as 1 million students.

Where the Commissioner of Education finds that additional facilities are required for the education of veterans, Public Law No. 697 authorized the Federal Works Agency to provide buildings and equipment from war surplus materials. The Veterans Educational Facilities program was established, and it has, to June 30, 1948, provided to schools and colleges more than 100 million items of equipment, which had a War Assets Administration fair value of $114,665,000, a amount that provided $74 worth of equipment for each veteran enrolled. This program also provided classrooms, laboratories, and other instructional facilities to the extent of 17 million square feet, for which the Federal Government expended approximately $75,000,000. Even larger sums have been expended by the Federal Public Housing Administration to build and equip residential facilities for veterans engaged in programs of education and training.

These emergency programs will provide, however, for only approximately 11 percent of the space college administrators say they need to combat the shortage. They now have approximately 341,000,000 square feet of space and need to increase this by 78 percent.

Grant-in-Aid Programs

VOCATIONAL EDUCATION

Total enrollments for 1947–48 in the federally aided program of vocational education, when State reports are finally tabulated, are expected to exceed the previous peak enrollment of 2.6 million in 1941–42. After the passage of the George-Deen Act in 1936, authorizing a substantial increase in funds for allotment to the States for the further development of vocational education, enrollments increased annually until 1941–42. During the war years, total enrollments receded to slightly more than 2 million. During those years, however, the vocational schools were being used to capacity in training war production workers. After the conclusion of the war, enrollments started to climb again until in 1946–47 they had passed 2.5 million. Further increase is expected, in part as a result of the passage of the George-Barden Act which authorized additional funds for allotment to States and Territories.

The amount of Federal funds made available for allotment to the States for vocational education during the fiscal year 1948 increased by more than $5 million. This was due to the increase in the

appropriation under the George-Barden Act (table 5), the first important increase in the amount of Federal funds available for allotment to the States since 1939.

TABLE 4.—*Enrollment in federally aided vocational classes, by type of program, 1946–47 and 1947–48*

Type of program	Enrollment	
	1946–47	1947–48 [1]
Total	2,508,618	3,522,575
Agriculture	584,533	640,791
Distributive occupations	235,141	292,905
Home economics	968,846	1,823,132
Trade and industry	720,098	765,747

[1] Provisional figures, subject to final review of State reports.

Revision of policy bulletin.—After the passage of the George-Barden Act (1946), starting in January 1947 and extending until October 1948, the Division of Vocational Education gave considerable attention to revising policies governing the use of the funds. As a result of meetings, staff conferences, and correspondence and personal conferences with interested persons in most of the States, Vocational Education Bulletin No. 1, Revised, was issued in mimeographed form in November and is to be printed. This bulletin contains the policies relating to the use of Federal vocational education funds, with recommendations regarding the administration of vocational education programs. It also contains explanations of the features of the vocational education acts which are now in effect.

Assisting States in program planning.—Staff members of the Office worked with State executive officers and State directors of vocational education in planning adequate total programs in vocational education and budgeting for such programs. The program planning was based upon two objectives implied in the Act: (1) Extending opportunities for vocational training in communities now inadequately served; and (2) providing vocational opportunities in communities not now served. Studies were conducted in all of the States to implement these objectives. At conferences held during the year, assistance was given to State representatives in planning for the further development of their State programs.

The following tentative break-down of the work of a State vocational staff was discussed: (1) Identifying needs for vocational education; (2) organizing and operating vocational programs; (3) providing instructional facilities and materials; (4) providing trained personnel; (5) improving instruction; (6) evaluating work done; (7) cooperating with other groups; and (8) administering the State program.

Under each of these eight main headings are many activities each of which contributes to the general purpose and must be planned as a unit. The work of the Division, therefore, was directed toward cooperating with the States and Territories in helping them to develop satisfactory programs.

TABLE 5.—*Funds available for allotment to States from Smith-Hughes and George-Barden Acts, fiscal year ended June 30, 1948*

Purpose	Smith-Hughes Act	George-Barden Act
Total	[1] $7,285,122.03	[3] $19,842,759.97
Agricultural education	3,058,452.99	6,889,084.53
Trade and industrial education	[2] 3,111,913.15	5,603,852.87
Home economics education		5,555,323.88
Distributive occupations		1,794,498.69
Teacher training	1,114,755.89	

[1] Includes appropriation for Hawaii and Puerto Rico under separate authorizing acts. Total appropriation Smith-Hughes Act, $7,167,000; Hawaii, $30,000; Puerto Rico, $105,000.
[2] Allotment for home economics included in trade and industrial allotment, not to exceed 20 percent for home economics.
[3] Actual appropriation, $19,333,942.

Vocational education legislation currently provides funds for agriculture, distributive occupations, home economics, trades and industry, and vocational guidance.

Agricultural Education

Owing to a world-wide shortage of food and the need for heavy exports of food and feed to depleted areas of Europe and Asia, the production and conservation of food were emphasized in agricultural classes for adult farmers. School-community canneries, operated under the supervision of teachers of vocational agriculture and home economics, enabled thousands of families to conserve a supply of food for their families. Thus more food was made available for shipment to needy countries.

Veterans' education.—Institutional-on-farm training for veterans under the Servicemen's Readjustment Act of 1944 continued to be of major concern during the year to State supervisors of vocational agriculture and, therefore, to the Agricultural Education Service. Public Law No. 377 (80th Cong.) clarified some of the provisions contained in Public Law No. 346. The Office cooperated with representatives of the Veterans Administration and State supervisors of vocational agriculture in setting up standards and procedures for the supervision and administration of this program, as provided for by the new Act. Approximately 290,000 veterans were enrolled in June 1948 to receive institutional-on-farm training, and nearly 15,000 special teachers of agriculture were employed to provide instruction.

TABLE 6.—*Expenditure of Federal, State, and local funds for vocational education, by type of program, 1946–47 and 1947–48*

Source of funds	Expenditure, by type of program				
	All programs	Agriculture	Distributive occupations	Home economics	Trade and industry
1	2	3	4	5	6
1946–47					
Total	$83,252,082.84	$24,556,393.68	$2,623,491.21	$22,459,839.21	$33,612,358.74
Federal	21,087,435.84	7,560,510.31	1,035,939.45	5,186,094.61	7,304,891.47
State	22,180,073.71	6,303,690.91	841,771.76	6,358,733.20	8,675,877.84
Local	39,984,573.29	10,692,192.46	745,780.00	10,915,011.40	17,631,589.43
1947–48 [1]					
Total	103,675,709.67	30,539,600.94	3,861,231.31	28,380,201.87	40,894,675.55
Federal	26,192,983.55	9,877,090.33	1,525,505.59	6,260,410.60	8,529,977.03
State	25,848,609.70	6,849,464.26	1,251,696.35	7,539,235.70	10,208,213.39
Local	51,634,116.42	13,813,046.35	1,084,029.37	14,580,555.57	22,156,485.13

[1] Provisional figures, subject to final audit of State reports.

A study was conducted to ascertain the wishes of veterans for further training in agriculture after their entitlement for training with the Veterans Administration ends. Replies received from 5,363 veterans enrolled in 25 States indicated that approximately 94 percent want further training in agriculture. Since approximately half of the high schools in the United States which serve rural areas do not have vocational agriculture departments, only those persons who live in communities where the high school offers courses in vocational agriculture will have an opportunity to receive agriculture training. These facts indicate an opportunity and a need for expanded programs of vocational agriculture to aid those veterans who have entered upon or who are preparing to enter upon farm work.

Care and maintenance of farm tractors.—The rapidity of the mechanization of farm work in recent years has meant that many farmers were not experienced in maintaining and operating new types of equipment safely and efficiently. To aid the States in meeting this educational problem for all-day, young farmers, and adult-farmer students in vocational agriculture, two farm tractor manuals have been developed in cooperation with technicians from industry—one for instructors and the other for students.

Farm mechanics training program.—An expanded program in farm mechanics was presented to the annual regional conferences for vocational agriculture. Following these presentations such a program was started in Florida, including general farm shop work, farm power and machinery, farm structure, rural electrification, and soil and water

management. Six pilot centers were set up in the State as a start for this program.

Safety in farm mechanics and with farm machines.—The increasing number of accidents in rural areas and the request for appropriate instructional material prompted the development of a bulletin, *Safety in Farm Mechanics and with Farm Machines,* published by the National Education Association. The bulletin deals, on a job basis, with three phases of farm safety: The school farm mechanics shop; the home farm shop; and farm machines. In the development of this bulletin a staff member of the Office worked with representatives of education, industry, and public and private agencies interested in the rural safety educational program.

Student organizations.—Membership in the Future Farmers of America, the national organization of students of vocational agriculture in public secondary schools, increased during the year roughly from 240,000 to 260,000. The organization held its national convention at Kansas City, Missouri, October 1947. More than 7,000 members attended.

The national contests for dairy cattle, poultry production, and dairy products were held at Waterloo, Iowa, in connection with the Dairy Cattle Congress, and the contests for livestock and meats were held at Kansas City, Missouri, in connection with the American Royal Livestock Show. These contests were directed by the Agricultural Education Service, Office of Education.

The New Farmers of America, an organization (similar to the F. F. A.) for farm boys in high schools for Negroes, likewise completed a successful year. Membership in the N. F. A. increased roughly from 24,000 to 26,000. A national N. F. A. convention was held in Greensboro, North Carolina, with 1,000 members in attendance.

These two organizations supplement the training and experience received in vocational agriculture classes. Major emphasis was placed on training in leadership. Special leadership schools were held by these organizations on the national and State levels. The award program was expanded to stimulate members to worthy achievement.

A national camp owned by the Future Farmers of America near Washington, D. C., was operated during the summer months to accommodate local chapters.

Distributive Occupations Education

As a result of an increase in the demand for training programs suited to the needs of proprietors and employees of small business enterprises, State Boards for Vocational Education in California,

Illinois, Kentucky, New Jersey, New York, Texas, Virginia, and other States sponsored training courses for these groups. Such courses recently were introduced into some 30 vocational schools in New York City. New York University, Syracuse University, the University of Houston, Ball State Teachers College, Mississippi Southern College, and a number of other institutions of higher education are now offering training for men and women engaged in small businesses.

In connection with programs of training for small business, much help in the form of published aids, unpublished information, and advisory assistance has been given by the Division of Vocational Education in cooperation with various trade associations, manufacturers, wholesalers, and publishers. With the assistance of educators and businessmen, the Business Education Service promotes a continuing program of research to determine the nature and scope of training needed for organizing and managing small business enterprises.

Increased emphasis on comprehensive long-range training programs for adults in distributive occupations was another important development during the year—in contrast to the offering of unrelated short-unit courses. Under this plan, an appropriate certificate or diploma is awarded each trainee who completes the required number of related courses in a specific phase of distribution. The Division of Vocational Education has assisted State boards for vocational education in planning and in implementing this long-range program of adult education.

Student organizations.—Organizations known variously as Distributors Clubs, Future Retailers, or Future Merchants have developed extensively in schools in the Southern and Midwestern States, less widely elsewhere. Composed usually of students enrolled in federally aided cooperative part-time retail training programs, these clubs are providing better opportunities for interchange of ideas, for development of leadership, and for cooperative effort and personal growth. They are bringing about mutual understanding and better cooperation between employers and the schools as to the effectiveness of the business training offered.

Home Economics Education

In 1948, approximately 1 million youth and adults were attending home economic classes in schools reimbursed from Federal vocational education funds. Home economics has moved from its restricted definition of cooking, sewing, and housekeeping to a comprehensive one built around homemaking and community responsibilities centered in the family. Methods and approaches in teaching have improved continuously as inventive teachers have found ways to use opportu-

nities for practical learning. Cooperative projects with homes, stores, churches, and agencies of all kinds are increasing.

Probably the most significant contribution of the Home Economics Education Service during the year was providing leadership in applying democratic principles to homemaking education which itself has much to contribute to an understanding of such principles.

Conferences and workshops.—Approximately 400 leaders in home economics education from all the States, Puerto Rico, and Hawaii participated in four regional conferences held by the Home Economics Education Service. In addition, an inter-regional conference was held for Negro leaders from the 17 States having separate schools.

Over a period of years the Home Economics Education Service has cooperated with Cornell University in offering workshops for city supervisors of home economics. In the summer of 1947, a workshop which served city supervisors from all over the country was held and another was planned for the summer of 1948.

In all of these conferences information was presented on national and international developments affecting homes in the United States, and consideration was given to new techniques for teaching, curriculum, and research. Programs were based on requests from people who were planning to attend. A committee from the group evaluated each conference, summarized results, and made recommendations for next year's conferences.

Home economics education research.—Another cooperative undertaking between Federal and State leaders in home economics is the national study of factors affecting the satisfaction of home economics teachers as part of a more extensive study titled *Factors Affecting the Supply of Home Economics Teachers.* To carry on the project, a staff member served as consultant on the national Home Economics Research Committee of the American Vocational Association, and helped collect and tabulate results of the study. While this was being done, plans for effective State action were being developed.

The study showed that salary adjustments alone would not materially increase the satisfactions of home economics teachers. Major factors affecting the supply of adequately trained home economics teachers related to (1) community and living conditions, such as community attitudes, health facilities, living arrangements, and library and other cultural opportunities; (2) professional aspects associated with their undergraduate and graduate training; (3) conditions existing in the school, such as inadequate equipment, funds for operating, attitude of administrators and other teachers toward home economics as a subject, and teaching load.

Forty States sent representatives to three regional workshops which

the Home Economics Education Service helped arrange and conduct. Here the States received help in analyzing data from their States and in comparing them with similar data from other States to find answers to the question "What can we do in our State to attract and hold good home economics teachers?" Few national research projects in education have had so representative a group participating. Few projects have resulted in such immediate efforts to put the findings to work in State and local programs. All of this was possible because organization for the entire project called for assistance from representatives of all States. Not only research workers but workers in administrative and teacher-training positions also took part.

While college enrollments in home economics increased during the last 3 years, the proportion in relation to total enrollments of women decreased, according to a survey conducted by the Office. Returns from 388 institutions show that about 11.5 percent of all women students enrolled in 1947–48 were majoring in home economics. In 1941, when a similar survey was made, about 17 percent of the women students in these institutions were majoring in home economics; in 1945, in 371 institutions, the figure was 13 percent. In 1945, 36,709 home economics majors were reported enrolled in 371 institutions; in 1948, 41,990 were reported by 388 institutions, an increase of approximately 14 percent. During the same years, there was an increase of about 35 percent in nonmajors taking home economics courses. The same institutions reported an increase in total women students of 30.5 percent. In 1948, more than 7,000 students received bachelors' degrees in home economics in the 388 institutions.

Trade and Industrial Education

Practical nurse training.—The Office publication *Practical Nursing—An Analysis of the Practical Nurse Occupation* (1947) resulted in an increased interest in the subject by hospitals and by public vocational schools. During the year practical nurse-training classes have been organized or new classes have been started in Delaware, Pennsylvania, South Carolina, and Tennessee. The committee of representatives of professional and practical nurse organizations which produced the publication is completing a curriculum for practical nurse training.

American Hospital Association study.—The American Hospital Association asked for a pilot study on the training of nonprofessional hospital personnel. A joint committee of the American Hospital Association and of the Division of Vocational Education made a 3-month study which showed that public schools and hospitals on a local level can cooperate to advantage in the selection and training of this group of hospital employees, estimated to be more than 600,000.

A selected bibliography of publications in this field, 1940–48, was produced and distributed.

Trade and industrial education for girls and women.—Since the war, State directors of vocational education have shown an increased interest in possibilities of trade and industrial education for girls and women. Courses in such fields as dental assistant services, practical nursing, and quantity food preparation and service have been newly established. New trade schools are making adequate provision for training girls and women.

Training for public service occupations.—There is a trend toward providing organized training for more persons employed in public service occupations. This trend is indicated by: Expansion of training courses for school bus drivers in Alabama, Colorado, Illinois, New Mexico, Oklahoma, and Wyoming; by new developments in the training of firemen in California, Iowa, Nebraska, Pennsylvania, and Texas; and by new training programs for rural electrification workers in Arizona, Florida, Idaho, Louisiana, Montana, New Mexico, North Dakota, Oregon, South Dakota, and Washington.

In cooperation with the Rural Electrification Administration of the Department of Agriculture, a job training and safety conference was held in Washington, D. C. The REA supervisors from 26 States attended this conference at which attention was given to on-the-job training of workers with emphasis on safety.

Employee-employer relations.—For the purpose of obtaining the advice of both labor and management concerning the Nation's total needs in trade and industrial education, a permanent advisory committee was organized. The membership on this committee included representatives of organized labor, management, and interested government agencies. One result of the work of this committee was a recommendation that, because of the acute shortage of bricklayers, the Division of Vocational Education give immediate attention to planning an accelerated program for the training of apprentice bricklayers. In cooperation with the Bureau of Apprenticeship, U. S. Department of Labor, plans were made under which the initial training period for these apprentices was materially shortened. This training plan was approved by the committee as a whole, and then by the Associated General Contractors of America, and by the Bricklayers, Masons, and Plasterers International Union of America. The plan was distributed to State boards for vocational education and to employee and employer groups.

Training for railroad apprentices.—During 1946–47 the Trade and Industrial Education Service worked with the Union Pacific Railroad and the representatives of a number of States in the preparation of

instructional material to be used in the training of apprentices in six railroad shop crafts. During 1947–48, attention was given to the training of instructors who were to use this material in order that the instruction might be uniform throughout the Union Pacific System. Competent shop workers were selected and special training courses were provided. These teacher-training courses were conducted jointly by the States and the management of the railroad. A *Teacher's Manual* was also prepared for the use of these instructors. With a view to the further development of this new type of training for apprentices, conferences were held with a number of other railroad systems.

Occupational Information and Guidance

An important task of the Occupational Information and Guidance Service during the year was to assist States to take advantage of the new provisions of the George-Barden Act for the extension of reimbursed guidance services. Forty-one States rewrote their State plans for this purpose. Four additional States—Alabama, Arizona, Florida, and Tennessee—made initial plans for reimbursed guidance services.

The promotion of guidance work included assistance to the 59 member-nations of the International Labor Organization. A member of the Service was designated to act as official adviser to the United States Government at the 31st International Labor Conference held in San Francisco. Through this representation the Division of Vocational Education was able to assist in the development of an international recommendation on vocational guidance. This recommendation, if adopted as outlined, will be consistent with the professional standards not only of the Division of Vocational Education, but also of those of other agencies in the Government which have interests in vocational guidance.

Professional assistance through regional conferences, informational materials, and consultations, gave special emphases to counselor training, evaluation of guidance programs, and educational occupational information. This assistance was so organized in conjunction with public and private agencies and associations as to supply aid in the development of the guidance movement on the national level.

The Service responded to requests from 21 States for help in preparing or reviewing professional publications. It assisted in various technical studies conducted under the auspices of the State departments of education or of professional organizations. Types of assistance are illustrated by the evaluation of the State Consultation Services of Virginia, cooperation with the U. S. Employment Service

in the promotion of joint professional objectives, and committee work with the American Psychological Association and the National Vocational Guidance Association.

LAND-GRANT COLLEGES AND UNIVERSITIES

The 69 land-grant colleges and universities are a unique feature of higher education in the United States. These institutions, established by the States and Territories "in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life," derive a part of their support from the Federal Government in accordance with the First and the Second Morrill Acts and supplementary legislation. The land-grant colleges and universities as a group offer instruction in practically all fields of human endeavor.

The Office of Education carries on the activities related to the Federal administration of the appropriations for the land-grant colleges and universities. The Office prepares and publishes an annual report on these institutions; the most recent of these reports is for the fiscal year ended June 30, 1947.

Seventeen of the land-grant institutions are maintained by Southern States for the education of Negroes and are known as universities (4), colleges (12), and institutes (1). The other 52 institutions are known as universities (31), colleges (18), and institutes (3).

The land-grant colleges and universities in the fall of 1947 enrolled 458,759 students, which was approximately 20 percent of the students enrolled in all the colleges and universities of the Nation. The enrollments ranged from 194 (Princess Anne College, Maryland, for Negroes) to 43,000 (University of California). Fourteen of the institutions enrolled more than 10,000 students each.

Educational Relations With Other Nations

FOREIGN STUDENT INFLUX

Although the shortage of dollar credits prevented many foreign students from coming to the United States, approximately 21,000 students from all parts of the world were enrolled in American institutions of higher education during the academic year 1947–48. This was an increase of about 4,000 over the figure for the preceding year. A majority of the foreign students were studying in the various

scientific and technical fields in which postwar American education has assumed leadership. The countries which are sending greatly increased numbers of students are those which are engaged in extensive programs of industrialization and the development of natural resources. India, for example, which previously had few students in the United States, now has 1,214, most of whom are subsidized by the government of that country. An increasing number of students are also coming from Latin-American countries for industrial and vocational training.

The influx of foreign students has added to the problems of colleges and universities which were already filled to capacity as the result of veteran enrollment. More institutions than ever before called upon the Office of Education for guidance in the evaluation of foreign academic transcripts. The 3,138 evaluations made in 1947–48 are an increase of almost 900 cases over the previous year, and approximately 1,700 over the 1945–46 figure. Requests for this assistance came from colleges and universities, as well as from State departments of education, hospitals, and medical examining boards. At the request of university registrars and admissions officers, information sheets containing condensed material on educational systems of 14 Latin-American countries were prepared and distributed by the Office.

Staff members of the Office were increasingly engaged, in cooperation with the Department of State and the Institute of International Education, in projects concerned with improving the selection, orientation, placement, and guidance of foreign students. It was recognized that the prestige of American education is at stake in the success or failure of these students to receive the professional training for which they have come to the United States. College and university administrators are increasingly looking upon foreign students as real assets in the intellectual life of their institutions, and are showing sympathetic interest in their welfare.

The Office added two titles to its series of studies on education in other countries as a result of first-hand surveys made by staff members in Panama and Venezuela.

INTERCHANGE PROGRAMS

During the year 1947–48, 126 teachers from the United States exchanged places with 126 teachers from Great Britain. They were from all levels of education from nursery-kindergartens to teachers colleges. The British teachers were placed in 31 different States. Among these teachers, 85 were placed in elementary schools and 41 in secondary schools.

During the past year evidence began to appear of the achievement of international understanding resulting from the British interchange program. In Texas, for example, the Delta Kappa Gamma honorary educational sorority instituted a State-wide program for the exchange of professional ideas and teaching materials called "Each One Adopt One," as a result of the suggestions of a 1946–47 exchange teacher. Hundreds of overseas friendships have already begun during the year in this project.

Because of the exchange between a teacher of Oklahoma City and one in Leeds, England, these two cities have established a rapport which included correspondence between mayors, chambers of commerce, school administrators, teachers, and students. And elsewhere in this country similar exchanges of correspondence were initiated.

In addition to regular teaching duties, exchange teachers have been called upon in both Great Britain and the United States to interpret their own country in talks to numerous community civic and professional groups. One superintendent of an American city school system in a letter of appreciation of the British exchange teacher in his city reports that during the school year she addressed a total of 96 different groups. Scores of similar letters of appreciation regarding the individual exchange teachers and the benefits of the exchange programs were received during 1947 from American superintendents of schools, headmasters of British schools, and officers of civic and professional groups.

An interchange of teachers between this country and Canada was also made this year in which 4 teachers exchanged places.

During the year there was also developed a program for interchanging teachers between this country and France, and it is anticipated that for the school year 1948–49 between 7 and 10 teachers will exchange places. This program with France was aided materially by a contribution from the Independent Aid, Inc., and the funds will be used to make grants-in-aid to the visiting teachers. The French Government will provide one-way transportation for the teachers from both countries.

As part of the teacher exchange program, Michigan and Texas established committees under the State superintendents of public instruction to evaluate both student and teacher exchanges in those States. In addition to evaluation, it was hoped through this project to make a study to determine the value of having visitors from other lands in the schools of the States, as well as the values which accrue to citizens of our country who have studied or taught abroad; to coordinate and utilize more effectively the resources which come from States in the form of scholarships to foreign students, aid to foreign teachers, leaves of absence with pay to teachers of the United States;

to stimulate additional sources of aid to students and teachers; to work out through registrars, directors of admissions, and deans, a means to bring about better geographical distribution of foreign students, thereby making fuller use of educational resources of the States; to stimulate and encourage teachers, principals, superintendents, and deans to use the visitors from other countries widely in classes of history, geography, social studies, and languages; and to stimulate community cooperation and participation in helping the visitors come to know American institutions more intimately.

THE FULBRIGHT ACT

The recently growing interest among American educators in the international interchange of educational personnel, skills, and techniques has received impetus during the past year from the implementation of the Fulbright Act. By this Act, Public Law No. 584, the 79th Congress authorized the use of certain foreign currencies and credits acquired through the sale of surplus property abroad for programs of educational interchange with other nations.

In full operation, the program will make available approximately $8,000,000 in foreign currencies for study, teaching, research, and other educational activities. Grants to United States citizens may include the payment of tuition, salaries, maintenance, travel, and expenses incidental to educational work. Only transportation costs may be granted to citizens of participating countries who wish to come to the United States under these programs.

Because of the restriction of funds authorized by this Act to currencies other than dollars, its programs will work in cooperation wherever possible with other educational exchange projects. Some of these are the foreign study benefits under the "G. I. Bill of Rights" (P. L. No. 346); the Smith-Mundt Act (P. L. No. 402), which provides an extension throughout the world of the Department of State's authority to carry on various kinds of educational, scientific, and cultural exchanges; programs of private American organizations and agencies for educational interchanges; and programs of foreign governments for such purposes.

Participants for benefits under the Fulbright Act are selected by the Board of Foreign Scholarships, whose members are appointed by the President. Executive agreements with participating countries establish in each a United States Educational Foundation to carry on exchange programs under the direction of the Board of Foreign Scholarships and to recommend programs, institutions, and candidates. Fulbright agreements have thus far been concluded with China, Burma, the Philippines, and Greece.

For the program in China, the Board of Foreign Scholarships has approved recommendations of the United States Educational Foundation for grants to 20 graduate students, 20 professors, 10 research scholars, and 6 librarians from the United States to go to China; travel grants for 30 Chinese students and professors to come to the United States; grants to 100 Chinese students to study in American schools in China; and a grant for the staffing of two English language institutes in China.

Approved recommendations in the program for Burma include grants to 5 graduate students, 8 professors, 2 secondary school teachers and 5 research scholars from the United States to go to Burmese institutions; grants for 5 Burmese students to attend the Medical Center for Frontier Areas; and travel grants to a limited number of Burmese students to come to the United States.

In its function as a preliminary screening agency for applicants for teaching positions in national elementary and secondary schools, the Office of Education has recruited applications for the two positions in secondary schools in Burma mentioned above and has submitted to the Board of Foreign Scholarships a panel of these applicants for final selection.

INTERNATIONAL PUPIL CORRESPONDENCE

At the request of the Department of State, the Office of Education administers an extensive foreign correspondence project through which thousands of letters from all parts of the world are distributed to American schools, colleges, and adult groups. Nearly 100,000 letters were received in the past year from Germany and Austria, where the idea has been encouraged and publicized by United States occupation authorities. This is an increase of around 70,000 over the previous year. Next to Germany and Austria in the number of letters from abroad are Australia and England, with other countries represented sporadically. Recently letters have begun to come from Japanese high-school students eager to establish friendly contacts with America.

Fortunately, most of the letters are written in English, for many interested American students are not skilled in other languages. The Office receives relatively few requests from American schools for letters written in German, although some language teachers have discovered that they are an excellent means of vitalizing study in their classes. Specific requests for material aid are eliminated from regular channels of distribution, to preserve the educational emphasis of the project.

Requests to participate in this international correspondence came to the Office of Education from schools and colleges throughout the United States. FIOCES (the international federation of corre-

spondence bureaus) has asked the Office to serve as a central coordinating bureau for international school correspondence for the United States. The official French bureau also has asked the Office to provide them with 30,000 names of American boys and girls between the ages of 13 and 25.

With the cooperation of the Office, Quota Club International has undertaken this year a Nation-wide correspondence project to provide an outlet for many of the letters from women overseas. Hundreds of letters from foreign adults have been distributed through such organizations as the Kansas Commission for UNESCO, local UNESCO groups, the American Friends Service Committee, the National Catholic Educational Association, and Protestant churches of many denominations.

UNESCO AND THE SCHOOLS

Through the cooperative efforts of such organizations as the American Council on Education, the National Education Association, the National Catholic Educational Association, and the American Federation of Teachers, the interest of American educators is being enlisted in support of UNESCO and its program. Through an intimate working relationship with the United States National Commission for UNESCO, the Division of International Educational Relations has assisted in many ways to bring to the attention of American schools the purpose of UNESCO, "to contribute to peace and security by promoting collaboration among the nations through education, science and culture."

The Office of Education has played a leading part in the selection of outstanding teachers to represent the United States at the following international seminars conducted by UNESCO: Education for International Understanding, in Paris; Early Childhood Education, in Prague; Teacher Training, in London; and Teaching about the United Nations, in New York.

One of the outstanding examples of response to these efforts to make UNESCO a vital part of the school program is that of the schools of Boulder, Colorado. Nebraska has developed a State-wide program, but this account illustrates similar programs in other city systems. In Boulder the project was initiated by a small group of teachers who attended the Rocky Mountain Regional Conference in 1947. At a meeting of the faculty they were able to convey some of the enthusiasm which they felt for what UNESCO can do for the world. As a result, the UNESCO Council was formed to make policy and have the over-all administration of the program in the schools.

The Board of Education made $3,000 available to be spent as the

UNESCO Council might see fit, and an additional $2,000 was raised by the teachers with which to operate the first year's program. A Junior UNESCO Council was organized in connection with a class in World History and among its aims were the following: To assume responsibility for reconstruction and rehabilitation in war-devastated areas; to undertake activities which will lead to better understanding and the elimination of racial prejudice in our community.

The project spread from the school to the community, and representatives of 25 civic groups met in the Boulder High School to plan community-wide participation in the UNESCO program. Through the work of the local Council, 10 persons—6 teachers, 2 high-school students, and 2 housewives—were sent to the International Congress for UNESCO in Mexico City in the fall of 1947. When they returned they talked to school assemblies and other groups in Boulder and surrounding communities.

Another practical project of this program was the adoption of a French school in Cannes, France, which had been completely destroyed during World War II. Out of these contacts has come a flood of correspondence between the children of the two places. The development of friendship and real understanding has been an achievement impossible to evaluate. To quote from a report of the Boulder program, "The experience of establishing direct contact with pupils and teachers abroad, of sharing from our plenty with those who had nothing, has widened horizons and stirred imaginations as never before. . . . It is impossible to measure such reactions, because they represent a continuing process. They cannot be contained within the confines of one community or one generation."

COMMISSION FOR INTERNATIONAL EDUCATIONAL RECONSTRUCTION

During the past year the Office of Education has continued its close cooperation with the CIER, which was organized in 1946 to gather and disseminate information on the various programs for educational relief. The Office participated in the CIER's second national conference on international educational reconstruction held in Washington, D. C., November 1947, which was attended by representatives of 160 organizations.

Through a project initiated by CIER, 39 educators from 18 countries were brought to this country for a 4-week Seminar in International Education at the University of Maryland in the summer of 1948. The project was sponsored by the American Junior Red Cross, the National Education Association, the American Colleges for Teacher Education, American Association for Childhood Education, Delta Kappa Gamma, and the Institute for International Education. Funds

for the project were largely provided by American classroom teachers and school children in response to UNESCO's appeal for educational aid to the devastated countries. Staff members of the Office acted as consultants during the entire seminar.

Contributions from American organizations which cooperate with CIER are utilized for school supplies and equipment; books and periodicals; fellowships, scholarships, and study grants; organized educational missions; sponsored educational work camps. These activities were carried on by 350 organizations which participated under their own auspices. In 1947 the total sum spent for such aid amounted to $88,000,000 as compared to $62,000,000 for the previous year.

U. S. GOVERNMENT PRINTING OFFICE: 1949

Annual Report of the

FEDERAL SECURITY AGENCY

1949

Office of Education

The Annual Report of the Federal Security Agency contains the Administrator's report and the reports of all the Agency's constituent organizations. In addition, the following reports are issued as separate reprints:

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SOCIAL SECURITY ADMINISTRATION
PUBLIC HEALTH SERVICE
OFFICE OF EDUCATION
FOOD AND DRUG ADMINISTRATION
OFFICE OF VOCATIONAL REHABILITATION
BUREAU OF EMPLOYEES' COMPENSATION
SAINT ELIZABETHS HOSPITAL

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Annual Report of the

FEDERAL SECURITY AGENCY

1949

Office of Education

FEDERAL SECURITY AGENCY

Oscar R. Ewing, *Administrator*

OFFICE OF EDUCATION

Earl James McGrath, *Commissioner*

Deputy Commissioner of Education, Rall I. Grigsby.

Associate Commissioner of Education, Edwin H. Miner.

Executive Assistant to the Commissioner and Director, Division of Central Services, Ralph C. M. Flynt.

Director, Division of Elementary Education, Bess Goodykoontz.

Director, Division of Secondary Education, Galen Jones.

Assistant Commissioner for Vocational Education, Raymond W. Gregory.

Director, Division of Higher Education, John Dale Russell.

Director, Division of School Administration, Henry F. Alves.

Director, Division of Auxiliary Services, Ralph M. Dunbar (acting).

Director, Division of International Educational Relations, Kendric N. Marshall.

Letter of Transmittal

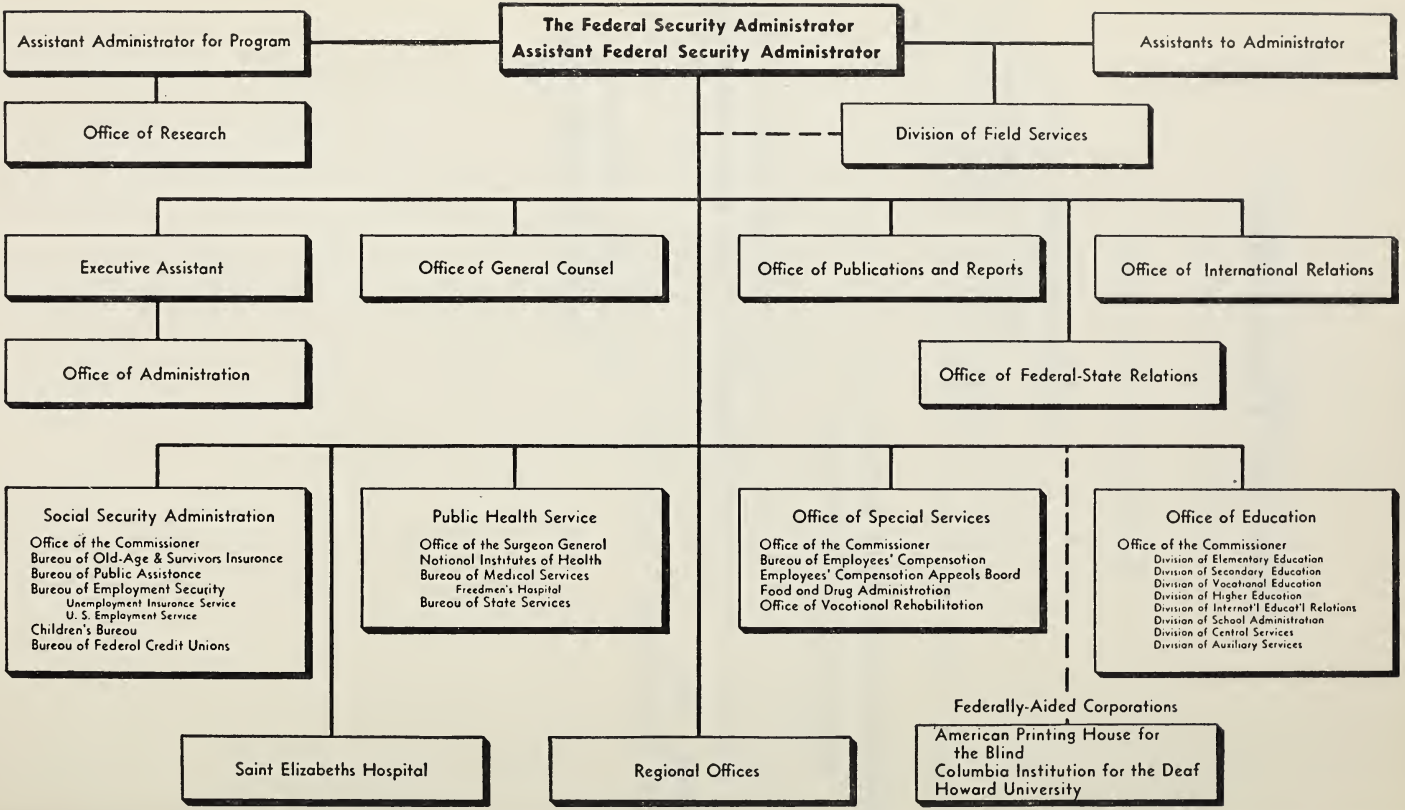
Federal Security Agency,
Office of Education,
Washington, D. C., October 31, 1949.

The Honorable Oscar R. Ewing,
Federal Security Administrator.

Dear Mr. Ewing: I herewith submit the annual report embracing the activities of the Office of Education for the fiscal year ending June 30, 1949.

Respectfully,

Earl James McGrath,
Commissioner of Education.


The Federal Security Administrator
Assistant Federal Security Administrator
Assistant Administrator for Program
Assistants to Administrator
Office of Research
Division of Field Services
Executive Assistant
Office of General Counsel
Office of Publications and Reports
Office of International Relations
Office of Administration
Office of Federal-State Relations
Social Security Administration
Office of the Commissioner
Bureau of Old-Age & Survivors Insurance
Bureau of Public Assistance
Bureau of Employment Security
Unemployment Insurance Service
U. S. Employment Service
Children's Bureau
Bureau of Federal Credit Unions
Public Health Service
Office of the Surgeon General
National Institutes of Health
Bureau of Medical Services
Freedmen's Hospital
Bureau of State Services
Office of Special Services
Office of the Commissioner
Bureau of Employees' Compensation
Employees' Compensation Appeals Board
Food and Drug Administration
Office of Vocational Rehabilitation
Office of Education
Office of the Commissioner
Division of Elementary Education
Division of Secondary Education
Division of Vocational Education
Division of Higher Education
Division of Internat'l Educat'l Relations
Division of School Administration
Division of Central Services
Division of Auxiliary Services
Federally-Aided Corporations
American Printing House for the Blind
Columbia Institution for the Deaf
Howard University
Saint Elizabeths Hospital
Regional Offices
FEDERAL SECURITY AGENCY

Federal Security Agency

The Federal Security Agency was established on July 1, 1939, by Reorganization Plan No. 1 of 1939. The objective of the Plan, the President said, was to group together those agencies of the Government whose major purpose was to promote social and economic security, educational opportunity, and the health of the citizens of the Nation. Among the agencies so grouped by that Plan and by Reorganization Plan No. 2 of 1939 were the Social Security Board (including the United States Employment Service), the Office of Education, the Public Health Service, and the Federal functions of the American Printing House for the Blind.

Reorganization Plan No. 4 of 1940, effective June 30, transferred to the Agency the Food and Drug Administration, Saint Elizabeth Hospital, Freedmen's Hospital, and the Federal functions relating to Howard University and to the Columbia Institution for the Deaf.

During the war the Agency became the center around which numerous war activities were developed. In addition to other war functions, the Federal Security Administrator became Chairman of the War Manpower Commission, established in September 1942. When the Commission was abolished at the end of the war, the United States Employment Service, transferred from the Agency to the Commission on its establishment, was then transferred to the Department of Labor.

The Agency was further expanded by Reorganization Plan No. 2 of 1946. Among other things this plan, effective July 16, abolished the Social Security Board and transferred to the Administrator all the functions of the Board and of its Chairman; transferred to the Agency the Children's Bureau with all its functions except those relating to child labor; and abolished the Employees' Compensation Commission and transferred its functions to the Administrator. As of the same date, the Administrator established the Social Security Administration, comprising the program bureaus formerly in the Social Security Board and also the Children's Bureau.

Legislative enactments of June 1948 again transferred the United States Employment Service to the Agency, as of July 1, and administration of the Federal Credit Union Act, as of July 29. The Employment Service was placed in the Bureau of Employment Security of the Social Security Administration, and the Bureau of Federal Credit Unions also was placed within that Administration.

The organization of the Agency at the close of the fiscal year 1949 is shown on the accompanying chart.

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Office of Education

Commissioner's Review and Recommendations

American education is now in the most critical period in its history. Ironically, this crisis results in part from the realization of our ideal of universal education. Since the earliest days of the Republic widespread dissemination of knowledge among the people has been recognized as the only sure foundation of a prosperous and impregnable democracy. George Washington clearly set forth the direct relation between the well-being of society and the general education of its citizens when he said: "In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."[1]

Our people generally have held the firm conviction that it is in the interest both of the individual and of society that all youth regardless of race, color, sex, social or political conviction, or economic status should have equality of educational opportunity. This has not been a popular view in other countries. In fact, thoughtful men through the ages, and some in our own country today, have been concerned about the future of a nation which attempts to provide education on any such grand scale. Renan, the distinguished French scholar, for example, some years ago put the case against universal education most pointedly when he said, "Countries which, like the United States, have set up a considerable popular instruction without any serious higher education, will long have to expiate their error by their intellectual mediocrity, the vulgarity of their manners, their superficial spirit, their failure in general intelligence."

The vast majority of our people take a contrary view. They con

[1] Farewell Address, Sept. 17, 1796. (Writings, XIII, p. 309, Ford ed. New York and London, 1892.)

sider equal educational opportunity the birthright of every child. Contrary to Renan, they would not limit elementary and secondary education because the higher educational opportunities are inadequate; they would rather extend educational opportunity at all levels to as many as can profit from it. This recognition of the importance of education combined with the rapid rise in the birthrate is, however, the root of many of the current difficulties in education in the United States. Devoted though we are to the conception of equal educational opportunity for all, we have not yet faced realistically the practical consequences of this philosophy—the cost in terms of teachers, buildings, textbooks—dollars and cents.

As Commissioner of Education I feel that I should be remiss in my duty if I did not vigorously draw the attention of the American public to the present inadequacies in our educational system. Unless removed they will prevent the realization of our national educational ideals. Our school system is inadequately staffed and housed. The present shortages of teachers, of buildings, and of instructional facilities are acute. They will become more serious in the immediate years ahead.

Teacher Shortage

There were in 1948–49 approximately 28,000,000 children enrolled in the elementary and secondary schools. A startlingly rapid increase in this number has already begun. By 1960, the number of children enrolled in elementary and secondary schools will be about 37,000,000 with the most rapid increases occurring in the 3 school years beginning in 1952, 1953, and 1954. The available teachers today fall far short of the number needed even to staff the classes assembling in the fall of 1949. This shortage exists largely among elementary teachers. In many communities the shortage of teachers has resulted in classes of more than 50 children. In others education has been curtailed by dividing the school day into two sessions, one group of students attending in the morning and another in the afternoon.

Thousands of classes are taught by teachers who hold only emergency or temporary certificates. Though such persons deserve commendation for their help in these critical times, a permanent, efficiently operating educational program cannot be developed on the basis of a temporary teaching staff. Many of the present teachers had been out of service for some years and had lost some professional skills through disuse. Some quite naturally are not so highly motivated as younger men and women who are planning to spend their lives in the profession. Indeed many of the older teachers are now

serving only out of a sense of duty which was born of the war emergency, and which may not serve to retain them in the profession much longer.

The present shortage of teachers will become more serious. Nothing can now be done to forestall the emergent crisis which will mean educational privation for many of our children. We have already delayed beyond the point where even the most drastic steps can quickly relieve the shortage of teachers in the elementary schools. Those who will graduate from the colleges and universities in the next 4 or 5 years will hardly replace the normal number of vacancies caused by retirement, death, marriage, and change of occupation. During the next academic year approximately 25,000 elementary school teachers will be graduated; at least 100,000 will be needed (30,000 for the increased enrollment, 60,000 for normal annual turnover, and 10,000 to replace a reasonable fraction of the teachers now holding emergency certificates.) For the years ahead, 30,000 new teachers a year will be needed to accommodate the increase beyond normal enrollment if the school program is to be maintained at its present level of efficiency—a level that in spite of the best efforts of educators is not high enough to justify a spirit of complacence.

One of the most important factors in the present short supply of teachers is the relatively low salary they receive in many communities. There has been some improvement in teachers' salaries in a number of communities, but the general average is still too low. Is it surprising that the profession of school teaching should not attract young men and women in sufficient numbers when the 4 years of additional education required for initial employment results in a beginning salary only slightly above (and during the war years often below) that of high-school graduates who enter industry or commerce?

Salary is not the only feature of academic life that attracts and holds the best minds and the most inspiring personalities. The many men and women who returned to teaching voluntarily during and after the war with a considerably smaller salary demonstrates that to many there are greater satisfactions than financial gain. Yet it is true that able persons continue to leave teaching because of financial need.

Moreover, there is no reason why teachers, who are as able and devoted to their work as the members of other professions, should live from hand to mouth while others enjoy financial security. The corroding effect of financial insecurity on morale and on membership in the teaching profession cannot be calculated mathematically, but those who know the profession do not doubt the fact. If the staffs of the elementary and secondary schools, and of the colleges and universities, too, are to be composed of able and conscientious men and women, salaries must be raised considerably. Until the economic rewards

for those who choose teaching as a life work are larger there is little likelihood in the visible future that the supply of well-prepared, enthusiastic, and devoted teachers will be adequate to meet the needs of the entire Nation. To take a Micawber-like attitude that somehow everything will turn out all right in the present crisis in our schools is to play cavalierly with the destinies of thousands of American youth. Only by facing this problem realistically now can the shortage of qualified teachers be materially reduced 3, 4, or 5 years hence. Only thus can the right of all American children to a basic education for their own personal advantages and for the responsibilities of citizenship be guaranteed.

Though income is a significant factor in recruiting and holding teachers in the profession, it is by no means the only factor. The status which the teacher occupies in the community, the regard of the public generally for the work of the schools, the opportunity to live a normal life unshackled by local conventions and prejudices, and a multitude of other psychological and social factors are no less important. In too many communities teachers are required to adapt their own tastes, conduct, and social activities to members of the school board or other prominent citizens. They are often expected to lead an abnormally restrained and inhibited life unmatched in the lives of the parents who impose such restrictions. The attitudes of suspicion concerning the teacher's political and social views, increasingly common in recent years, likewise deprive the teaching guild of some of its most alert and enterprising minds. These and other more subtle influences unquestionably make teaching unattractive to many talented young men and women.

The Unmet Need for Facts

We need more reliable evidence than we now have as to why some young people are attracted to teaching while others are driven from it. We do not know what makes some highly successful as teachers and others dismal failures. It is of the utmost importance to the future of education in this country that this evidence be gathered and made generally available not only to the members of the profession themselves but to the public at large.

A study of the teacher in America is needed now. A considerable body of pertinent information on the subject already exists. Much of it, however, relates to such matters as teachers' salaries, their ages, the amount of training they have had, insurance and annuity provisions in various school systems, and to other of the more obvious aspects of the teacher's life and work. All these items of information can be used to advantage in determining the status and drawing

power of the teaching profession. But there are others of greater significance which deserve careful study.

An adequate analysis of teaching will require the cooperative efforts of educators, social psychologists, economists, sociologists, psychiatrists, anthropologists, political scientists, and other specialists in human relations. Such a group should attempt to identify and study the intellectual and emotional characteristics of successful and unsuccessful teachers and the forces which determine the conditions of teaching in the United States. Such an investigation should seek answers to the following questions: What factors in the work of the teacher make the profession unappealing to many young people today? What personality traits make for inspiring and effective teaching? Can these traits be cultivated or are they essentially inborn? To the extent that the latter is true, what means should be taken to identify at an early age persons having such traits and how can they then be attracted into the profession? What attitudes in the community outside the school prevent the recruitment of the best qualified candidates and drive teachers out of the profession? What influence do standard salary scales and permanent tenure have on the retention of highly competent and grossly incompetent teachers? What steps are taken to acquaint high-school and college youth with the characteristics of the teaching profession? This meager but representative list of questions to which satisfactory answers are not available should make abundantly clear the need for thorough study of the teacher in America. Plans for such a study have for some time been in the process of development in the Office of Education. Either public or private funds should be made available soon to make this investigation possible to the end that the profession may attract and keep the thousands of inspired and inspiring teachers so urgently needed in our schools.

School Building Needs

The present critical shortage of teachers is matched by an arresting lack of schoolhouses. If all the needed teachers were available today many would have no rooms in which to conduct their classes; that is, rooms fit for school use. The shortage of school buildings is in part the result of the depression of the thirties and in part the result of restrictions on construction during the war years. From 1930 to 1940 many communities found it difficult if not impossible to finance school construction. They waited for a more prosperous day. But when money was available, building materials were not. As a consequence many children must attend classes conducted in obsolete, insanitary, and frequently dangerously dilapidated structures. And even many

of the buildings which are physically sound are antiquated in terms of the functions of modern education. Some teachers in the school year 1948–49 are conducting their classes in church basements, factories, stores, and other unusual locations. These emergency efforts to provide space where our children can be educated are laudable. They show again our ability to carry on in the face of difficulties. But the fact that such measures are necessary is a reflection upon our ability to foresee the educational needs of the youth of the United States and to provide modern schoolhouses built on plans that are educationally sound.

How serious is the shortage of schools? Facts have been presented to show that the school population will increase roughly at the rate of at least three-quarters of a million children each year at least until 1958. If we assume a class of 30 to be a suitable instructional unit, then the number of new classrooms required each year to accommodate these new enrollments until the end of this period will be approximately 25,000. But these figures neglect entirely the fact that many existing schools are antiquated and dangerous to the health and safety of children. Education has changed basically since they were built 30, 40, or 50 years ago. The curriculum and the teaching methods of today require a school composed of something more than four walls, a blackboard, and desks.

The school is now a living community in which children of varied ages engage in a great variety of activities, some of which now considered essential by competent authorities were unknown only a few years ago. These activities can be carried on effectively only in buildings designed specifically for educational purposes—and for the purposes of education in 1949–50, not in 1899 or even in 1929. In addition, therefore, to the many school buildings that must be constructed immediately to accommodate the greatly increased enrollments resulting from the high birth rate of recent years, thousands of new classrooms are needed to replace those which are now a menace to the health and safety of children, or unsuitable for the purposes of modern education.

The Facts Must Be Gathered

The number and types of new buildings needed are not known with accuracy. Nowhere has such information been systematically and completely gathered. It can be secured only with the full cooperation of all the States and their constituent communities, for the total building program is dependent in part on the organization of education within the several States and smaller governmental units. For many years it has been recognized that many school districts are too small

and too poor to maintain an adequate educational program. The little red one-teacher school, to be sure, served a high purpose in the history of this country. Many men great in the Nation's councils received their early education in these buildings. The dramatic past of these structures, however, should not blind us to the fact that in many communities they now occupy the place in education equivalent to that of the horse and buggy in the field of transportation. Many larger administrative units are needed in the school system. They provide a broader tax base. They also make possible larger schools with greatly enriched and diversified offerings. These well-rounded programs are essential if all children regardless of their residence are to have approximately equal opportunity for education and the resulting social and economic benefits.

Remarkable progress has been made in the reorganization of school districts. In the State of Arkansas, for example, there were 4,600 districts in 1928. Now there are approximately 375. In Illinois the districts have been reduced from 12,000 in 1940 to 6,000 in 1949. Similar reorganization plans are being executed in other States. But there yet remain hundreds of school units too small and geographically too remote from population centers to support an adequate educational program. If the maximum use of local resources is to be made, the movement to reorganize administrative school units should proceed apace.

In attempting to determine the cost of the school building program for the entire country, plans for local reorganization must be taken into account. There is need, therefore, for a cooperative and comprehensive study of school organization and finance. Until such an investigation is made with the enthusiastic cooperation of State and local units, the sums needed to provide an adequate school plant for the entire Nation can be only roughly estimated. Sampling studies made by the Office of Education and the National Education Association indicate that the cost of building the additional school structures needed to accommodate the increased enrollments within the next 10 years and of replacing obsolescent and dilapidated buildings would amount to at least 10 billion dollars. More comprehensive studies should be begun at once. The demand is obviously so great, however, that appropriating legislative bodies need not refrain from acting until final and definite figures are available.

No alarmist state of mind is required to predict that the educational system of the country will fall into shocking disorder and ineffectiveness if steps are not taken now to secure an adequate supply of teachers and school buildings. This is a condition which no democratic social order can long condone. It contains examples of inequities to which critics of democracy like to be able to point.

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Federal Action Essential

Careful students of the school system are convinced that the quality of education cannot be maintained without Federal financial support. They are certain that without such aid the deterioration in the quality of education which has already begun will accelerate. The need for Federal aid to education is clear and imperative. Without Federal aid the traditional American ideal of educational opportunity for all cannot be realized. Without it the educational birthright of an increasing proportion of our youth will be denied. The following facts compel this conclusion.

Traditionally the control of education in this country has rested with local communities and the States. In the beginning each district taxed itself for the support of schools. Later the States began to supplement local money out of general funds in an attempt to equalize local educational advantages. Though the formulas for equalization vary greatly from State to State this practice has now become almost Nation-wide. Concretely, this means that some sections of the State contribute to the support of education in other sections. This practice has been justified on the ground that all children should have equal educational opportunity not only for their own good, but most particularly because it is in the general interest to give all children the fullest possible education for the rights and the responsibilities of citizenship. These plans of equalization have helped to reduce the differences in the character and the quality of education within the school districts of the several States.

Within even the wealthiest States, however, wide educational differences still exist. These same differences also exist among the several States. They stem largely from two economic and social factors. The wealth of the several States varies enormously and the States which have the least money have proportionately the most children.

It is essential that Federal funds be supplied to reduce the present inequalities. A formula should be devised for the distribution of Federal funds which will take into consideration both the relative ability of the various States to pay for education and the differences in their birth rates. The largest proportion of funds so distributed should of course go to the poorer States.

In the past, the practice has been to make grants for specific educational purposes. It has not been the policy to appropriate lump sums to be used by States or institutions for such purposes as seemed to them most pressing and desirable. Moreover, Federal financial assistance for specific purposes has usually been made available only on the condition that the receiving agency match or supplement it. There are well-known arguments for this type of joint support of education.

The practice of giving Federal support to specific types of education should undoubtedly be continued for some years to come. Indeed categorical grants-in-aid for education may always be necessary as an initial stimulus to the development of needed educational programs within the States and communities. It would seem desirable, however, to balance these categorical grants by making other Federal grants in lump sums to be used by the States in support of such education as they consider essential. This plan would tend to preserve local initiative in the development and control of a well-balanced educational program.

For the time being, however, this ideal support of a more general character will have to be qualified by the practical needs and pressures for specific types of education. These should not prevent the passage of legislation for general Federal aid for the expenses of maintenance and operations and for school construction. In addition to these more general grants, however, support is needed at least for a period of years for several specific types of education.

A case in point is the present inadequate supply of personnel in the various health services as recently reported by the Federal Security Administrator. This report shows that many American citizens receive inadequate health service because of an insufficient supply of doctors, dentists, and nurses. A careful study of the matter would seem to indicate that two of the chief factors in preventing a larger production of properly trained practitioners in these fields, are the high cost of education to the individual, and the high cost to educational institutions in providing it. It is a well-known fact, for example, that medical education absorbs a very large percentage of the resources of those institutions which offer it. Not uncommonly the annual cost for the education of a medical student is six to eight times that of the cost of educating the average student in a college of liberal arts. Personnel and facilities in the medical schools of the country are far from adequate, and if they were raised to a proper level of efficiency very large sums would be required. Yet the health of our citizens generally requires that more doctors be produced and that they be better trained. It seems unlikely, however, that rapid progress can be made in this direction unless the resources of the institutions are increased quickly. In this instance it would seem desirable to make an exception to the rule that the Federal Government make only general grants to the various States. If the objective of better public health services is to be achieved, it appears necessary to make grants directly to the appropriate educational institutions and to provide scholarships for capable but needy students who desire to become physicians.

Another exception to the rule of making more general grants should

be made at the present time in the form of a large scholarship program for American youth who graduate from secondary schools and who possess the ability to profit by higher education but do not have the financial means to gain it. The report of the President's Commission on Higher Education recently issued showed that there are hundreds of thousands of young people in the United States of high scholastic ability who discontinue their education in the secondary school because they, or their parents, cannot afford advanced education.

Most colleges and universities have scholarship funds for worthy and able students. But the fund is normally so small that only a few students can be helped. Moreover, aid is often available only to students who have already shown their capacity to profit by college education through the successful completion of at least one college year. The consequence of this practice is that many young men and women of superior ability who cannot finance the first year of higher education never enter college at all.

President Truman, in a speech delivered at Rollins College on March 8, 1949, stated:

> If our country is to retain its freedom in a world of conflicting political philosophies, we must take steps to assure that every American youth shall receive the highest level of training by which he can profit. A soundly conceived Federal scholarship program in our colleges and universities is a necessary step in attaining this goal. Education has been defined as a bulwark against the acids of fascism and communism. Neither of these totalitarian forms of government can survive examination by educated men and women—men and women free to search for the truth and imbued with the principles of liberty set forth in the preamble to the Constitution of the United States—the greatest document of government, in my opinion, that has ever been written by the hand of man.

The report of the President's Commission showed also that the ability of the various States to support higher education varied considerably. Some of the States with the smallest annual income have the largest number of young people capable of profiting from higher education. It is in the interest of the national welfare that these young people have an opportunity to continue their education beyond the high school. If this is to be accomplished, some form of Federal scholarship program is absolutely essential.

Education for International Relations

Thirty years ago, in the aftermath of the first World War, H. G. Wells observed, "Human history becomes more and more a race between education and catastrophe." [2] The onset of the Atomic Age has now given disquieting dimensions to the prescient insight of Mr. Wells. There is a feverish and ubiquitous building of instruments

[2] Outline of History, New York, Collier & Son Co., 4th ed. rev. 1925, vol. iv, p. 1305.

of war—military planes, ships, and bombs, and recruitment of armies. Yet there is hope among the people everywhere that another conflict which could wipe out civilization may yet be avoided. And there is widespread agreement that education is the best and perhaps the only means of preparing the peoples of the world to live together in harmony and prosperity.

Normally the usual processes of education should suffice to ensure peace and security. But under present conditions these efforts must be supplemented by direct, specific instruction for international understanding. Basic general education should provide a knowledge of the physical universe and the human beings who inhabit it. It should also cultivate the habit of looking for relevant facts and applying analytical thought to current problems. Through a study of man's nature, his persistent desires and life purposes, and the different manner in which these human characteristics are reflected in various national and racial customs, the educated person should gain a sympathetic understanding of cultures which differ from his own. Normally this program of general education would be enough to guarantee international understanding and peace. For the minds and the hearts of men would be opened to the influence of other peoples and other cultures different from their own. They would possess the judgment and the integrity and the sympathetic understanding to live in harmony and to work cooperatively with the people of other countries in what may be the last opportunity to preserve peace and good will among men.

But this indirect route to the goal of amity among nations is too slow. Direct attention by educators is indicated. The unstable international situation requires that a specialized program dealing with problems of international understanding and peace be made an integral part of the work of the schools and of informal educational agencies. It is urgently necessary that the people of all nations come to know something of their fellow men in other areas of the globe. Only through an intelligent and sympathetic understanding of the customs, the ambitions, the art, and the culture of other peoples can the various nationality groups hope to live together in harmony in this ever contracting world. A vigorous campaign of education is therefore needed, focused directly on problems of international understanding. The President of the United States in his letter appointing the members of the Commission on Higher Education recognized the need for such education. He referred specifically to the urgency for considering problems of international understanding and he said he hoped the Commission would especially consider "the adequacy of curricula, particularly in the fields of international affairs and social understanding."

Many good beginnings have already been made in the field of international education. One of the specialized agencies of the United Nations organization, the United Nations Educational, Scientific, and Cultural Organization, is concerned with the work of educational agencies.

The United States National Commission for UNESCO composed of one hundred distinguished educators, scientists, and other persons engaged in cultural activities within its brief existence of 3 years has already developed a vigorous and imaginative program. It has enlisted the cooperation of many cultural organizations in the crucial task of educating our people about the purposes of UNESCO and the part which they can play in it. Nevertheless much yet remains to be done in making Americans conscious of the work of this important agency. Even those who have a general understanding of its program often fail to exhibit an enthusiasm for its work commensurate with its potential value in maintaining world peace.

The maintenance of harmonious relations among the nations is a task worthy of the efforts of all educators. All the various professional associations of educators from the elementary schools through the colleges and universities ought to devote a significant part of their annual conferences to a discussion of the ways and means by which they can assist in achieving the objectives of UNESCO. Elementary school teachers, administrative officers, supervisors of instruction, high-school teachers, principals, directors of instruction, college professors of history, psychology, philosophy, art, literature, and other subjects, counselors, college deans, presidents of colleges and universities, and all others concerned with education—all these have a moral responsibility to become acquainted with UNESCO and to advance its program.

It is encouraging to observe that many efforts are already being made to supplement the formal programs of educational institutions in the advancement of international understanding. The various programs for the exchange of persons fall in this category. One of the most successful of these was established through the efforts of Senator William Fulbright. Drawing upon his experience as a Rhodes Scholar at Oxford University, Senator Fulbright saw the advantage of having the citizens of one nation live in close contact with those of another. The Fulbright Bill passed by the Congress and approved by the President on August 1, 1946, makes it possible for a considerable number of foreign students, teachers, and research workers to spend varying amounts of time in this country. Similar arrangements provide for residence of Americans in other countries. Through the United States Department of Defense exchanges of persons between the United States and Germany and Austria have been arranged and

similar plans are now being prepared for the exchange of Japanese nationals. The Institute of International Education in New York has a well-developed program for the exchange of students from other countries to the colleges and universities of the United States. The Office of Education of the Federal Security Agency in cooperation with national educational organizations has for several years arranged for the exchange of teachers in foreign countries, especially the United Kingdom, with teachers in the United States. Each British teacher takes the place of an American in one of our school systems and vice versa. The success of these teacher exchanges is clearly indicated by the fact that the demand in the school systems of this country for British teachers far exceeds the supply.

The long-run effect of these programs is already perceptible in the good will and the improved understanding in the communities in which exchange persons have lived and worked. One aspect of these programs of exchange needs study. It can best be presented in the question, "What are the purposes of an exchange program and what kinds of persons are likely to achieve these purposes?" There are two obvious objectives of exchanges. The first has to do with providing another nation with highly skilled technical personnel, such as engineers, research workers, or scholars. Countries like Germany, Italy, and Japan, many of whose educators, scientists, and others engaged in cultural activities were lost, or were not trained in adequate supply during the war years, or who lost touch with the learned world through isolation, need the assistance of technical personnel from this and from other countries. Only through such assistance can their economy and social organization be restored to a sound and self-sustaining basis.

Then there are other nations whose standards of living have never been high, whose natural and human resources have not been adequately developed, and whose skilled workers, scholars and scientists do not exist in sufficient numbers to undertake a program of national development. In the development of their own resources President Truman offered to these nations the knowledge and the skills of Americans. Said he,

> We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas. . . . For the first time in history, humanity possesses the knowledge and the skill to relieve the suffering of these people. . . . The United States is pre-eminent among nations in the development of industrial and scientific techniques. . . . I believe that we should make available to peace-loving peoples the benefits of our store of technical knowledge in order to help them realize their aspirations for a better life. And, in cooperation with other nations, we should foster capital investment in areas needing development.[3]

[3] Inaugural Address of Harry S. Truman, Jan. 20, 1949. (p. 3, Senate Document No. 5, 81st Cong., 1st Sess. Fourth.)

The exchange of such technical personnel will help greatly in maintaining international peace by reducing the economic and social differences between the "have" and the "have-not" nations, and by creating good will abroad. Our institutions of higher education, the various branches of government and industry and commerce can all supply highly trained persons for such technical assistance. These persons can help other nations in improving their industrial and agricultural production and in generally upgrading the conditions of life of the people.

American educators can render an even more lasting service by assisting foreign school systems in establishing programs for the recruitment and training of their own professional and technical people. Thus the technical leadership now supplied from beyond their own borders can eventually be provided through their own educational institutions. The educational institutions of the United States can make an enormous contribution to this program of technical help to other nations through the exchange of persons and also through advisory commissions. These activities will create much good will and foster international understanding.

A second purpose of the exchange program is somewhat more direct in its expression. To be sure, the interchange of technical personnel will have some incidental effect on international understanding, but the brief and preoccupied sojourn of specialists or technicians will not ordinarily supply opportunity for doing the two-way job of cultural ambassadors. The interpretation of our culture to the members of the communities in which they happen to reside, and the acquiring of an adequate understanding of the customs, thoughts, and ideals of another people, are processes requiring exceptional abilities and longer residence, as well as relative freedom from the preoccupations of a technical assignment. Prolonged and leisurely contact between the citizens of one nation and those of another—citizens selected because of their interest in international understanding—is an excellent means of breaking down the cultural barriers which separate peoples and sometimes engender hostile attitudes. To be effective ambassadors of good will, exchange persons must live intimately with the people in the country of their sojourn. Understanding and sympathy are human qualities, cultivated best in the day-to-day contacts of life.

But contact does not always breed understanding. What types of persons, then, are likely to make the greatest contribution to international understanding by living in another country? My own conviction is that teachers, students, businessmen, journalists, members of labor organizations, and others in the ordinary walks of life would best carry out the mission of international understanding. In the

development of a more nearly adequate exchange program, and in the selection of persons to be cultural ambassadors, there ought not to be an inordinate emphasis upon scholarly accomplishments. It is questionable whether research scholars are better qualified to achieve this second purpose of the exchange program than are the ordinary teachers in our lower schools, our undergraduate students, and our typical men of business, commerce, industry, labor, and the professions. In any event the latter can certainly play a valuable part in an exchange program. A similar comment concerning the too-narrow selection of exchange persons appears in the February 7, 1949, report of the United States Advisory Commission on International Exchange:

> In reaching our conclusion as to the general effectiveness of the program, we find ourselves in agreement as to one defect. In our judgment there is great need for broadening the scope of the exchange of persons program. The culture of any nation is a composite of all activities of all of its people. Recognition has been given to the scientific and technical fields and to exchanges of academic personnel and leaders in the professions, but insufficient emphasis has been placed on certain other groups—ministers, authors, musicians, businessmen, and others whose participation is necessary to a balanced program of interchange.

Take the secondary school teacher, for example. Such a person, under the plan now in operation between England and the United States, moves into a position vacated for one year by an American teacher. The visitor has a regular teaching assignment which results in daily contact with the children of the community and with teachers and administrative officers in the school. The visiting teacher sees these people, so to speak, in their native habitat under normal conditions exhibiting their natural reactions. She lives in an average home in the community and witnesses at close range the normal activities of American family life with its stresses and strains, its joys and sorrows, its good will, its provincialism, and its prejudices. The members of the school community and of the home likewise have an opportunity to observe the behavior and the ideas of the visitor. Through meetings in the church, the Rotary Club, the circus, the picnic, and other social activities the teacher sees America as it really is, not inevitably out of context as it often appears in the movies, the novel, the lecture hall, or the textbook.

In Britain the American exchange teacher has the same experience. And most important of all, the children who sit in the classroom of such a teacher come to realize that a foreigner is fundamentally quite like us, having likes and dislikes, ambitions and loyalties, a desire to achieve the basic human satisfactions, and above all a common sense of decency, of honesty, of integrity, and of good will toward those who do not erect barriers against its expression. In short, students, at the most impressionable ages, come to realize that this visitor from a foreign land is like most of our fellow countrymen, a pretty good

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person after all, and that any basic differences that may exist between our two peoples must arise from misunderstanding and not from malice. The same can be said for students, working men, and business executives who would spend a year in a foreign community. This in my judgment is the primary purpose of international exchanges.

A careful review of the purposes of the exchange programs and an appraisal of the accomplishments to date would, it seems to me, be very helpful in clarifying future policies and practices. Such an evaluation should take into consideration the distinctions between different types of exchange programs. In the case of technical advice and assistance, of course, the scholarly standing and accomplishments of those who are to be sent abroad are of paramount importance, and an interest in the broad problem of international understanding of secondary consideration.

A distinction should be made between the research scholar, on the one hand, who is going abroad to advise with a foreign government or private agency upon a specific technical problem, and the university research scholar, on the other hand, who has no such assignment but wishes merely to complete his own research which may have no relation whatever to any of the technical problems in the visited country. In the former instance, the direct contribution to international understanding may not be expected to be great, but the technical advice provided justifies the exchange. In the latter, it should be the chief objective. There seems little justification, therefore, for using funds set aside to promote international understanding and peace to advance personal research, however meritorious the research may in itself be. A systematic and careful evaluation of these and other aspects of the international exchange programs would be useful in determining future policies with regard to this important activity.

Declaration of Human Rights

No report on the part which education can play in creating international understanding and peace would be complete without reference to the Declaration of Human Rights prepared by the United Nations Commission on Human Rights. The Declaration, which embodies the highest ideals of all people of good will throughout the world, ranks in importance with the French Declaration of the Rights of Men and of Citizens, the British Magna Carta, and the United States Declaration of Independence and The Bill of Rights. At present this document carries only the unofficial endorsement of the participating nations, but a committee is now at work upon a covenant which will embrace most of the provisions of the Declaration. This covenant upon its completion will be submitted to the powers signatory to the

Declaration for formal official approval. Persons of every creed, color, nationality, race, and condition of life, interested in lifting men everywhere to a higher level of human aspiration and a richer spiritual and material life will wish to work energetically not only for the adoption of the covenant, but more important, for the carrying out of its implications in the everyday activities of all our people.

All Americans should read and study the Declaration of Human Rights, and discuss its implication with their fellow citizens. Particularly the schoolmen of the Nation should consider ways in which the educational program, from the elementary school through the university, can teach the principles of human conduct and relations set forth in this monumental statement. The teachers of the Nation should know its provisions by heart and they should attempt to embody its precepts in their tasks, not only in the formal activities of the classroom, but in all the relations of one human being to another throughout the school and its environment. The distribution of information about the Declaration of Human Rights and the organization of activities leading to its adoption and implementation is in the hands of the United States National Commission for UNESCO. Educators and other citizens as well will wish to cooperate actively with the National Commission in acquainting our people with the Declaration and in working for the practical realization of its recommendations in the lives of all Americans.

Communism and the Schools

In the present postwar period, as after World War I, there is a noticeable increase in internal tensions of the Nation. One expression of these tensions is seen in the widespread concern over communism. Many citizens feel, for example, that there is danger that communistic influences may operate through our educational systems. This whole problem calls for a quality of careful thinking and considered action which it is the special responsibility of schools and colleges to supply.

Recent months have seen the discharge of three members of the faculty of a large State university for reasons of Communist Party membership. The American Association of University Professors is, at this writing, investigating the situation. The members of the National Education Association in formal meeting in July of 1949 in Boston resolved that persons who are members of the Communist Party should not be permitted to teach in the schools, and that they should be excluded from membership in the Association. In the spring of 1949 the Educational Policies Commission of the National Education Association issued a report which deserves careful study, both by members of the teaching profession and by the public at large.

Entitled, "American Education and International Tensions," the report analyzes the cross-currents of world conflicts of ideology, their implications for education, and the consequent steps to be taken in American schools and colleges. The Commission makes four specific recommendations:

1. Young citizens should have an opportunity to learn about the principles and practices of totalitarianism, including those represented by the Soviet Union and by the Communist Party in the United States.
2. Teaching about communism or any other form of dictatorship does not mean advocacy of these doctrines. Such advocacy should not be permitted in American schools.
3. The schools should continue with vigor their programs for giving young citizens a clear understanding of the principles of the American way of life and a desire to make these principles prevail in their own lives and in the life of their country.
4. Members of the Communist Party of the United States should not be employed as teachers.

The position of the Commission with respect to the exclusion of the Communists from teaching positions in the public schools is sound. Under the laws of all States children are required to attend school until a designated age. In addition to learning a certain body of fact about the world in which they live, the presumption is that they are sent to school to learn how to use their intellectual faculties, that is, how to think critically and logically. In short, the teacher even in the lower grades is expected to cultivate those habits of mind and of attitude which predispose the growing citizen to pursue the truth. Children are not sent to school to be indoctrinated with a closed system of philosophy or the political views of the teacher. To the extent that education becomes dogmatic indoctrination it ceases to be education.

The Communist embraces and teaches dogma. He is, by his Party membership and sympathy, committed to a closed system of thought. He has given his allegiance to a predetermined set of principles which are not to be evaluated in the light of evidence or examined on the basis of results. He is not free to serve the truth as the evidence may uncover that truth. He has therefore surrendered his right to teach in a nation of free people. In this, the Communist is not alone, of course; but the fact that there are those others whose commitments prevent them in some measure from pursuing the truth does not justify the retention of Communists. Instead, it raises a much more difficult question: How can American education guard itself against domination by any and all forms of dogmatic intolerance, and at the same time safeguard the traditional rights of academic freedom and freedom of speech? This much appears clear: While our constitutional guarantees

rightly defend the privilege of every man to speak his mind out freely, regardless of the truth or error of his utterance, trusting to the sifting processes of free debate and the integrity of an educated people, there is no justification, either in principle or in practice, for knowingly employing as teachers of our youth those whose commitments are contrary to the foundation principles of freedom itself.

The Real Dangers

Communist influence, if it began to find expression in our schools and colleges, would be inimical to the development of the minds and characters of American youth on whom the future depends. But in our efforts to avoid one danger, we must not embrace another. The present period of hysterical concern must not betray us into adopting measures of censorship and control which are the essence of the police state. Some persons have the unfortunate tendency to label as communistic every idea which they happen to dislike. This form of intimidation through vilification is just as objectionable and just as stultifying as the closed-mindedness of the Communist. Under no circumstances must we permit the constructive effort to keep the schools free of Communist domination to lead, by almost imperceptible steps, to the establishing of thought-control and the limitation of academic freedom in our schools and colleges.

There are many citizens, many of whom vigorously deplore communism, who have that relatively rare and highly desirable quality of critical loyalty which enables them to support the nation and social institutions which at the same time they are working to improve. To create a more perfect union . . . to promote the general welfare . . . to secure the blessings of liberty . . . are fundamental American objectives. No person of sober thought could suggest that these ideals have as yet been fully realized. The teacher who is free to aid students in analyzing both the strengths and the weaknesses of American life is in a position to train the kind of leadership which will make tomorrow better than today. Any attempted intimidation of the teacher, any effort to break the independent spirit or quiet the inquiring mind, is more than a violation of academic freedom: it is a betrayal of American youth, and therefore of America's future. It is one thing for a teacher to disqualify himself by giving allegiance to a closed system of dogma; it is quite another thing for the American public to give way to a form of mass hysteria and surrender its own free institutions to the emboldened forces of reaction. Unless the schools are kept free, education can become the tool of a controlling class, as it was in the fascist countries of Europe under Hitler and

Mussolini. When the dissident opinion of minority groups or individuals is killed or suppressed, the pursuit of truth is stopped and the minds of children are perverted.

As we fight communism let us beware lest we create our own kind of police state. If, in our efforts to defeat totalitarianism, we become totalitarian, we have lost the battle. Consider some of the features of totalitarianism which are most repugnant to democratic values: the suppression or liquidation of dissident groups; imprisonment for political opinions; spying and informing on private citizens; censorship of newspapers, radio, books, education; abrogation of the rights of free speech and free assembly; arbitrary adherence, either voluntary or involuntary, to a dogmatic party line. In the name of democratic liberty, with its necessary responsibility, American educators and the American public must avoid these evils. The nonconformist teacher must not be attacked and his character besmirched merely because he differs from others. Teachers rightly repudiating the Communist Party line must not be subjected to the line of some other party or of a pressure group or class or race. A free society must be made up of free men. There is no other way.

And since there is no short cut to democracy and freedom, but only a continuing, never-relenting struggle for the truth that makes us free, the teaching profession must be alert to every infringement of the traditional rights of teachers under a democratic form of government. Defeatism born of fear, conformity which masks frustration, and allegiance blindly and uncritically given to whatever ideal or objective have no place in American education. Cool examination by dispassionate judgment marks these degradations of the human spirit as the basic enemies of democratic life. The teaching profession has a great responsibility to practice and to perpetuate the best traditions of the American heritage of freedom. This is an obligation not easily or pleasantly discharged, but it is one which will bring rich rewards in the thanks of our people when a calmer day makes detached judgment possible.

A brief review of educational developments in the United States and of the relationship of the activities of the Office of Education to these developments is presented in the pages that follow.

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Research and Statistics

EDUCATIONAL RESEARCH METHODS

Uniform Records

The collection and publication of reliable information on the "condition and progress of education in the several States and Territories" requires uniform basic records. Uniformity in turn demands the understanding and acceptance, by the various compiling agencies and reporting officials, of a standard set of definitions of terms such as "school" and "capital outlay." Because of the central importance of records, the Office of Education has for 40 years been vitally interested in the improvement of reporting systems.

During the year, the Office worked actively with the Michigan State Association of School Business Officials, with the newly organized New York State Association of School Business Officials, and with the Research Committee on School Accounting of the National Association of School Business Officials (United States and Canada). The Office cooperated with this Research Committee in revising the Manual of Public School Accounting.

Attitude, Achievement, and Aptitude Measurement

The measurement of attitudes of pupils in various fields (such as mental hygiene, current affairs, and pupil-teacher relations) has been fostered on the national level by the Purdue Opinion Panel. Increasing use of the measurement of attitudes is evidenced in social studies classes, and more attention is being paid in general to the attitudes of students about democratic practices. The Office of Education, for example, has issued checklists for students and faculty on democratic attitudes, for experimental class use.

The study of personality as an aspect of student adjustment has expanded greatly. A larger number of tests have been offered for use, especially tests which encourage the unconscious and indirect expression of students' motives and reaction patterns.

Achievement measurement and evaluation are advancing through the wider use of questions which emphasize understanding and problem-solving ability, instead of merely factual information. Wider application has also been made of observation as a technique of measurement.

Aptitude measurement in the schools has received significant impetus from the successful work in the area by the armed forces.

Several aptitude test batteries have been evolved, each of which measures several different aspects of intelligence. Such multiscore instruments provide measures which are much more sensitive and therefore more helpful for pupil counseling than the single, undifferentiated score normally obtained from intelligence tests.

The measurement field, in general, has been characterized by an attempt to get away from isolated measurement of single aspects of the student's abilities and personality. Therefore, the emphasis has been placed on the need for a *more complete* picture of each child. Development has been in accord with the view that the child is best studied as a complex interacting whole, rather than as the simple sum of separate, isolated parts.

Coordination of Educational Research in the United States

Educational research has many needs—for staff, facilities, and financial resources—but perhaps greatest of all is the need for improved coordination of research efforts and more efficient cooperation among research agencies. Engaged in educational research at present are professors; teachers; graduate students; bureaus of educational research in the universities, in public schools, and in State departments of education; the American Council on Education; the Educational Testing Service; various educational associations (such as the National Education Assoication and its constituent units, the National Society for the Study of Education, the Southern Regional Educational Conference, and certain of the State educational associations); as well as the Office of Education, Federal Security Agency. The efforts of these groups are to some extent coordinated by the logic of research needs, as accounted in the periodicals and volumes reporting educational research. But too often educational research reflects merely the pressures and limitations of a personal or local situation. Student X, for example, works on a problem which he can complete "within the school year"; professor Y perforce continues to exploit his local opportunities, even though the point of diminishing returns has long been passed; bureau Z works on problems—generally administrative problems—which are peculiar to its own school system; and so on. Larger issues demanding both a broader viewpoint and greater resources remain neglected or are inadequately explored.

Two solutions seem to be shaping up in response to the need for coordination in educational research: (1) The development of larger research units; (2) development by the Office of Education of new areas of responsibility for research leadership. An example of the first type is the formation of the Educational Testing Service, which combines the educational testing activities of the American Council

on Education, the Cooperative Test Service, the College Entrance Examination Board, and the Graduate Record Office. An example of the second is the planning and encouragement of research connected with the Life Adjustment Education Program of the Office of Education. Some dozen States have appointed steering committees for encouraging experimentation in various phases of the Life Adjustment Education Program. However, the opportunities of the Office of Education in the field of coordination of research are largely untapped. Obvious avenues of development include the use of research grants to universities and research bureaus and the establishment of a clearing house for educational research.

BASIC PERIODIC STATISTICS

Since 1871 the Office of Education has collected and published basic statistical facts to show status and trends and establish the normative standards that exist in the field of public and private education. From 1871 to 1916, these statistical reports were collected annually for almost all levels of education, but because of the growth of education, many studies were thereafter put on a biennial basis.

Although the Office is required by law to collect and publish educational statistics, educational institutions and systems are not required to report to the Office except for the land-grant colleges and the administration of Federal money for vocational education. Voluntary cooperation can be obtained only if the results of such cooperation are made of real value to the cooperating institutions and school systems. This means that the published reports must give sufficient and accurate data which are useful to the respondents and as nearly current as possible. Some 75 percent or more of the institutions and school systems cooperate voluntarily. Data for the others have to be collected from secondary sources, such as State departments of education, or by personal visits.

The statistical studies, together with a statistical summary of education, constitute the Biennial Survey of Education in the United States. The summary chapter picks up the major historical trend and status tables from each of the other studies in order to present a concise overview for all education, public and private, in the United States of the following data: Number of schools (more than 200,000), enrollment (more than 28,000,000), staff (more than 1,000,000), sources of income, and purposes of expenditure (more than $4,000,000,000) in 1945–46. In addition, the major data are given for white and Negro schools in the 17 States and the District of Columbia that have separate schools, for various types of libraries, and for any special statistical studies made during the biennium.

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State School Systems

The biennial chapter, "Statistics of State School Systems, 1945–46," and the abridged study (60 items) on the same subject for 1946–47 (Circular No. 255) were published during the year. From some standpoints the report on State systems is the most important statistical report published by the Office since it deals with the American public elementary and secondary school system, in which about 82 percent of all persons attending school on a full-time day basis were enrolled.

According to the most recent report published, the number of 1-room schools decreased from 265,474 in 1909–10 to 86,563 in 1945–46, and was probably below 75,000 in 1948–49. The average salary of supervisors, principals, and teachers increased from $1,420 in 1929–30 to $2,254 in 1946–47, and was estimated at $2,750 for 1948–49. This is still a relatively low salary considering educational requirements for teachers, the social importance of teaching, and the rise in the cost of living. Expenditures per pupil in average daily attendance for current expenses increased from $86.70 in 1929–30 to $152.80 in 1946–47, and to an estimated $185 for 1948–49.

The grand total expended by the public-school system for current expense, capital outlay, and interest for 1946–47 was $3,420 million. The Federal Government supplied almost 3 percent; State governments, 35 percent; and county and local governments, including school districts, 62 percent of the revenue receipts for 1946–47.

The enrollment for the public-school system for 1946–47 was 23,659,158, of which 17,821,481 were in kindergarten and elementary school, and 5,837, 677 in high school (last 4 years of school system). It is estimated that in 1948–49 the enrollment in public schools was 25,667,000. (Total enrollment should not be confused with average daily attendance; the latter may be roughly computed as 85 percent of the former. Note also that these figures are for public schools only.)

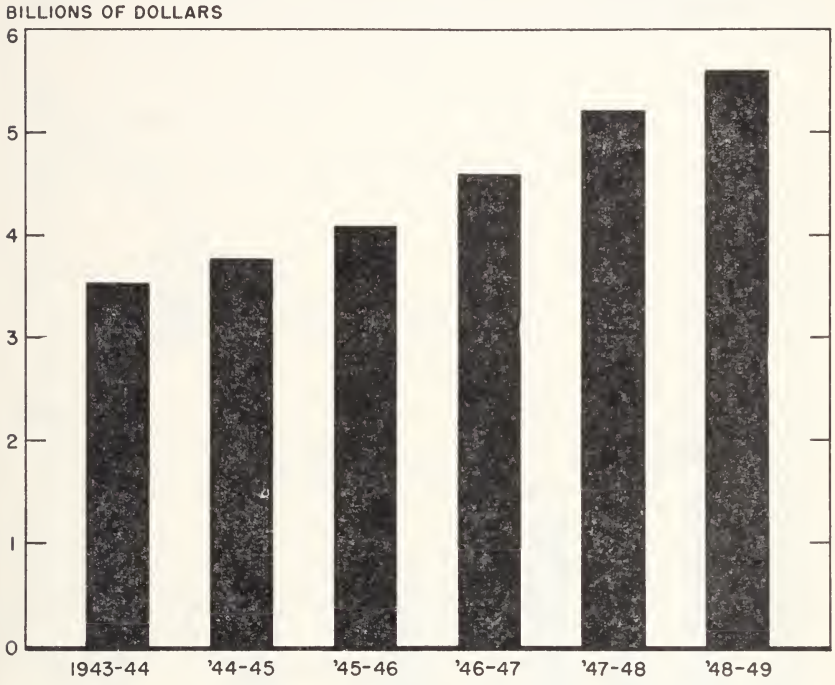
City School Systems

"Statistics of City School Systems, 1945–46," a chapter in the Biennial Survey of Education, and "Expenditures Per Pupil in City Schools, 1946–47," (Circular No. 245) were published in the 1949 fiscal year. The biennial chapter gives 17 items for each city of 10,000 population or more having its own system (not part of a larger school system). National figures are given on many more items by the 4 city-sized groups and for all city school systems combined. Data report 418,980 supervisors, principals, and teachers, and 11,-970,043 pupils, by sex; average and aggregate attendance; expendi-

tures of $1,061 million for salaries of supervisors, principals, teachers, and clerks; expenditures for free textbooks, supplies, and other expenses of instruction; total current expense of $1,511 million for full-time day schools and $50 million capital outlay for new plant and equipment. Data are also given for total bonds and other school debts outstanding totaling almost $1,100 million. Certain data are

Chart 1.—EXPENDITURES FOR EDUCATION

(Estimated for all education, public and private)



given separately for 26,891 full-time day elementary schools; for 5,870 full-time day secondary schools; for 532 systems with part-time, Americanization, night, and continuation schools; and for 173 systems with summer schools.

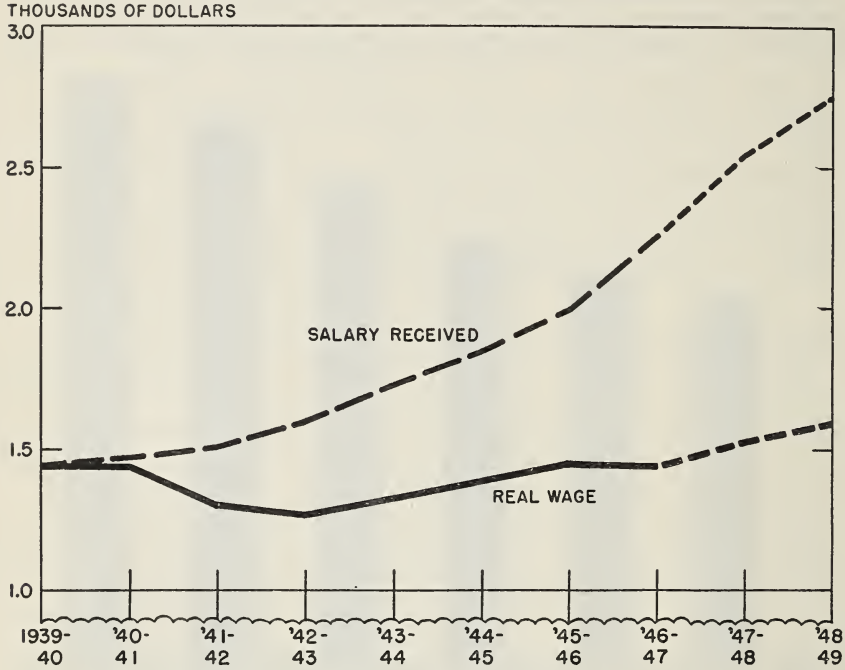
The city school system data are particularly useful for cities making surveys, and for cities that regularly compare themselves with a definite group of cities. They also make possible on a national and State basis comparison of urban and rural school practices.

A group of 226 cities that report promptly cooperate to make the annual study of Expenditures Per Pupil in City Schools possible and keep the data comparable over a period of time.

From 1937–38 to 1946–47 the average total current expense per pupil

attending full-time day schools in all city school systems increased from $102.89 to $186.41. City expenditures per pupil generally exceed rural expenditures, and consequently also exceed the average for the country as a whole. Average expenditure for cities of different-sized groups ranged in 1946–47 from $191.08 in cities of 100,000 population and more, to $143.76 in cities under 10,000 population. There was an even wider range among individual cities within each

Chart 2.—ACTUAL SALARY AND REAL WAGE OF TEACHERS [1]



[1] Real wage is actual salary adjusted to consumers' price index (Bureau of Labor Statistics). Teachers include principals, supervisors, and "other instructional staff."

group. For example, the smallest cities ranged from $64.28 to $267.98, with a median average expenditure of $141.82 and a mean average expenditure of $143.76.

Higher Education

Because there is no central organization of all institutions of higher education in the Nation, or even within most States, the Office of Education collects information directly from all institutions of higher education (1,728 in 1948–49, according to the classification used by the Office). The Office during the past year divided periodic statistics of

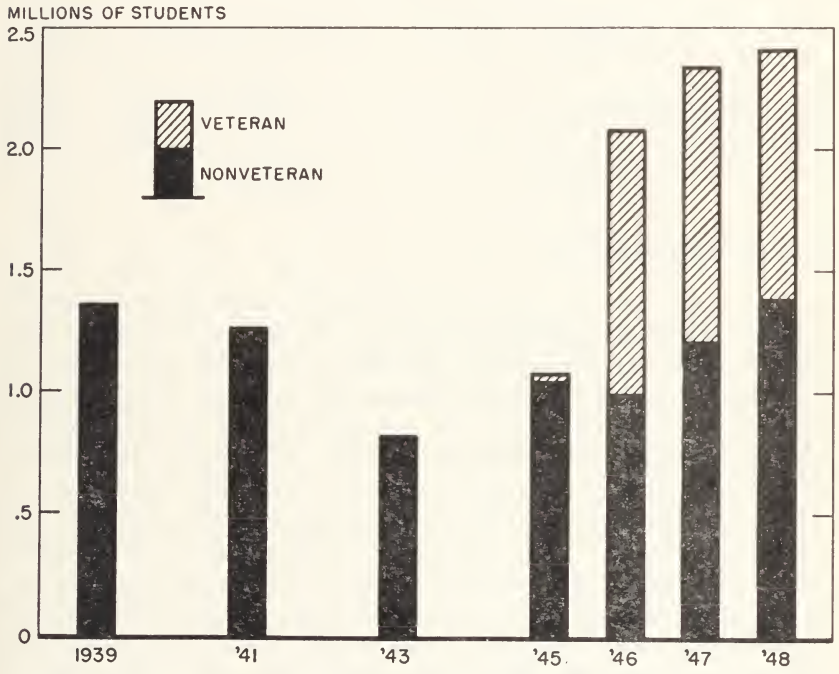
higher education into a number of small studies staggered throughout a biennium, as follows: Summer school enrollment (annual)—July; fall enrollment (annual)—October; earned degrees granted (annual)—June; staff, income, expenditures, property (biennial)—June.

This "fractionation" of the statistical program for higher education gets more prompt and complete replies and makes possible preliminary releases of the annual studies from 6 to 8 weeks after the forms are sent out.

The decrease in fall enrollments in higher educational institutions during the war period and the increase since the war is shown in chart 3

Chart 3.—ENROLLMENT IN HIGHER EDUCATION

Fall enrollment, all types of students



There were more than a million veterans in college in the fall of each of the past 3 years: 1,080,396 in 1946; 1,122,738 in 1947; and 1,021,038 in 1948.

The number of junior colleges as defined by the Office of Education increased from the 46 reporting in 1917–18 to 472 in 1947–48, and their total enrollment from 4,504 to 240,173. As defined by the American Association of Junior Colleges, there were 651 such institutions in 1948–49, compared with 663 in 1947–48.

The total staff, administrative and instructional, in all institutions of higher education in 1945–46 was 165,324, an increase of 14,344 in 2 years.

The number of degrees conferred in both 1948 and 1949 was greater than ever before because of the large number of GI students.

Including an estimated amount for the U. S. Service Academies, the total income for higher education for 1945–46 was approximately $925 million for educational and general purposes, distributed by source (in millions) as follows: Student fees, $214; Endowment earnings, $90; Federal Government, $197; State & local governments, $256; Private gifts and grants, $78; other sources, $90.

Approximately $462 million of this was received by publicly controlled and $463 million by privately controlled institutions.

Degree	Prewar high	1947–48	1948–49
Total	216, 728	318, 749	422, 754
Bachelor's and first professional	[1] 186, 500	272, 144	366, 634
Master's and second professional	[1] 26, 731	42, 417	50, 827
Doctor's	[2] 3, 497	4, 188	5, 293

[1] 1939–40. [2] 1941–42.

Elementary Education

No separate periodic statistical studies are made of kindergartens and of elementary schools because of the great number of these schools under the jurisdiction of 86,000 school districts. Data on enrollment in public elementary schools, given in the studies of State and city school systems, show the beginning of the upswing from the most recent low of 17,713,096 in 1943–44 to 17,821,481 in 1946–47. The estimated enrollment for 1948–49 was about 20,000,000.

The aforementioned studies give number of schools, by State (160,227); teachers, by sex (541,528); total elementary enrollment, by sex; enrollment, by grade; the number and enrollment in 1-, 2-, and 3-teacher schools for the States reporting; average and aggregate days attended, and length of school term in days; total enrollment, staff, grade enrollment, average and aggregate attendance, and length of term in schools for Negroes in the 17 States and the District of Columbia, having separate schools for Negroes. They also give number of staff (64,495) and students (2,259,392), by sex, in all private elementary schools, by State; and for the number of staff and students in Catholic elementary schools, by State, as reported by the National Catholic Welfare Conference.

In "Statistics of City School Systems," data are given for elementary schools (including nursery and kindergarten where present) for enroll-

ment (34.2) and average daily attendance (28.0) per teacher for all city schools combined and for each of the 4 city-sized groups.

Secondary Education

During the year the study was completed of public high-school statistics for 1945–46 for the 24,314 schools of all types employing 326,776 staff members and educating 7,140,164 pupils, including those in junior high schools. This was the first large study in this field since 1937–38, when there were 8,016,384 pupils. Because there were almost 1 million fewer persons aged 14–17, inclusive, in 1945–46 than in 1937–38, it would be expected that there would be 710,000 fewer persons enrolled in high school. Therefore, about four-fifths of the 876,220 decrease in enrollment was due to the decrease in births.

In 1945–46, 445,647 boys and 570,917 girls were graduated from the fourth year by 20,065 public high schools. Public and private high schools have graduated more than 1 million pupils a year for 11 years (1935–36 to 1945–46) and probably each year since 1945–46.

The enrollment in the last 4 years of public high-school work in 1945–46 was 5,706,389 pupils; this number was 65 percent of the total number of persons 14–17 years of age in the population.

There were about 10,000 fewer men and 16,000 more women teaching in high school in 1945–46 than in 1937–38, reflecting the exodus of men from teaching during the war.

The 1,732 high schools in 11-grade school systems enrolled 322,897 pupils, whereas the 22,215 high schools in 12-grade systems enrolled 6,596,727 pupils (exclusive of ungraded high schools and those with enrollments of fewer than 10).

One of the outstanding features of high-school development over the past 35 years has been a steady and uninterrupted increase in the number of schools deviating in form of organization from the 8–4 or 7–4 types of school organization in favor of some sort of "reorganized" pattern such as 6–3–3 or 6–6 type. In 1945–46 the reorganized schools constituted 43 percent of the total number, had 62 percent of the pupils, and 58 percent of the staff members, compared with 39 percent, 56 percent, and 54 percent, respectively, in 1937–38.

Vocational Education

Vocational education statistics are reported in a separate section.

Libraries

In order to study the library resources available for instruction and self-education, the Office of Education periodically collects and

reports statistics on the holding, services, personnel, and expenditures of school, college, and public libraries. These comprehensive surveys, scheduled on a quadrennial basis, are supplemented by occasional limited studies made annually.

The latest Nation-wide compilation for college and university libraries, covering the academic year ended June 30, 1947, showed the following figures in comparison with those for 1939–40:

	1946–47	*1939–40*
Number of institutions submitting report	1, 345	1, 321
Number of volumes:		
Added during year	3, 602, 198	3, 194, 578
At end of year	94, 300, 665	71, 666, 801
Added per student	1. 9	2. 6
At end of year per student	48. 3	59. 8
Circulated for home use per student	15. 0	21. 7
Number of reserve books circulated per student	18. 7	30. 0
Total operating expenditures (excluding capital outlays)	$34, 621, 588	$17, 976, 231
Operating expenditures per student	$18. 07	$15. 31

It may therefore be assumed that our college and university libraries were operating at the close of the 1948–49 school year with slightly more than 100 million volumes in their collections and were expending annually at least $38 million, exclusive of capital outlays.

In the case of the institutions with enrollments of 5,000 students or more, their expenditures in 1946–47 for library purposes were distributed as follows: Salaries: library staff, 51.1 percent; Wages: student service, 8.6; Books and periodicals, 31.4; Binding, 3.5; Other (excluding building maintenance), 5.4.

The comprehensive study of the 7,500 public library systems in the United States is not scheduled until 1950, but an analysis of the annual reports of the 94 public libraries in cities with populations of 100,000 or more showed an increase from 1945 to 1948 of 7 percent in number of volumes at end of year, 12 percent in number of registered borrowers, 4 percent in circulation, and 43 percent in expenditures (excluding capital outlay).

At the beginning of 1949, this group of large-sized public libraries possessed 45,142,081 volumes and circulating 133,283,304 annually; and were expending $45,205,592, exclusive of capital outlays.

Public-school library statistics for the school year 1947–48 were collected during 1949, but the compilation and analysis had not been completed at the end of the fiscal year.

Special Education

More exceptional children and young people were enrolled in special schools and classes than ever before. More than twice as many local

school districts reported special educational services for such pupils in 1948 as in 1940. Despite a slight decrease in total day school enrollment, the enrollments in special schools and classes for exceptional children and youth in local school districts increased by 20 percent (from 313,722 to 378,059).

From 1931–32 to 1947–48 there was an increase of 90 percent in the number of children reported as receiving special educational services in public schools or in State and private residential schools. Yet hundreds of thousands—even millions—who need such services are still not getting them.

Administration of Grants

PROGRAMS UNDER CONSIDERATION

General Federal Aid to Education

Although general Federal aid to education has been discussed for many years, the need for Federal aid has probably been more clearly recognized this year than at any previous time. In his budget message in January 1949 President Truman stated:

> . . . In many areas, teachers' salaries are low, particularly in the elementary grades. Too many are leaving the profession; too few are entering. Enrollments are rising. As a result, overcrowded classrooms and substandard instruction are common. As the large number of children born during and after the war reach school age, the situation will become even worse.
>
> Many States are finding it difficult, even with high tax rates, to pay adequate salaries or to take other corrective measures. It is therefore urgent that the Congress enact legislation to provide grants to the States in support of a basic minimum program of elementary and secondary education for all our children and youth. This Budget includes a tentative appropriation estimate of 300 million dollars for such grants in the fiscal year 1950.

Evidence of the need for general Federal aid has rapidly accumulated. Studies show that the wealth per child in the eight most wealthy States is approximately three times the wealth per child in the eight least wealthy States. This means generally that unless Federal aid is available for schools, the least wealthy States will have to make approximately three times the fiscal effort to support their schools as the most wealthy States, or will have to be satisfied with lower standards of education. The evidence shows clearly that the least wealthy States have in general made about 50 percent greater fiscal effort to support their schools than the most wealthy States and yet have not been able to provide satisfactory educational programs.

More bills relating to Federal aid to education were introduced

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in the first 6 months of the 81st Congress than in any previous comparable period. Most of these bills are designed to provide an equitable system of Federal aid to schools without imposing Federal controls.

The Senate, having passed a bill providing for general Federal aid to education during the 80th Congress, acted favorably upon a similar bill in May 1949 (S. 246). At the close of the fiscal year, legislation on this subject was still before the House of Representatives.

Federal Programs of School Health Services

In cooperation with the Children's Bureau of the Social Security Administration and with the Public Health Service, the American Academy of Pediatrics made a study of child health services which showed a serious lack of school health services, particularly in the isolated semi-rural and isolated rural areas. This lack is shown graphically in chart 4.

In the areas adjacent to and including the metropolitan areas (combining the first three county groups), 11 percent of the children were in counties without school health services; whereas in the isolated semi-rural and isolated rural areas (combining the fourth and fifth groups), 42 percent of the children did not have school health services. The study also showed that the administration of the program in the more populous areas was predominantly under school jurisdiction, while in the less heavily populated areas it was largely under the jurisdiction of departments of health. Forty-eight percent of the children lived in districts in which the responsibility was under schools, 12 percent lived where it was joint health agency and school, and 36 percent lived in areas in which it was under health agencies, and 4 percent under other agencies.

In 10 States 50 percent or more of the children lived in counties with no school health services. In 10 additional States, 30 to 49 percent of the children lived in such counties.

To meet this lack of services, a school health services bill was introduced into Congress and passed the Senate, but had not been voted upon in the House of Representatives at the close of the fiscal year. To obtain full information, the Office completed a study of the present legal responsibility for school health services.

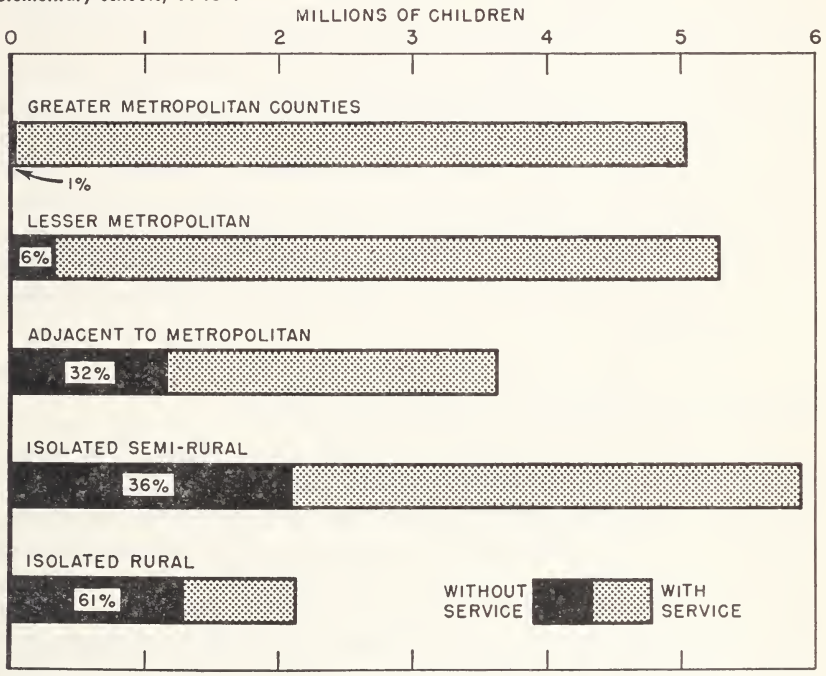
Established Federal grants to States have continued, directly or indirectly, to bring improved health services to children of school age. Among these grants are those for maternal and child health and crippled children's services, through the Children's Bureau, and those for public health education and tuberculosis, through the Public Health Service.

The experimental study on methods of vision testing, carried out under the auspices of the National Society for the Prevention of Blindness, the American Academy of Ophthalmology, the Children's Bureau, and the St. Louis Board of Education, was completed.

The American Medical Association conducted a survey of local medical societies on their participation in the school health program. Supplementary studies are being made of the schools by the Office of

Chart 4.—SCHOOL MEDICAL SERVICES

(Proportion of children aged 5–14 in counties with no organized medical service in public elementary schools, 1946 [1])



[1] A county is said to be without school health service if there is not at least one public elementary school in which children are given a medical examination by a physician.

Education. This is an example of cooperation between education and the medical profession.

In the past year the use of the topical application of sodium fluoride was extended in an attempt to decrease the amount of dental caries in school children. This extension, a joint project of health and educational authorities, was stimulated in part by funds provided by the Public Health Service for experimental purposes.

There has been an increasing interest in mental health for school children, school personnel, and the community as a whole, with workshops devoting considerable time to this subject. Emphasis

is being given to meeting the mental health needs of children and school personnel with increased pre-service and in-service training for school personnel in this field.

Federal Programs for School Plant Construction

From January through June 1949, 40 bills were introduced in the 81st Congress to authorize Federal financial assistance for the construction of elementary and secondary school facilities. Twelve of these bills pertain to *special* and specific situations, 8 propose assistance for *emergency* construction only in cases where the urgent needs have resulted from war and specific Federal activities, and 20 propose to make Federal funds available to all States for needed school construction *in general.* These 20 bills fall into 8 different administrative and distribution patterns.

Six school construction bills, each representing a different administrative and distribution pattern, were referred to the Senate Committee on Labor and Public Welfare, which organized a special subcommittee to consider them. The Subcommittee held public hearings on these bills in June 1949 but had not reported a bill by the close of the fiscal year.

Recognition of Need for a Scholarship Program

The report of the President's Commission on Higher Education, released in December 1947, had wide discussion during the past year. Among the recommendations was one for a federally financed system of fellowships and scholarships, to enable capable young people to continue their education beyond the secondary level. As the program of educational benefits for veterans tapers off, the need for a similar plan of financial assistance for selected nonveteran students will be more generally felt. Studies have shown that half or more of the most capable high-school graduates do not enter college, largely because they cannot afford to. The waste of this most precious of all natural resources can be prevented only by some program of financial assistance to students. A few States have provided scholarships in limited numbers and amounts. The resources available to the States and to the individual institutions are inadequate to meet the demonstrated national need. The President's Commission on Higher Education came to the conclusion that the problem can only be solved by a plan using Federal funds for scholarship purposes. The Commission, composed of nationally known educators, recommended such a program.

The President's budget message of January 1949 recommended

an appropriation of $1 million to the Office of Education for two studies, one of which would be concerned with plans for administering and operating a program of scholarship assistance. It was subsequently decided not to undertake such a study but that the Office of Education should prepare a staff memorandum summarizing the the known facts concerning the need of assistance for students in higher institutions. In May 1949 the Division of Higher Education of the Office held a conference of national educational leaders to study this problem. The Office then submitted its recommendations to the Bureau of the Budget in the same month.

OCCUPATIONAL TRENDS

A trend toward higher employing standards was particularly noticeable during the past year and has created needs for more skilled and better educated employees at all levels.

President Truman's "point 4" is one indication among many that the United States will be increasingly called upon to provide men and women with a large variety of skills and abilities, to help in the rehabilitation of the war-torn world.

Among occupational conditions directly affecting vocational education was a pronounced shortage of craft workers, accelerated by the relatively high average age of workers in certain crafts. In industry the rapid increase in the number of apprentices since World War II continued, resulting in a greater demand on the public schools for related training and instructional materials. Farmers purchased an increasing amount of power-driven machinery during the year, which in turn increased the demand for persons skilled in the care and operation of farm machinery.

The trend in industry is toward increased dependence upon science and technology. This dependence has perhaps been accelerated by the developments in the utilization of atomic energy. The trend was reflected in the employment of more engineers and scientists in industry and business. The needs of industry and business were in turn reflected in college enrollments in engineering and scientific curriculums. In 1948–49 the colleges graduated the largest classes of engineers and scientists in their history.

Industry also evidenced an increasing need for well-educated persons for administrative positions, a need reflected in a large increase in the enrollment of students in business education. As in engineering, the number of graduates in this field rose to an all-time peak. The greatly increased enrollments in all fields of training which prepare for business careers emphasize the growing need for adequate and effective guidance services to high-school and college students, in

order that the students seeking professional careers may have adequate knowledge of the professions in which they are interested, and may be guided into the professions for which they are best qualified.

There has been an acute shortage in all branches of the health professions—physicians, dentists, nurses, laboratory technicians. Public health authorities, for example, point to the need for training at least 20,000 practical nurses a year for the next 10 years.

There were shortages of elementary teachers in practically every State during 1948–49 (see extended discussion elsewhere in this report.)

The large numbers of married women who work outside the home, as found in a survey (1947 data) published by the Census Bureau in 1949, indicate that homemaking programs need to serve not only the teen-age children who are taking responsibility at home, but also women who are gainfully employed and also keep house.

GRANT PROGRAMS ADMINISTERED BY THE OFFICE

Vocational Education—Instructional Problems

AGRICULTURAL EDUCATION

The Office's Agricultural Education Service, Division of Vocational Education, cooperated with the Department of Agriculture in the publication of a bulletin entitled "Price Program of the U. S. Department of Agriculture—1949." More than 300,000 copies of this bulletin, 10,000 bulletins containing outlook charts, and copies of an outline of conservation practices were made available to departments of vocational agriculture for use by in-school farm boys, out-of-school young farmers, adult farmers, and veterans who are enrolled in the institutional-on-farm training programs.

A special regional committee devoted the greater part of a year in developing a long-time comprehensive program of work for agricultural education, setting forth plans by which the States and local communities may put into operation a complete program of agricultural education.

In cooperation with the American Society of Agricultural Engineers, special working conferences were planned for farm mechanics teachers. Frequent discussions were held with representatives of the American Institute of Cooperation, the National Grange, the American Farm Bureau Federation, the Farmers Union, and the National Council of Farmer Cooperatives on the instructional problems to be taken up in classes in vocational agriculture. Four regional conferences of supervisors and teacher trainers were held which emphasize instructional programs for young and adult farmers, and for veterans enrolled in institutional-on-farm training classes.

Two studies are under way for improving instruction in agriculture—one to work out a functional program in agricultural education for young farmers and the other to formulate plans for evaluating institutional on-farm training for veterans.

The membership in the Future Farmers of America, the national organization of students of agriculture in public secondary schools, increased during the year roughly from 260,000 to 280,000. The New Farmers of America, a national organization for Negro Farm boys in States maintaining separate schools for Negroes, grew roughly from 26,000 to 28,000. Leadership training schools were conducted by the Agricultural Education Service for the officers of these two organizations.

BUSINESS EDUCATION

The Business Education Service gave major attention during the year to the preparation of a step-by-step schedule of planning, developing, and organizing a long-range adult instructional program in the distributive occupations. This schedule provides for a reasonably complete subject-matter coverage of the several levels of employment in the major areas of retail and wholesale distribution and the distributive phase of service occupations. Under this program an adult distributive worker will be able to pursue, in sequence, related courses providing comprehensive training in a specific area of distribution.

The Business Education Service worked cooperatively with numerous national trade associations, for example, the National Leather and Shoe Finders Association and professional organizations, in the preparation of instructional materials.

HOME ECONOMICS EDUCATION

Teachers of home economics in service need many kinds of help with their instructional problems. In most States a large number of inexperienced teachers are found in the home economics field, for many are employed only a few years and then leave to marry or to enter better-paying professions. War marriages have brought with them many problems which call for special insight into family relations and child development on the part of both youth and adults. These aspects of the home economics program should be strengthened. Many home economics departments need better equipment for teaching these and other phases of home and family living.

Because of these conditions the Home Economics Education Service helped State leaders in 16 States to plan for State-wide curriculum studies and State or district curriculum conferences, or to evaluate and organize for publication materials that had been developed by teachers. In several States, representatives from this Service assisted

in evaluating the local and State needs and helped set up a long-time plan which would emphasize different aspects of the program in succeeding years.

Work was completed on two bulletins—"Frontiers in Homemaking Education—A Program for Adults" (Vocational Division Bulletin No. 239) suggesting guides to supervisors and teachers who are organizing and developing adult homemaking education programs, and "Space and Equipment in Homemaking Education" (Misc. No. 9) for persons planning homemaking departments in secondary schools. The leaflet "Home Economics in the Public High Schools of the U. S. A." was published.

In 1945 high-school girls began organizing chapters of the Future Homemakers of America and of the New Homemakers of America on a national basis. During 1948–49, 737 new chapters were organized in both groups and membership increased by roughly 26,000, raising the total membership to nearly 295,000. Because of the increase in membership in the two groups, many teachers, supervisors, and teacher trainers have needed help in integrating this work with the other parts of the school program. One representative of the Office of Education visited 31 States during the year to give help on this problem.

TRADE AND INDUSTRIAL EDUCATION

The Trade and Industrial Education Service, at the request of the Air Force Training Command, made a special study of 10 training centers conducted by the Command. An official report was made to the Command Headquarters setting forth the criteria for evaluation, describing existing situations, and making recommendations for improving the instruction in Air Base schools.

The Service assisted in the development of new types of instructional materials for firemen. Pictorial manuals—"Handling Ladders" and "Handling Hose and Salvage"—were prepared by a joint committee from the International Association of Fire Chiefs, The Fire Department Instructors' Conference, and The National Fire Protection Association. In addition, the Service prepared a bulletin "Arts and Crafts: A Bibliography for Craftsmen," issued by the National Gallery of Art, and a bibliography on occupations for girls and women, for use by the Women's Bureau of the Department of Labor. In cooperation with a national committee representing the national associations of nursing education, a curriculum for the use of schools offering training for the occupation of practical nursing was prepared for publication. This curriculum, organized to conform to an analysis of the occupation previously published, was designed for use of vocational schools and cooperating hospitals training practical nurses.

The Trade and Industrial Education Service prepared a list of instructional materials on apprentice training for distribution to State and local school authorities, and to training officials in industry. The Service coordinated the exchange among States of instructional materials and study guides for apprenticeable occupations. A program for completing a uniform pattern of study guides for apprentices in railroad shop crafts was coordinated among seven States engaged in this type of training.

The Service provided leadership for four regional committees working on improving trade and industrial education programs through studies on placement and follow-up of trade school graduates; standards for trade school buildings; production of visual aids for instruction; and an outline of technical vocational courses.

OCCUPATIONAL INFORMATION AND GUIDANCE

The eighth National Conference of State Supervisors and several regional conferences held by the Occupational Information and Guidance Service helped more than 100 State supervisors and counselor-trainers to exchange ideas on guidance practices.

The first draft of a publication on occupational information for training counselors was completed. Documents on the implication of the new draft law, on occupations in the Navy, and on occupational outlook were produced, either by the staff of the Service or by other agencies with the assistance of the staff.

Demonstration and pilot guidance centers were operated on an experimental basis in several States to establish patterns that could be used by other schools.

Vocational Education—Organization and Administrative Problems

For the first time, policies for the administration of the Federal vocational education acts were published in the *Federal Register* during the fiscal year. The policies were also printed as "Administration of Vocational Education" (Vocational Education Bulletin No. 1, rev. 1948).

Assistance was given States in total program planning and evaluation, in analyzing needs from the budgetary standpoint, and on problems regarding the responsibilities of State boards for vocational education as the ultimate authority in the State for the vocational education program.

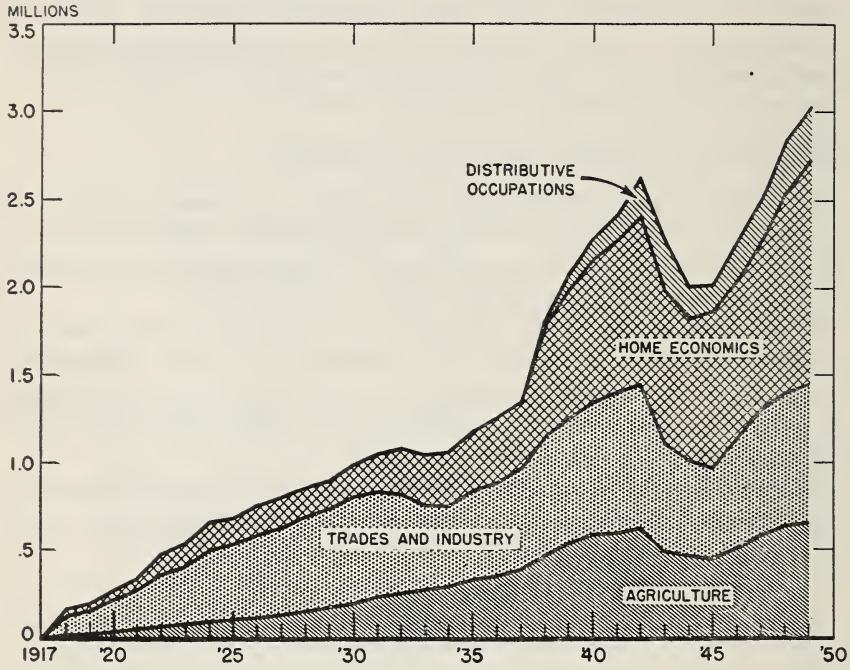
New procedures were used in auditing the State's accounts of Federal and State matching funds for vocational education. A fiscal audit was made by the Grant-in-Aid Audit Unit of the Federal Security Agency and a program review of professional aspects of State expendi-

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tures was made by the Division of Vocational Education Office of Education. Heretofore one person from the Division made both the fiscal audit and the program review in a State.

Approximately one-fourth of the States now provide, through the vocational division of the State department of education, supervision and leadership for all phases of business education—office training and distributive training. Other States provide supervision only for the

Chart 5.—ENROLLMENT IN FEDERALLY AIDED VOCATIONAL CLASSES



federally aided distributive occupations training. In response to the interest and requests of the States, the Business Education Service is assisting them in developing an organizational pattern that will best facilitate effective vocational training in all phases of business education.

Special problems were presented in the area of guidance services. States had problems dealing with budget provisions, the duties and qualifications of new officers, and, in many cases, with first steps in providing guidance services. Thirty-one States were aided in this program planning, six States in reactivating dormant programs, and three States in establishing new ones.

The postwar increase in enrollments in all types of vocational education classes (day, evening, part-time) brought the total enroll-

ment in all phases of vocational education for 1948–49 to a new all-time high. Enrollments since 1917 in each of the four fields of vocational education are shown in chart 5.

The Federal funds appropriated for vocational education programs in the States are shown in table 1. These amounts were identical with those for the preceding year.

TABLE 1.—*Funds available for allotment to States from Smith-Hughes and George-Barden Acts, fiscal year 1949*

Purpose	*Smith-Hughes Act*	*George-Barden Act*
Total	$7, 285, 122	$19, 842, 760
Agricultural education	3, 058, 453	6, 889, 084
Trade and industrial education	[1] 3, 111, 913	5, 603, 853
Home economics education	----------	5, 555, 324
Distributive occupations education	----------	1, 794, 499
Teacher training	1, 114, 756	----------

[1] Not more than 20 percent may be used for home economics.

Despite the fact that no additional Federal funds were available for vocational education in 1948–49, the State and local expenditures for vocational education increased, as shown in table 2. In many cases this means that States, in order to establish vocational programs in schools not previously served, are decreasing the rate of reimbursement from Federal funds to schools with currently established vocational programs.

TABLE 2.—*Expenditure of Federal, State, and local funds for vocational education, by type of program, fiscal years 1948 and 1949*

Source of funds	Expenditures				
	All programs	Agriculture	Distributive occupations	Home economics	Trades and industry
1947–48					
Total	$103, 675, 710	$30, 539, 600	$3, 861, 231	$28, 380, 202	$40, 894, 675
Federal	26, 192, 984	9, 887, 090	1, 525, 506	6, 260, 411	8, 529, 977
State	25, 848, 610	6, 849, 464	1, 251, 696	7, 539, 236	10, 208, 213
Local	51, 634, 116	13, 813, 046	1, 084, 029	14, 580, 555	22, 156, 485
1948–49 [1]					
Total	119, 293, 893	34, 615, 022	5, 423, 961	33, 405, 719	45, 849, 191
Federal	26, 406, 924	10, 048, 995	1, 548, 877	6, 243, 033	8, 566, 019
State	30, 356, 147	7, 942, 476	1, 449, 913	8, 732, 370	12, 231, 388
Local	62, 530, 822	16, 623, 551	2, 425, 171	18, 430, 316	25, 051, 784

[1] Provisional figures, subject to final audit of State reports.

Vocational Teacher Education

AGRICULTURE

The Agricultural Education Service made a special effort to emphasize the directed teaching phase of the resident teacher-training

program by conducting workshops for critic teachers in Pennsylvania, Maryland, Delaware, New Jersey, Michigan, and Louisiana.

The Service cooperated with a joint curriculum committee of the American Society of Agricultural Engineers in working out the training needs of teachers of vocational agriculture in farm mechanics.

Reports were prepared showing the number of new teachers available and how they were placed in 1948. Information was also collected showing the percentage of agricultural college graduates who qualified as teachers of vocational agriculture.

BUSINESS

As a result of a national workshop conducted by the Business Education Service for State supervisors and teacher trainers, a bulletin dealing with the pre-service and in-service training of teachers of distributive occupations was prepared. This publication presents the best practices, standards, and curriculums of the several States.

The lack of occupational experience is one serious deficiency of business teachers, particularly those teaching courses not federally aided. In an attempt to meet that need, and in response to the request for assistance from many teacher-training institutions, the Service prepared a bulletin on "Business Experience for Business Teachers" (Vocational Division Bulletin No. 241). A representative committee of businessmen and business educators assisted in its preparation. It presents five plans for incorporating the optimum amount and kind of business experience in the training and professional improvement of business teachers, coordinators, and supervisors.

The Service conducted four regional conferences dealing in part with the problems of teacher education, and gave assistance to 27 colleges and universities in either the planning or the further development of their teacher-training programs. The Service participated in the summer school teacher-training sessions of 5 universities, in 4 university and college workshops, and in training conferences for teacher-coordinators in 2 States.

HOME ECONOMICS

The shortage and the rapid turn-over of home economics teachers necessitate continuous re-evaluation of teacher-education programs. Some of the activities of the home economics staff were directed toward assisting institutions in studying their whole undergraduate program for preparing teachers, aiding them in developing more satisfactory centers for student teaching, helping them study the effectiveness of certain types of off-campus teaching experiences, and holding conferences with college and supervisory personnel to find better ways of integrating pre-service preparation with in-service training.

Special attention was also given to ways of strengthening some aspects of the undergraduate curriculum in home economics. Conferences were held for college teachers of family relations and child development, and assistance was given in planning and conducting two regional conferences and planning a national workshop for college teachers of textiles and clothing.

Besides visiting States and holding four regional conferences to give assistance with these teacher-education problems, members of the home economics staff held an interregional conference for home economics education of Negro leaders, to consider objectives for the college home economics program. They also conducted a regional and a State conference for city supervisors of home economics and assisted in conducting a 2-week workshop for city supervisors studying techniques of supervision and problems of city organization and curriculum.

The Home Economics Education Service cooperated with the Research Committee in Home Economics of the American Vocational Association in a Nation-wide study of factors affecting the supply of home economics teachers. States were given help in analyzing questionnaires returned by teachers and in planning ways to bring their findings to the attention of school administrators, laymen, teacher trainees, and supervisors, who can help change conditions causing dissatisfaction. Another phase of this study emphasized during the past year was the development and preliminary trial of a series of inventories to be used with high-school and college students to determine why they choose or do not choose to take home economics or to prepare for home economics professions.

Members of the Home Economics Education Service staff assisted the State supervisor and research workers in one State in planning a study of teaching foods in the ninth grade, evaluated plans and materials in home economics education studies submitted for criticism and suggestion by eight States, made suggestions for doctor's dissertations and other graduate studies at two universities, and reviewed and made suggestions on the report of a State study evaluating high-school programs in home economics.

TRADE AND INDUSTRIAL

Through a series of five regional conferences the Trade and Industrial Education Service interpreted to State supervisors of trade and industrial education and industrial teacher trainers the results of a study of samples of teacher-training courses made with a view to obtaining uniformity in title and content in such courses. The sequence and the time required to meet the needs of both pre-service and in-service training and the methods to be used were studied. In

addition, special training conferences for supervisors and instructors for fireman training and for rural electrification job instructors and safety trainers were conducted. The Service also coordinated the exchange of information among States on certification requirements, instructor selection, and qualifications standards.

COUNSELOR PREPARATION

The Occupational Information and Guidance Service worked with nearly 100 guidance specialists from almost every part of the country in editing and coordinating reports on counselor training.

Counselor training programs were established in 14 States and reimbursed from George-Barden funds. The Service aided in suggesting programs and in selecting and obtaining staffs for these programs. Related to this development was that for certification of counselors, a problem in which 19 States required assistance.

Land-Grant Colleges

The Federal supplementary Morrill appropriation for instruction in the Nation's 69 land-grant colleges and universities was continued for 1948–49 at its customary amount—$5,030,000. The annual report on these appropriations was prepared as required by law.

The enrollment of full-time students in these institutions as of October 1948 was 458,854—practically the same as for the previous year. For the fiscal year 1948, latest figures available, the income for educational and general purposes was $484,876,565, of which $174,127,306 came from the Federal Government. Of the Federal contribution, $85,505,372 came from the Veterans' Administration for fees and educational supplies, $45,486,924 from various government agencies for special research, $5,030,000 from the Federal Security Agency for campus instruction, and $38,105,010 from the Department of Agriculture for agricultural experiment stations and cooperative extension services.

Federal Property Donations and Disposals

VETERANS EDUCATIONAL FACILITIES PROGRAM

Supplemental facilities for the education and training of veterans have been acquired by nearly 1,700 schools and colleges under the provisions of Public Law 697, 79th Congress, which authorized the establishment of the Veterans Educational Facilities program. War surplus buildings have been used to provide nearly 19 million square feet of floor space for educational uses at a total cost to the Federal Government of slightly more than $76 million. Items of personal

property in war surplus, having an estimated fair value of approximately $124 million, have been transferred to educational institutions by the Federal Works Agency upon certification by the Commissioner of Education that the facilities were needed for the education and training of veterans. Although the maximum number of veterans enrolled at any one time in participating institutions was about 1,200,000, these facilities have been made available to probably two or three times that number. The acquisition of property by the Federal Works Agency under this program ended December 1948. Liquidation is now in progress.

ARMED SERVICES DONATION PROGRAM

Public Law 889, 80th Congress, authorized the Secretaries of the Armed Services to donate obsolete and surplus equipment, materials, books, and other supplies determined by the Commissioner of Education to be needed and usable for educational purposes. During the fiscal year 1949 the Office of Education allocated donable property from these sources with a total acquisition value of more than $85 million among the 48 States, the District of Columbia, and the Territories for distribution by State educational agencies to public tax-supported and private nonprofit schools, colleges, and universities. This program provided at a considerable saving much-needed equipment, materials, and supplies for vocational shops, engineering and scientific laboratories, and classrooms in an estimated total of more than 25,000 schools, colleges, and universities.

SURPLUS REAL PROPERTY PROGRAM

Approximately 1,500 applications were submitted during the fiscal year by educational claimants for surplus real property under the Surplus Property Act of 1944. Need and ability to use the property effectively were surveyed in each case and recommendation submitted by the Office of Education to the War Assets Administration. Transfers of real property for educational purposes to 1,682 schools and colleges included 20,897 acres of land and 6,249 buildings, which cost the Government $107,428,016, but which cost the schools receiving the property only $514,283. This property furnished facilities for classrooms to relieve overcrowding and make full day sessions possible, for veterans training programs, trades training, cafeterias, gymnasiums, playgrounds, and recreation centers, and for scientific and agricultural research. Utilization inspections of transferred surplus real property were begun in February 1949 to assist the educational transferees in meeting terms and conditions upon which public benefit allowances were granted, to recommend changes in such terms and conditions, and to assist in the retransfer to other eligible educational

claimants of residual materials and property not needed by the transferee.

Inspection of Howard University

The legally required annual inspection of Howard University was made by the Office of Education. The master plan for the development of the University was considered at length by the inspector. The architect's plans for the buildings being built in conformity with that master plan were examined. Proposals were made to the University administration for future consideration having to do with the long-time program of the University and its place in the Nation-wide higher education system for Negroes.

Programs of Organization and Administration

ELEMENTARY EDUCATION

For many years the elementary school has been accepted as the institution providing fundamental education for children between the ages of 6 and 14. But as new demands have been placed on the schools of the Nation, they have been gradually growing upward and downward, as well as outward, to include many activities fostering the best development of children and youth. Living and learning are now the keynotes of modern education. In a study of elementary school programs in 100 cities, 42 reported that they had extended the school schedule and were operating programs for children of school age outside the regular school hours. Sixteen had extended such services to include children as young as 3 and 4 years of age. This trend has also been reflected in State legislation providing or continuing facilities of this kind, as in California and the District of Columbia. In four States—Connecticut, Illinois, Indiana, and Michigan—citizens' groups have supported the enactment of permanent State legislation for nursery school education. All States but one have for years given to local school systems legal authority for establishing kindergartens.

The provision of education for exceptional children has likewise shown great progress. Forty-two States now have State laws authorizing or requiring State-wide educational provisions for physically and mentally handicapped children in local school districts.

Thirty-four of them grant financial aid to help local schools to pay the excess cost involved. Since 1930, and even since 1940, the increase in the number of States making such provisions has been more than 100 percent. As a result, more exceptional children than ever before are now receiving special educational services at school. For those physically unable to attend school, instruction at home or in the hospital is also being provided in ever-increasing degree.

One stumbling block to the continuous progress of children enrolled in the first years of school has been the traditional demand for the acquisition of skills within specified time limits without regard for the individual child's stage of development and social adjustment. Under the caption "Primary Unit" or "Primary School" an administrative technique has been devised to overcome this difficulty. By this plan, each child moves along from the kindergarten through the third grade with little or no break in his individual learning pattern. Traditional "grade" lines give place to flexible grouping, and continuing records of growth and development guide the placement of each child. Experience with this "unit" plan has shown less retardation and improved social adjustment by children at the end of the third school year.

In the area of learning resources, emphasis has been placed upon the use of not only printed materials, but all types of audio-visual aids and on-the-spot visits to industrial and cultural centers, such as manufacturing plants and museums. Too often in the past these have been ignored as aids to teaching and learning. Through workshops and conferences held by many teacher-education institutions teachers have been helped to recognize what constitutes a learning resource in their own communities.

Even with all of these developments, few communities provide adequate educational services for all groups of the population—children, youth, and adults. Many school systems have taken steps to organize a coordinating council or committee for the improvement of educational services. The activities of such councils have centered on making plans for curriculum revision, reporting to parents, better home-school relations, planning new buildings, and increasing funds available for education.

The National Council of State Consultants in Elementary Education decided upon a long-time study of evaluation as basic to the total educational program at the elementary level. They considered aspects of the problem at their last two annual meetings and set up working committees of the membership to attack their problems. States that participate in the Southern States Work Conference also have a committee which is studying the problem of evaluation.

Answers to the questions most frequently asked about ways in

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which elementary schools are organized and supervised were supplied by first-hand reports of the practices in 100 city school systems. These school systems are located in cities of all population sizes in 43 States.

The reports were obtained by staff members of the Office of Education in conferences with superintendents and members of their staffs. The following questions are among those for which answers were provided:

What are the existing types of elementary school organization? Who is responsible for general supervision? How are daily schedules developed? How large are the classes? What is the content of cumulative records? What coordinating councils or committees are sponsored by the schools? How are instructional materials selected for teacher use?

The answers to these and other questions given by the 100 school systems show certain common practices as well as those that may be attributed to the organization of local school service and to the philosophy of education followed.

The report does more than show trends in school organization and administration. It offers an opportunity for teachers, principals and, supervisors to compare specific details of their programs with those of other cities. It also gives the superintendent of schools, his board of education, and interested citizen groups an opportunity to look at their school programs in the light of their needs and accomplishments

State Educational Programs Work Conference

Related to the interests and activities of State department of education personnel is the Work Conference on State Educational Programs held annually at the Office of Education. Recognizing the leadership functions of members of State departments of education and their need to compare experiences, the Divisions of Elementary and Secondary Education and the Division of Auxiliary Services, Service to Libraries Section, invited State departments of education to send representatives to a 2-week work conference in May 1949 to discuss problems of their own selection. Thirty States were represented.

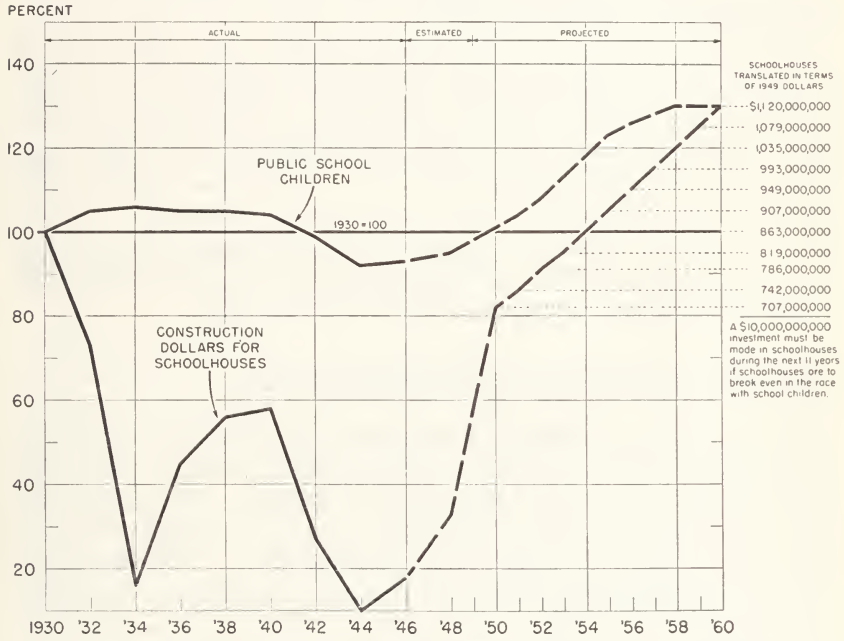
The group identified several major areas in which they wished to work: curriculum, evaluation, teacher education, and the education of exceptional children. These areas were subdivided to meet the interests of small groups and individuals. For example, one of the small groups worked on curriculum problems of the small high school. One studied methods of accrediting schools. One studied characteristics of the community school and another discussed ways of appraising the school program. Librarians preferrd to work most of the

time with the other groups rather than as a separate section, for that is the way they work in the States and in local schools. Seven workers from the Florida State Education Department developed a guide to help the schools of their State evaluate their programs.

States Face a Building Program

Elementary schools throughout the Nation are faced with serious classroom shortages. In one State, a recent State-wide school survey revealed that between the school years 1948–49 and 1956–57 there will be an increase of at least 163,000 elementary school pupils.

Chart 6.—SCHOOLHOUSES AND SCHOOL CHILDREN.[1]



[1] Consideration must be given to the possibility of greater population growth than is assumed here. With a higher rate of growth, public elementary and secondary school housing needs for the next decade might reach the sum of $12–14 billion.

In that State, for example, on the basis of 30 pupils to a class grouping, at least 5,400 new classrooms with the necessary auxiliary facilities will be needed in the next 7 years. But this is only part of the need as revealed by the study. By conservative estimates it was calculated that more than 2,000 new classrooms will be needed to replace worn-out, unsafe, and totally inadequate ones now in use.

One aspect of this problem which needs special emphasis is that *educational* planning should precede *construction* planning. The kind

of planning which will be done will influence the lives of milllons of boys and girls, and in fact the character and quality of life in the communities which the new buildings serve.

In the past the major responsibilities for planning the school building were often left to the architect. This practice is changing rapidly. More and more, elementary buildings are being constructed in relation to the educational planning of school administrators and school staffs and members of the community. To show some ways to bring about joint planning for new buildings, the Division of Elementary Education published an education brief, "Developing the Educational Specifications."

SECONDARY EDUCATION

The organization and internal administration of secondary schools received attention from a number of Office of Education specialists. The Office has a series of projects on class size, extra-classroom activities, student councils, organization of personnel in the large high school, place of general education in the educational program, and experimental or new-type curricular practices in secondary schools; also a cluster of projects on practices looking toward expansion of services through technical institutes, technical schools for rural youth, extension education, and correspondence instruction.

Evaluation of School and of Individual Pupils

There has been a change of view among school persons in regard to evaluation programs. This has been brought about by the wide expansion in the use of two educational techniques. One is described in the 1940 edition of the "Evaluative Criteria" prepared by the Cooperative Study of Secondary School Standards. The use of these criteria has spread the idea of over-all school evaluation. During the past 18 months a thorough revision of the "Evaluative Criteria" has been made.

The other development has been the new way of appraising pupil growth. In the beginning of measurement and evaluation work, usually only one or two facets of a pupil were appraised. Now many different aspects are assessed in order to make a comprehensive evaluation. Among improved methods of appraising pupils are more accurate observational techniques, the measurement of personality traits, the appraisal of adjustment to home and school, and the use of multiple-aptitude tests. Some of these methods are partly in the experimental stage and some entirely so as in the case of projective techniques. Teacher-training centers such as those at Har-

vard, Yale, and the Universities of Michigan, Chicago, and Maryland have incorporated this view of comprehensive evaluation in their teacher-training programs.

Expansion of General Adult Education

Public schools, junior colleges, and extension divisions of universities especially are attempting to serve the expressed demands of adults for more education. Limited funds and shortage of trained personnel restrict the opportunities. Marked growth in number of adults served has been demonstrated repeatedly in communities which provide adequate leadership and funds.

Broad educational programs designed to serve the entire community are developing. A variety of educational leadership, materials, and activities is being provided to meet the needs of adults. Conventional subject matter is being supplemented by activities concerned with helping adults solve the problems of living in such fields as citizenship, family living, health, intercultural understanding, safety, and leisure.

Adult and Post-High-School Education

A survey completed during the year indicated that approximately 3 million out-of-school youth and adults were served by the public schools during 1947–48. Meantime four-fifths of all districts in communities of 2,500 and more provided some kind of adult education, although the amount in many cases was small. While some small communities had excellent programs, in general, few small schools reported activity. Education for adults was most commonly conducted through an evening school, although the variety of other organizational forms was increasing. Other activities reported in significant numbers were morning and afternoon classes, opportunity schools, open forums, film forums, radio broadcasts, conducted excursions, exhibits, supervised correspondence study, training-within-industry programs, workshops, community center activities, adult guidance services, community councils, and special programs for young adults. Vocational education was the most widespread, although the fields of recreation, high-school subjects, arts and crafts, Americanization, physical education and fitness, and music education also ranked high.

The Office began a State-by-State study to determine the extent to which secondary education is being furthered through the use of correspondence courses. A circular (Circular No. 309) and bibliography were published containing suggestions to those interested

in such courses, especially if they want to earn credits toward a diploma or degree.

Education for the Aging

The number of persons over 65 can be expected to increase greatly in the next 25 years. This change in age structure of our population will have profound effects on our society. Some of the problems created can be alleviated by education. Education for occupational changes, leisure time, health, changing family relationships, and additional guidance services will be needed. The Office of Education was represented on a committee of the Federal Security Agency set up to channelize information on various aspects—health, education, security, and the like—of the problem. As one outcome of the committee's screening of recent developments in this field, the Office prepared information related to the responsibilities of education in this growing area.

HIGHER EDUCATION

The great increases in college enrollments since the end of World War II have been carried chiefly by expansion of facilities of the existing colleges and universities. Significant, however, has been the tendency toward the establishment of new institutions. This tendency is reflected in the numbers of institutions included in the "Educacation Directory, Part 3, Higher Education," published annually by the Office of Education. The 1948–49 Directory listed 1,728 institutions, 40 more than in the previous year. Preliminary work on the 1949–50 Directory indicates that 75 or more institutions will be added. During the past few years more institutions of higher education have been established in the United States than in any comparable period in our history.

The institutions being established to meet the increasing demand for higher education are chiefly of two types. About one-fourth are specialized professional and technical schools and more than half are junior colleges. Large numbers of the latter take the form of the community college, an institution recommended by the President's Commission on Higher Education. The development of community colleges gives promise of making 2 years of education beyond the high school readily available to most young people, in an institution near their homes and where they can find programs suited to their needs at relatively low cost.

Need for Additional Plant Facilities

The increase in enrollments in the regularly established colleges and universities put a severe strain on the physical plant. The needs for additional plant facilities were met temporarily in most institutions by the use of surplus Federal property, the donation of which was authorized by Congress. The institutions are moving rapidly, however, to develop additional permanent buildings. A sample of 53 institutions, located in 32 States and accounting for about 14 percent of the total college enrollment, showed that permanent buildings costing approximately $300 million had been completed or begun between September 1945 and July 1948. The needs of these institutions for building space, as stated in March 1947, constituted 18 percent of the 265 million square feet needed by 1,386 institutions which reported on space needs.

Organization and Control

In several States serious thought was being given during the past year to the reorganization of their plans for the control and the operation of State-supported higher education. State-wide surveys were completed recently in a number of States and planned in several others. Perhaps the most sweeping reorganization in recent years has been that in the State of New York which has, by act of the Legislature, set up a board of trustees for the control of the State-supported system of higher education.

A significant development in the organization of higher education was the formation of the Board of Control for Southern Regional Education, with headquarters in Atlanta, Georgia. Through this agency, a group of States in the South set up arrangements to provide educational facilities for their citizens in fields of study for which the State itself makes no direct provision. Thus, a State which has no school for veterinary medicine may contract, through the Board, with a public or private institution in some other State. The institution agrees to enroll a specified number of citizens of that State as students, in return for a payment of a specified sum of money toward the support of the institution. This agency may make possible economical arrangements whereby educational opportunities can be extended without duplicating costly facilities for small numbers of students.

Student Organization

The National Student Association, which held its first annual Congress in August 1948, is composed of representatives chosen by

the students in member colleges and universities. This association is interested in problems affecting higher education in the United States and in foreign countries. The student group has not previously been represented in national councils on matters affecting higher education.

Accreditation

The problem of the accreditation of institutions of higher education in the United States has for many years been perplexing. Although there is need for agencies that certify the quality of institutional programs, the rapid growth of such agencies has aroused protest from college and university administrators. The type of control exercised by some of the accrediting agencies has also been adversely critiziced. In 1948, when the Association of American Universities discontinued its list of approved undergraduate colleges, the only Nation-wide list of accredited colleges of liberal arts was wiped out. To meet this situation the various regional accrediting associations were considering plans for the formation of a National Federation of Accrediting Associations. The hope is that ultimately such a body will be in a position to issue a Nation-wide list of accredited colleges and universities, based on reasonably uniform standards and criteria.

Studies of problems of accreditation in specialized fields have been carried on by several groups. In the nursing profession, a national committee has been at work to develop a rating of the various hospital schools and colleges that train nurses. A member of the staff of the Office of Education served as consultant to this group.

In the field of social work, a member of the staff of the Office of Education has been directing a national study, supported by funds supplied by the Carnegie Foundation for the Advancement of Teaching. One of its goals is the development of a national plan for accrediting institutions which prepare social service workers.

The Committee on Criteria for College Work in Home Economics of the American Home Economics Association, without going into an actual program of accreditation, has produced a book on home economics in higher education, intended to be a guide to institutions in setting up their programs. The chapters of this volume deal with the philosophy, curriculum, and administration of programs in home economics. The appendix contains a checking device which the college department can use in evaluating the aspects of the department and its program on the bases discussed in the book. Two members of the staff of the Office of Education have served as consultants for the committee which prepared the home economics volume.

Plans for improving the procedures for the accreditation of institu-

tions that prepare teachers were considered by the American Association of Colleges for Teacher Education and the National Commission on Teacher Education and Professional Standards of the National Education Association.

Activities of the Service

Though the latest Office bulletin on scholarships and fellowships available in institutions of higher education in the United States was published in 1936, the Government Printing Office reports that there is still a strong demand for it. The urgent need for up-to-date information resulted in the initiation of work on a new bulletin concerning available scholarships and fellowships.

A Specialist for College Business Management was added to the staff of the Division of Higher Education in April 1949. In addition to the usual consultative services, he began editing a handbook on principles of business and financial administration for colleges and universities, prepared in collaboration with a committee representing the various associations of college and university business officers.

STATE AND LOCAL SCHOOL SYSTEMS

State Studies

During the past year State-wide studies of education were completed in a number of States, including New Mexico, Indiana, North Carolina, South Carolina, and Georgia. A study of limited scope was completed in Texas. Special studies were completed in Arizona and California. In addition, the Governors' Conference sponsored a study of public elementary and secondary school education, published by the Council of State Governments under the title, "The Forty-Eight State School Systems." These studies served to call attention to many problems which seriously need attention and, in a number of States, helped to bring about at least partial solutions.

Changes in State Educational Structure

The State structure for education is a significant factor in developing a satisfactory educational program in any State. Changes in State structure however are usually made slowly regardless of the defects which may exist. While minor changes were made during the past year, only a few States made major changes in State structure. The citizens of Colorado adopted a constitutional amendment providing for the appointment of the chief State school officer by the State

Board of Education. The Texas Legislature took steps to eliminate the elective superintendent of education when the present term expires, and provided for the immediate election of a State board of education and for the appointment of a State commissioner of education.

To assist State and local school authorities with their problems of organization and administration and at the request of the National Council of Chief State School Officers, the Office of Education made a detailed study of the organizational structure of the 48 State departments of education and prepared for publication the manuscript "The Structure of State Departments of Education" (Misc. No. 10). Three additional studies, also requested by the Council, were initiated. For one of these, "Organization of State School Administration as Provided by State Laws," digests and analyses of State laws were prepared; for the other two, "Services of State Departments of Education" and "Administering Professional Personnel of State Departments of Education," inquiry forms were developed.

Provisions for Changes in Local School Administrative Unit Organization

The citizens in many States have continued to be interested in improving the structure of local school administrative units. Arkansas established provisions by law that will eliminate most of the very small districts of the State by 1950. Colorado and Missouri enacted laws providing for the reorganization of districts. Minnesota revised and extended its reorganization laws. Iowa, Illinois, and other States are continuing their program for reorganizing and enlarging local school administrative units.

Financing Education

There were three broad but distinct developments in the financing of education:

(1) Many States further increased the proportion of school funds from State sources, the Nation-wide percentage at present being approximately 40 percent of the total.

(2) The tax base was further broadened in many States, although approximately 60 percent of all public-school revenue still comes from general property taxes.

(3) Many States continued to strengthen their equalizing or foundation programs. Indiana and Texas in particular revised their programs last year, providing more adequate and objective bases for defining needs and improving the equalizing features.

Most States are still studying the development of better measures for educational need. Some States have developed relatively valid and objective measures, while in others the measures are still rough or subjective. Some States are still struggling with the development of better measures of local taxpaying capacity. While most States still use assessed valuation regardless of variations in assessment ratios, several States have either improved their assessing plan or developed some more objective measures, such as an equalizing ratio or an index of taxpaying capacity.

Plant Needs

The increase in birth rate during the war years further complicated the problem of providing adequate school plant facilities which was already serious because school plant construction had been practically discontinued during the war years. An average increase in enrollment in the public schools of at least three-quarters of a million students a year for each of the next several years is expected. Because of the accumulative effect of births on school enrollments, attendance will continue to increase at least until 1958. To provide for this increased enrollment will require approximately 250,000 classrooms during the next 10 years. Another 150,000 or 160,000 classrooms will be required to replace obsolete facilities and probably another 40,000 for kindergarten and junior college pupils.

While some local school systems have begun systematic studies to determine plant needs and costs, many systems still do not realize the seriousness of the problem and have not developed any adequate plans for working out a solution. Few States have faced the problem realistically. Only a few have carried out systematic State-wide studies to determine where permanent school centers should be located, what buildings should be provided, and what plans should be developed to finance the needed school plant construction.

Because of the great variation in construction costs since 1930, dollar volume of capital outlay has little meaning unless it is related to schoolhousing space provided by the investment. Results from preliminary studies, and calculations based on enrollment increases, educational program expansion, and emergency replacements indicate that it will require a capital outlay investment of at least $10 billion within the next 10 years to enlarge and improve physical plant facilities for public elementary and secondary schools. (See chart 6.)

Miscellaneous Developments

Three groups carried on cooperative studies during the past year. These include the Southern States Work-Conference on Educational

Problems, the Central States Conference, and the New England School Development Council. These studies represent efforts by schools and by State school systems in various parts of the country to coordinate their attack on common educational problems.

The officials in many States now realize that State laws and restrictions have placed such serious limitations on local tax levies for school purposes that local initiative and responsibility have been seriously handicapped. Some States are working to remedy this situation.

Consultative services were rendered by Office staff members on problems of State and local unit organization, school plant planning and management, school finance, and pupil transportation, to State departments of education, workshops of State universities, State school boards associations, and local school administrative units in 22 of the 48 States.

The staff also prepared for publication 6 articles on educational legislation, 24 articles on educational school plant planning and management; the following Office bulletins and circulars: "Educational Leadership in Action", "Selected Bibliography on School Finance" (Bulletin 1949, No. 14), "Records and Reports for Pupil Transportation" (Special Series No. 2), "State School Plant Assistance," "Bibliography on School Plant Management," "Improving School Custodial Service" (Bulletin 1949, No. 13), and Parts I and II of the "Educational Directory, 1948–49"; and for outside publication: Three chapters of American Association of School Administrators yearbook on "American School Buildings"; five chapters for "Guide for Planning School Plants" by the National Council on Schoolhouse Construction; chapters on pupil transportation for State educational surveys in Indiana and New Mexico; and a survey report for the Arizona Advisory Council on Education, on the structure, organization, and services of the State educational agency entitled "Improving Education in Arizona."

The Office also worked with State education staff members and with civic groups in analyzing programs of legislation and finance for the education of exceptional children and youth.

PUPIL PERSONNEL SERVICES

Particularly significant in pupil personnel services was the issuance in April 1949 of a manual on "Counselor Preparation" which was prepared jointly by the following organizations: American College Personnel Association, American Psychological Association, National Rehabilitation Association, National Vocational Guidance Association, Office of Education, National Association of Guidance Supervisors, U. S. Employment Service, and Veterans' Administration.

This is the first time in the history of the guidance movement that a joint enterprise on such a large scale has been completed. It is felt that the manual will be especially valuable in defining areas of training and qualifications basic to developing effective counselors.

Supervised work experience for pupils in areas of training not already covered by federally supported vocational programs was recognized as having definite educational value when properly supervised and integrated into the instructional program.

The relation of guidance services to the rest of the educational program was a topic of increasing concern. Books such as "Education in a Divided World," by Dr. Conant, President of Harvard, and "Education for all American Children," by the Educational Policies Commission, and many lay articles emphasized this point. Guidance services are a central theme of the Life Adjustment Education program (described elsewhere in this report); and texts on elementary and secondary education have more and more employed guidance techniques to relate teaching to the characteristics and needs of individual pupils. These emphases have in turn pointed to the necessity for a conception of guidance as a coordinated service if it is to do all that is expected of it.

International interest in guidance services is growing. Foreign visitors, including an official delegation of German educators, included guidance work as an object of investigation. Calls for field help in Brazil, the Philippines, and other countries were received. UNESCO has expressed an interest in adding this kind of service to its program. The International Labor Organization adopted a recommendation on vocational guidance for the benefit of its 61 member nations.

Another trend has been toward raising standards of practitioners and protecting the public from unethical practices. Notable progress was made by the Ethical Practices Committee of the National Vocational Guidance Association. Certain other professional organizations are experimenting with qualification requirements. Public employment agencies are resorting more and more to certificating practices. In May, the National Vocational Guidance Association published its first approved list of guidance services under a group of minimum standards of the Ethical Practices Committee.

With the assistance of Office staff, several groups made efforts to define the counselor's duties in terms of competencies and the training required to obtain these competencies. Resulting from these efforts, a report of the National Vocational Guidance Association and two of a series of eight reports from the National Association of Guidance Supervisors were published. The American Psychological Association and Counsel of Guidance and Personnel Associations did preliminary work on similar reports.

Two studies, one referring to summer sessions and the other to regular sessions, were published by the Office to describe work being offered in counselor training institutions. Many States employed new counselor training staffs, often using Federal funds in part, and the new offerings embodied the developing theories. The total effect is a distinct advance in the degree of professional competency expected of guidance counselors.

Evaluative Criteria, Form B, and a manual of directions, were published during the year, a joint effort of State officials and Office of Education staff members. Guidance programs in many schools were evaluated by this instrument. Meanwhile, the Cooperative Study of Secondary School Standards completed a tentative form of another evaluation tool. The trend is toward measuring guidance services by standard criteria, with emphasis on the stimulation rather than on the grading of provisions. The quantity of services reported in another study indicated that the number of schools having counselors had increased nearly 100 percent in the past 10 years.

Both national and State activities related to the extension of social work education brought about joint planning and studies by a number of professional organizations and Government agencies during the year. The status of visiting teacher services in the public schools, accreditation of schools, and the certification requirements for school social workers present pressing problems which educators must solve in the development of these services. The Office began a national survey to get information on the extent to which these services are available in the schools.

A statistical report recently issued by the Office indicates that in 1945–46 only about one-sixth of the secondary schools in the United States claimed to provide counseling services to pupils. Fifty-seven percent of the 4-year high schools employed a staff of six or fewer teachers. In schools of this size it is difficult to employ full-time counselors. This fact has pointed up the need for more participation by teachers and administrators in counseling. To meet this need during the past year, more emphasis was placed on promoting in-service training of staff members in child study techniques.

Programs of Instruction

GENERAL EDUCATION

Individual Pupil Growth

The child-development approach to elementary education centers attention upon individual guidance as a basis of instruction. Among

the many evidences that child development is being accepted as a basic approach to instruction are the following:

1. A mounting volume of scientific literature and accounts of successful school practices have centered attention upon the influences affecting children's attitudes and social behaviors.

2. There is increasing cooperation between home and school in the continuous protection of children's physical health and in the guidance of children's social behaviors and learnings.

3. Adjustments are being made in the school building, its equipment, and the outdoor play areas to aid both learning and social cooperation.

4. Continuous appraisal and adjustment of the school curriculum are being made to improve the experiences and guidance services of all children, both normal and exceptional, and to make possible more cooperative relationships between parents and teachers.

5. Such extended community facilities as children's libraries and museums, supervised play centers, and summer camps are providing new opportunities for children's development.

6. There has been a rapid growth of specialized services for exceptional children and youth.

With the increased emphasis on the child-development approach to curriculum problems, teachers carry a heavy responsibility for planning children's school experiences to meet individual pupils' needs. How is the course of study different because of such emphasis? What happens to "subjects" such as arithmetic, geography, and spelling? How can teachers and parents measure children's growth? To answer these and similar questions, the Office of Education obtained accounts from school experience and published "The Place of Subjects in the Curriculum" (Bulletin 1949, No. 12).

To emphasize the school's central purpose of promoting children's growth and development, the Third Conference of Leaders in Elementary Education agreed on a resolution calling on all the constituent associations to promote the widest possible understanding of this point of view.

Almost without exception, studies of what parents want for their children bring out their belief in the school's responsibility for broad social, physical, and intellectual growth. To say simply to parents of prospective students what the school's aims are, the Office published "Preparing Your Child For School" (Pamphlet No. 108). To help parents and schools work together in analyzing, recording, and reporting children's growth in school enterprises, the Office analyzed school systems' current types of report cards, and made recommendations based on the analysis in an Education Brief called "Periodic Reports of Children's Progress."

Life Adjustment Education

During 1948–49 there were many evidences of a widespread desire to improve the high-school curriculum in order to serve all American youth. A group of distinguished lay leaders formed a National Citizens Commission for the Public Schools. Members of the Commission did not state a special concern for any particular aspect of public-school activities, but especially pertinent to secondary schools were Chairman Roy E. Larsen's comments: "We must all decide what results we want from our public schools, and then we must begin at once to take the necessary steps to obtain them."

There was emphasis upon the provision of consultant services for schools as illustrated by extension divisions of State universities and teacher-training institutions, the Horace Mann-Lincoln Institute of School Experimentation at Teachers College, Columbia University, and the formation of the Joint Council of Economic Education at New York University. The Committee on Human Development of the University of Chicago reported broad-gauge research studies focused upon character in adolescents and upon the impact of social classes on adolescents.

Financed by the William Volker Charities Fund, Inc., the Citizenship Education Study in Detroit, Mich., published materials helpful to teachers. Supported by the National Better Business Bureau, the Consumer Education Study completed a series of bulletins, begun in 1942, for high-school pupils and teachers. These publications were designed to develop more discriminating consumers, but their preparation provided also an excellent example of harmonious and effective cooperation between education and lay citizens.

With many different approaches State departments of education encouraged the improving of the high-school curriculum. In Pennsylvania, committees of teachers gathered effective practices from the schools of the State and published them under the direction of the department of public instruction in a manual called "Educating for Citizenship." In the State of Washington, a bulletin entitled "Life Adjustment Education" was similarly prepared. In Illinois, 32 lay and professional organizations cooperated with the State department of education in sponsoring a State-wide revision of the high-school curriculum. In Michigan, the cooperative agreement between secondary schools and colleges was extended and many high schools pioneered in education for family living. In Maryland, there was a vigorous renewal of the State-wide effort to improve general education in junior high schools. Characteristic of many State education department activities was an effort to secure the participation of lay citizens in setting up educational goals.

In July 1948 the Office of Education directed a conference on Life Adjustment Education attended by leaders from Indiana and six adjoining States, at Indiana University, and in October 1948 a conference for State and local leaders in Washington, D. C. In April 1949 the Commission on Life Adjustment Education for Youth, which is an advisory body to the Office, held a one-day conference in Washington attended by representatives of national lay organizations.

Chief State school officers and directors of vocational education were invited to set up State committees to stimulate Life Adjustment Education. The Office compiled suggestions for State committees in a circular entitled "Getting Programs of Life Adjustment Education Under Way," and suggestions for local school staffs in a circular called "Developing Life Adjustment Education in a Local School."

With the cooperation of the American Technical Society, a nonprofit publishing company, wide distribution was given to two pamphlets prepared by members of the Office staff: "High school—What's In It For Me?" and "A Primer of Life Adjustment Education." Many States and local educational agencies held conferences and prepared Life Adjustment publications of their own. At the close of the year, life adjustment committees had been appointed in 12 States, and 3 of them had selected a few schools to cooperate in developing appropriate programs for all youth

At their April 1949 meeting, members of the Commission on Life Adjustment Education for Youth agreed that if, in the promotion of their program, they should be limited to a single point of attack, their emphasis would be upon a continuing study of the pupil with the supporting guidance services. Other emphases which they considered of great importance were upon maintaining and upgrading skill in the tool subjects, utilizing the industrial and practical arts, encouraging supervised work experience, educating the citizen of and for a free society, developing intelligent consumers, and improving home and family living.

The Office made progress in the study of characteristics of youth. Field work consisted of planning and carrying out the measurement and evaluation of a group of 14-year-olds and a group of 17-year-olds in cooperation with the School of Education of Indiana University. One aspect of this general project resulted in the publication of a bulletin, "Intellectual Abilities in the Adolescent Period" (Bulletin 1948, No. 6).

In cooperation with Delta Pi Epsilon, a graduate research fraternity in business education, the Office made a study of the business situations to which youth must adjust satisfactorily if they are to avoid making poor judgments and unwise economic and business decisions.

College Programs of General Education

Interest in programs of general education at the college level continued to be high. An increased time allotment for general education was advocated by those interested in certain of the professional fields and also in preprofessional curriculums such as those for medicine and law. The engineering profession put increasing emphasis on the broadening of engineering education, on the inclusion of more general education and on more work in the humanistic and social studies. In some cases this is being accomplished by increasing the curriculum to 5 years and in others by replacing some of the technical and professional subjects with humanistic-social subjects.

The Journal of General Education established by Earl J. McGrath, then dean at the University of Iowa, is continuing publication under the sponsorship of the University of Chicago. The series of volumes dealing with the relation of the various subject-matter fields to general education is rapidly approaching the completion of its publication schedule. The faculty members of many colleges have been revising their curriculums to make better provision for general education.

INSTRUCTION IN SPECIAL AREAS

Social Sciences

In the social sciences there was an apparent trend toward larger and broader units of instruction at all grade levels, from elementary schools through universities. There seemed to be an increased emphasis on pupil participation, for example, in pupil-teacher planning, student government, and forum activities, to give opportunities for social development. Forward-looking elementary schools continued to develop social studies units which touch on the direct experience and interest of children; through activities designed to help them understand the problems in the unit, pupils acquire learnings in language arts, music, science, and other school subjects.

Junior high schools in increasing numbers experimented with the core curriculum. In this curriculum a maximum use is made of problems and experiences; the language arts, fine arts, physical sciences, and social sciences are taught in situations which add meaning to the experience or help in solving a problem. In senior high school curriculums a few schools developed general education programs drawing heavily on the social sciences and language arts, and a larger number of schools broadened their traditional courses in civics, history, and social problems to include social science materials from related fields.

Colleges and universities continued to experiment with broader approaches to the social sciences as part of a general education program. Departmental social science groupings replaced traditional departments in four-fifths of the teachers colleges; the same trend was observed in one-third of the land-grant colleges and State universities.

Education for intelligent citizenship continued to be recognized as a major goal for social science instruction in the schools. A better understanding of America's role in world affairs was a point of special emphasis, as schools attempted to carry out the suggestions made in "Education for International Understanding in American Schools." [1] The Educational Policies Commission issued "American Education and International Tensions" [2] which called for development of an understanding of the principles and practices of totalitarianism, communist and fascist, as ways of life which differ from democracy.

Emphasis on economic education promises to be increased in schools and colleges as the result of (1) investigations which were being conducted by the American Economic Association and the Catholic Economic Association; and (2) the formation of a national organization, the Joint Council on Economic Education, which sponsored three workshops on economic education.

Stimulated in large part by recent publications, new emphasis was given to conservation education as a basis for peace and improved living standards for all peoples. Intercultural education tended to become international in its emphasis on human rights for all people of all races, religions, and cultures. The study of atomic energy, its development and control, entered the school curriculum. These national and global problems did not, however, preclude interest in other problems closer to home: there was also increased interest in the social sciences in education for home and family living.

The reception given to Stuart Chase's "The Proper Study of Mankind," a notable effort to explain and relate the social sciences to contemporary social problems, indicated a general school interest in the role of the social sciences in today's world.

The Office of Education established a social science section in the Division of Higher Education during the fiscal year 1949.

Specialists in the social sciences worked to improve instruction in citizenship, world understanding, atomic energy, and the teaching of Government, economics, history and geography, consumer education, and conservation. The Office staff approached these, not as isolated subjects, but as critical points to be planned for within the total social studies curriculum.

[1] National Education Association, 1948.
[2] National Education Association, 1949.

Social science specialists worked with teachers in workshops, and at conferences at the University of Minnesota, New York University, Syracuse University, the University of West Virginia, the University of Nebraska, the University of Washington, and Middlebury College.

Several of the publications prepared by specialists for the social sciences are concerned with the whole social studies program. A descriptive analysis of courses of study in elementary social studies was prepared along with a statement of trends and recommendations, "Social Studies Courses of Study," (Selected References Series, No. 17, April 1949, Division of Elementary Education.) Four annotated bibliographies of professional materials for social studies teachers of the various grade levels were prepared: "Teaching the Social Studies," Selected References Series, No. 18, May 1949, Division of Elementary Education; "Selected Sources of Current Teaching Materials for Social Studies Classes," "Teaching the Social Studies, A Bibliography of Periodical Materials," and "A Selected Professional Library for the Social Studies Teacher," Circular Nos. 301, 302, 303, March 1949, Social Studies Series, Division of Secondary Education.

The Office of Education placed strong emphasis on citizenship education through a program known as Zeal for American Democracy. Activities of the Office were coordinated by an Interdivisional Committee.

In February 1949, the Office sponsored a conference for representatives of the learned and professional organizations to consider the establishment of work conferences for college instructors of teachers of social science. The purpose of the conferences was to focus the attention of institutions preparing teachers on the kinds of skills and information prospective teachers need to educate youth for American citizenship. The conferees felt this step to be of so great importance that they went on record as endorsing it with high priority.

At least 14 States developed programs, for which the Office extended all help requested and available. Sample State programs follow:

Pennsylvania produced a new manual, "Education for Citizenship," which contains a list of recommended practices in the teaching of democracy which were gathered from the schools of the Commonwealth.

Nevada established community committees, with high-school students included, to promote local programs of Zeal for American Democracy.

North and South Dakota promoted the "Young Citizens League" which constitutes a vehicle for teaching American ideals and supplies apparatus for putting representative government into practice in everyday school activities.

The Office of Education cooperated with three national nongovern-

mental organizations in conducting the second annual Voice of America contest. 250,000 high-school students throughout the land competed in delivering original essays on the topic, "I speak for Democracy." Recordings of winning talks are lent by the Radio Script and Transcription Exchange Service of the Office.

Publications of the Office particularly concerned with citizenship education were:

Pointers—a news letter and a supplement to keep school people aware of developments in citizenship education programs throughout the Nation.

How Democratic Is Your School?—a pamphlet containing a discussion of the principles of American democracy and checklists on democratic practices for secondary school teachers and students.

With Liberty and Justice for All—a bulletin containing a series of units describing how democratic government in this country came about, of practical value for the teacher of upper elementary grades. (Bulletin 1948, No. 15).

Education for Freedom—a bulletin summarizing State requirements for instruction concerning the Constitution, American history, and matters relating to American freedom. (Bulletin 1948, No. 11).

What is Democracy? America's Schools Are Writing the Definition—a reprint by the Office of a series of articles from the *Christian Science Monitor*, which describe what schools are doing throughout the Nation to develop better citizens.

Specialists for the social sciences took a major part in projects of professional and learned organizations whose work affects the social science field. The organizations include: American Economic Association, American Political Science Association, National Council for the Social Studies, National Council of Geography Teachers, Association for Supervision and Curriculum Development, American Education Fellowship, Committee on International Relations of the National Education Association, and Joint Council on Economic Education.

A staff member represented the Office on the steering committee which organized the Estes Park (Colo.) conference on the role of higher education in international understanding, and the Brookings Institution seminar on teaching of international relations at Lake Forest (Ill.).

A sampling study dealing with offerings and registrations in the social studies during the school year 1946–47 makes possible the determination of trends in this field since 1933–34. This study reveals an increased emphasis on United States history. It also shows that United States history courses almost always provide for instruction in current affairs and in American government and the Constitution. Substantially all students, both in junior and in senior high school,

are enrolled in courses in United States history, but the range in hours of instruction devoted to this subject is wide.

Another study, "Requirements and High School Students' Programs," concerned with high-school graduation requirements and the actual 4-year programs of representative students from schools having good programs in civic education, showed that although only 11 States required 3 or more units—i. e., years of instruction in social studies, the graduates, whether in a college-preparatory, vocational, or general program, tended to average about 3 units in social studies, 1 of which was in United Stats history.

Members of the staff began studies, designed to improve the teaching of Government economics, history, and geography, at the request of the American Political Science Association, the American Economic Association, and the Catholic Economic Association. The Office is cooperating with the National Council for the Social Studies on another study.

Home and Family Life Education

The Office of Education made studies with the aid of staff members in 14 colleges to determine the emphasis now being given to home and family life education as part of the general education program for all home economics students and for other college students. Plans were made to strengthen the programs in these colleges so that they will contribute more effectively to the kind of wholesome family life which is basic to successful living in a democracy.

At three of the four regional conferences for home economics supervisors and teacher trainers called by the Office, committees worked on the problem of increasing the contribution of home economics to education for home and family life for all high-school pupils and for adults. At the fourth regional conference, supervisors and teacher trainers worked on ways of evaluating progress toward some of the objectives of education for home and family living. Special assistance was also given to one State conference of city supervisors and teachers on the teaching of family relations.

Conferences were arranged in the southern and southwestern sections of the country for college teachers of family relations. Course objectives, essential concepts, experiences which might help college students understand themselves and develop in their family, social, and community relationships, and the teacher's role in family relations classes were considered by these groups. Reports of the conferences and a "Progress Report of a Cooperative Study of the Teaching of Family Relations on the College Level" were completed.

The Office also gave special attention to methods by which home

economics teachers and high-school, college, and adult students could acquire a greater understanding of the ways children develop and the factors in home and family life which promote wholesome growth. A national conference of State and city supervisors of home economics, teacher trainers, college teachers of child development, and high-school homemaking teachers was called. They evaluated present practices in high schools and colleges and made suggestions for strengthening the teaching of child development in the high-school homemaking program.

To meet the many requests from lay organizations and schools for information on how to improve parent-teacher relationships, the Office published "Working With Parents" (Bulletin 1948, No. 7).

Science and Related Subjects

SCIENCE

At their invitation, the Office assisted a few school systems in reorganizing science courses and in planning desirable alternatives to the science courses long accepted as useful primarily to students who plan to complete college work. Consultative help was given to colleges and universities, where workshops and institutes were arranged on problems of science teaching. To aid in such work the Office prepared a bibliography of references on science education. The Office assisted schools to make science a part of the elementary school instruction, to help science teachers so to modify course content and methods of teaching that the needs of all youth may be served, and to counsel with college science teachers on problems related to the development of science courses especially suited to purposes of general education.

In elementary education, emphasis was placed on the importance of relating the experiences of children in elementary science to the total elementary school program. The Office cooperated with more than 100 teacher-training institutions on the improvement of teacher training in science for elementary school teachers. The Office also assisted in-service education programs in 19 major cities, 10 counties, 6 State departments, 7 colleges, and at meetings of 14 State or national professional teachers' groups.

A bulletin entitled "Teaching Science in Rural and Small Town Schools" (Bulletin 1949, No. 5) was prepared to help teachers in rural communities.

The Office conducted studies and cooperated in the preparation of the reports of studies conducted jointly by the Office of Education and by national organizations, as follows:

(1) Office of Education—"Inquiry Into the Teaching of Science, Grades 7–12 (1947–48)."

(2) American Association for Colleges of Teacher Education—"Inquiry into Science Offerings and Facilities in Teachers Colleges."
(3) National Association for Research in Science Teaching—"Needed Research in Problem Solving."

CONSERVATION

To coordinate the planning of projects related to conservation education, an Interdivisional Committee on Conservation Education was established in the Office.

The Committee assisted the U. S. Forest Service, the Junior Red Cross, and other agencies, in the evaluation of motion pictures, pamphlets, teaching units, and other materials prepared for classroom use, and suggested pupil projects and activities which could be used to develop fundamental concepts and personal responsibilities for conservation at all levels of the schools.

With assistance from the Office, the National Committee on Policies in Conservation Education prepared a selected bibliography on conservation for use by pupils and teachers at various grade levels. This bibliography brings to the attention of teachers and supervisors references not only on the more limited aspects of conservation, such as animal life, plant life including forestry, water, minerals, and soil, but also on the broad problems of conservation.

AVIATION

To encourage teachers to utilize surplus aviation war equipment for classroom demonstration, the Office produced a "Bibliography of Articles Concerning Conversion of War Surplus Equipment for Civilian and School Use."

MATHEMATICS

The Office made a résumé and analysis of recent elementary courses of study in arithmetic, together with suggested references for teachers.

Atomic Energy

The Interdivisional Committee on the Educational Implications of Atomic Energy was created in the Office of Education to help meet the need for educational services which will bring to the public an awareness of the problems arising from the development of atomic energy, and an understanding of their significance which will assist in the formulation and support of sound national policies. In its work the committee maintained close liaison with the U. S. Atomic Energy Commission.

The Committee's functions are: (1) Coordination of the selection and collation of data on school and college courses involving atomic

energy developments; (2) service as a clearing house for material related to the educational implications of atomic energy developments; (3) cooperation with other educational groups and civic-minded organizations in planning, initiating, and, where appropriate, directing conferences, workshops, and exhibits; (4) cooperation with appropriate agencies to develop a public awareness and understanding of the potentialities of atomic energy for our national welfare and security and for our personal health and happiness.

A survey of colleges and universities to determine the nature and extent of their activities in developing instruction about atomic energy and its significance revealed that relatively few had made any significant curricular changes since the advent of the atomic era. Of those that had, it was found that the technological schools had continued the prewar trend in increasing the social science requirements in their programs, while the liberal arts colleges had increased their requirements in the physical sciences. The findings of this survey were summarized in a special issue of HIGHER EDUCATION devoted to atomic energy developments.

A similar survey among secondary schools indicated that only in a few school systems had careful attention been given to the educational implications of atomic energy. Some physical science teachers had incorporated instruction relating to atomic energy in their courses, but since these courses reached only a minority of the pupils, the broad educational needs were not well served. The survey revealed teachers' needs for information about the opportunities opened up by atomic energy developments—industrial, agricultural, medical, research, and vocational—and for suggestions for coordinated programs, techniques, activities, and instructional materials. Many such suggestions were incorporated in a supplement to the March 1949 issue of SCHOOL LIFE entitled "Atomic Energy Here to Stay."

Five bibliographies on atomic energy and its educational implications were prepared. These are: (1) A Bibliography of Bibliographies on Atomic Energy (for teachers, students, and adult discussion groups); (2) Introductory Bibliography on Atomic Energy (for teachers, students, and adult discussion groups); (3) Teaching Aids in Atomic Energy (bibliography for teachers); (4) Inexpensive Books and Pamphlets on Atomic Energy; (5) An Annotated Bibliography on Atomic Energy for Teachers and Students.

The Committee revised three tests for evaluating the results of Atomic energy education in secondary schools. The tests were originally prepared by a Committee of the College of Education, University of Illinois. The revised versions were sent to chief State school officers for such distribution as they care to make, and to State educational journals for possible publication.

Health and Physical Education

The Office of Education directed its efforts toward relating all aspects of school health and physical education to the growth and developmental needs of children in a total educational program. Particularly significant was a series of conferences held in five Western States on health and physical education in the elementary schools. In all, 85 conferences, involving school administrators, supervisors, teachers, specialists in health and physical education, and public health personnel, were held. These conferences stressed local and State problems and programs.

"Playground Equipment That Helps Children Grow," Education Brief #16, was prepared. This publication stressed the need for developmental equipment and gave suggestions for selecting, constructing, placing, and maintaining equipment.

Several studies were carried on in cooperation with national organizations. Among the subjects were: Interscholastic athletics for children of elementary and junior high school age, girls' athletic programs, and the status of health and physical education in elementary schools.

The Office gave special attention to the improvement of teaching in health education and to a determination of the status of programs in health instruction in the secondary schools. A report on "Institutions Offering Professional Education in Health Education, Physical Education and Recreation" was completed. The report of the Regional Demonstration Workshop on Teacher Education for Health in Secondary Schools, sponsored by the Office, was issued.

The first regional conference among Negro colleges for teachers of health education, sponsored by the Office of Education, was held March 1949, at Virginia State College, Petersburg, Virginia. A conference on camping and outdoor education was called by the Office to consider the national significance of such programs to education.

The Office published a revised classroom height-weight chart and prepared two bulletins on teacher education for health: "Teacher Education for the Improvement of School Health Programs" (Bulletin 1948, No. 16) and "Report of the Regional Demonstration Workshop on Teacher Education for Health in Secondary Schools."

The Office sponsored, with the Public Health Service and the Children's Bureau, a conference on Mental Hygiene in Schools and Teacher-Education Institutions. Fourteen consultants attended the conference; their recommendations on needs and projects to be carried out should result in the development of a broader program for the Federal Security Agency in the field of mental health.

Additional study was made in the use of the Wetzel Grid—a method

of graphing the growth of a child—as a means of pointing out areas in the country where children have health problems.

In many schools of the country the instructional phases of health education are the direct responsibility of the science teachers. The Office therefore worked to secure a functional integration of units on personal and community health into the curriculums in general science and biology.

Library Services

Libraries are essential in programs of instruction and self-education for children, youth, and adults. In the library field, a number of major developments took place during the 1949 fiscal year. One was the marked progress in sound planning to achieve adequate library service in schools, colleges, and communities. As part of their plans to improve elementary and secondary school libraries, State supervisors and other educators worked on the evaluation of these facilities and their relation to the curriculum.

Rural sociologists and librarians organized the Northern Great Plains Library Planning Council to work for adequate library service in that large, but sparsely populated, region. Regional planning was also evidenced in the creation of the Midwest Interlibrary Corporation, a cooperative undertaking of libraries for the acquisition and economical storage of research materials.

Much attention was paid to library legislation, a necessary step in any long-range planning. Interested American Library Association groups conducted a Library Legislation Institute, participated in by public administrators, political scientists, economists, and librarians. Organized efforts by lay groups and librarians were rewarded with the passage of legislation which created a State library agency in the sole remaining State without one.

Another major development during the year was the enlarging of the conception of what constitutes "library materials." In increasing numbers, public libraries, college libraries, and school libraries, as agencies for the dissemination of information, continued the trend toward the use of all media of communication, not the printed word alone.

Another major development concerned the recruiting and training of the library staff. To attract suitable persons to the profession, many State library associations, individual libraries, and library schools put on intensive campaigns to interest high-school and college students in library work as a career. Notable changes were also made in professional library training programs. Nearly two-thirds of the library schools moved towards placing instruction in library methods

on the undergraduate level and reserving for graduate study those courses in library science which prepare librarians for positions involving professional leadership and scholarship.

The Office of Education participated in many of the major library developments during 1948–49. Among the States assisted were: Alabama, Arkansas, Connecticut, Florida, Louisiana, Massachusetts, Mississippi, New Jersey, New York, Tennessee, and Washington. Aid was also given on the revision of the library portion of the Evaluative Criteria of the Cooperative Study.

The Office assisted in the planning for library extension and improvement not only by providing much basic data, but also by organizing and conducting a conference of State library agency officials and library training specialists. This work conference made recommendations regarding the standards to be applied to the operation of large administrative units of library service in areas now wholly lacking such service. It also formulated the guiding principles for the training of workers to serve in such areas.

For the use of college and school administrators, the current trends and problems in professional library education were analyzed and the results published in the Office periodical, Higher Education. This survey showed that library schools were in the process of revamping courses and curriculums in order to put the study of the scholarly and professional aspects of librarianship on a strictly graduate level.

Sound planning in the field of college and university libraries was aided by the completion of a Nation-wide survey for the academic year 1946–47. The facts on resources, services, and expenditures will furnish part of the basis for studying the adequacy of these libraries to support the instructional programs of their institutions. Another basic survey completed showed the trends from 1945 to 1948 in the resources, uses, and expenditures in public library systems of cities with populations of 100,000 or more.

Audio-Visual Aids

FILMS

Increased teacher interest in the use of visual methods and materials was probably the most significant development in visual education during the fiscal year 1949. Thousands of schools have purchased projectors and other equipment since the war, and with such equipment now available teachers sought help and guidance in its use. The Office of Education, for example, received more than 18,000 such inquiries in 1947–48 in contrast to only 5,000 during the preceding year.

This increased teacher interest was coupled with a healthy growth in teacher initiative and responsibility at the local school level with less and less reliance being placed on the visual education "experts." Visual aids became an accepted part of the school program and the concern of all teachers rather than that of visual education specialists only.

The Office published (1) a selected bibliography of motion pictures on democracy, (2) a summary of how to obtain the motion pictures and filmstrips of all Government agencies, and (3) a State-by-State directory of 897 16mm film libraries.

In an attempt to answer the much disputed question of whether schools have projection equipment, the Office conducted a survey of public secondary schools and found that more than 80 percent of them, rural and urban, had 16mm sound projectors.

Sales of Office of Education films increased slightly over the previous year. The Castle Films Division of United World Films Inc. continued to sell the films under a contract awarded by the Treasury Department. During the 7½ years since the first films were released, nearly 100,000 prints have been purchased by schools and colleges, industry, and other educational users. Since 1944, the Office has collected a royalty on film sales, and by June 30, 1949, a total of $234,580 had been returned to the U. S. Treasury.

TABLE 3.—*U. S. Government films sold under auspices of Office of Education*

Agency	Total	Number of—	
		Motion pictures	Filmstrips
Total	2,013	1,309	704
Office of Education	899	467	432
Department of the Navy	612	436	176
Department of Agriculture	150	150	----
Department of the Army	85	75	10
Department of the Air Force	71	41	30
Office of Inter-American Affairs	68	68	----
Coast Guard	59	13	46
Office of War Information:			
Overseas Branch	10	10	----
Domestic Branch	32	32	----
Public Health Service	12	8	4
Civil Aeronautics Administration	7	1	6
Fish and Wildlife Service	4	4	----
Department of State	2	2	----
Office of Small Business	1	1	----
Housing and Home Finance Agency	1	1	----

Perhaps the outstanding visual education service performed by the Office during the 1949 fiscal year was its facilitating the release, for educational purposes, of the films of the Department of the Army, the Office of Inter-American Affairs, the Overseas Branch of the Office of War Information, the Department of State, and the United States

Coast Guard. At the end of the year, the Office of Education was handling 2,013 motion pictures and filmstrips of 15 different Government agencies.

The Office of Education, at the request of the Navy Department, is carrying on several evaluation projects in selected universities on the use of audio-visual training aids in Navy training programs; and at the request of the Public Health Service, is supervising the production of a motion picture on mental health. These professional services being rendered by the Office for other Government agencies were recognized and approved by the Hoover Commission.

RADIO

As a result of the effort to bring the advantages of instruction by radio to all schools, 44 new FM stations on the 88–92 megacycle band, set aside by the Federal Communications Commission for education, were added this year. Radio workshops and training courses in utilization invariably preceded the installation of these stations, which are located at universities, colleges, and in school systems in every section of the United States. State, county, and city directors of audio-visual education continued to establish new divisions of radio and television under competent direction in their school systems. A comprehensive study of "Educational Broadcasting in the United States," including television, was completed by the Office for UNESCO; it will be published as part of a larger volume describing such activities of all member nations.

Scripts, transcriptions, and printed teaching guides were distributed to schools and colleges for their use on a loan basis in cooperation with the Federal Radio Education Committee. Nearly 12,000 such scripts, and 4,000 transcribed programs, were lent for classroom use and for rebroadcast over educational stations; the latter represented an increase of 25 percent over the 1948 number. Distribution by the Office of new radio and television bibliographies, guides, and related publications reached the quarter-million mark, compelling evidence of the increased use of radio, recordings, and the new use of television for instructional purposes. It is estimated that more than 150,000 teachers are using radio and recordings in their daily work. They receive a regular service of the Frec Bulletin produced by the Office of Education.

Professional Education

In professional education, in addition to teacher education, activity was confined chiefly to the health professions, social work, and

engineering. In the last-named, effective cooperation was maintained with the American Society for Engineering Education through the activities of the Office specialist in engineering education, who has served during the year as a member of the Society's National Council, as chairman of the National Capital Area Section, and as a member of eight national committees.

An Office staff member directed a Nation-wide survey of social work education, covering historical development, present status, and needs, with respect to the selection, preparation, employment, and salaries of individual workers, and with respect to coordination among schools, professional accrediting organizations, and employment agencies.

The Office sponsored a study of premedical education for Negroes to discover reasons for the low level of achievement of Negro students on the Medical Aptitude Test and to suggest methods of improving educational programs so that Negro students will be admitted to medical schools in greater numbers.

The Associate Chief for Education in the Health Professions directed the activities of the Committee on Teaching, American Association of Dental Schools. This committee prepared a report on recruiting, preparing, and improving dental teachers. The committee also sponsored the preparation of a 44-page report on teaching orthodontics to undergraduate dental students.

The Associate Chief for Education in the Health Professions continued his participation in the Pharmaceutical Survey as assistant director in charge of curriculum studies.

Achievement of Veterans as Students

Studies of student achievement in many widely scattered colleges throughout the country have consistently shown that veterans have tended to excel nonveteran students in grade-point averages. Since the veterans comprise almost half the student body, their high scholastic attainment raised the quality level of work done by the entire student body. The testimony is almost universal that, as a result of veterans in their classes, professors now have the ablest and most diligent group of students they have ever taught. The investment the Federal Government has been making in financing the continued education of veterans is paying immediate dividends in the strengthening of the general level of student achievement in colleges and universities. It cannot be doubted that for the next 30 or 40 years the country will receive enormous dividends through the high quality of leadership of those veterans who have had their education financed by the Federal Government.

Groups With Special Instructional Problems

ADULT ILLITERATES

A recent Office of Education study indicated that probably less than one-eighth of the school systems in the Nation were conducting literacy education classes. Another study showed that the greatest shortage of suitable reading materials for adults was in the fields of citizenship, parent education, homemaking, and health. In an effort to meet part of this need, the Office project in literacy education completed its scheduled production of instructional materials for adults of low literacy levels. It was planned to have them published at low cost for general distribution. The published materials would comprise a packet consisting of four basic primers, four accompanying workbooks, one language workbook, one arithmetic workbook, one testing workbook, one teachers' guidebook entitled "Let's Help the Ten Million," and six supplementary pamphlet readers.

DISPLACED PERSONS

Approximately 50,000 displaced persons came to the United States during the year under the provisions of the Displaced Persons Act of 1948, which authorized the admission of 205,000 by June 30, 1950.

The proper resettlement of these displaced persons requires their knowledge of simple facts about the geography, history, and institutions of America, as well as an understanding of its institutions and customs. Moreover, they need help in making the psychological adjustment in their transfer from the status of displaced persons to that of potential American citizens, and in appreciating their obligations as well as opportunities.

At the request of the Displaced Persons Commission, the Office of Education assigned a staff member, for a period of 3 months, to make a report on an orientation program for displaced persons who are eligible for admission to the United States, and to make recommendations on the most effective methods for administering the proposed program.

EDUCATION OF NEGROES

Few, if any, subjects in education received more public attention during the year than the education of Negroes. This is partially a result of litigation aimed at bringing about equality of opportunity and of the widespread interest of Negroes and certain public officials in bringing public services more in line with democratic principles.

The activities of the Office of Education in this connection included the revival of the National Advisory Committee on the Education of Negroes; sponsorship of a work conference on special guidance

problems of Negroes; publication of a bulletin on the education of Negro leaders; and continuation of the project on literacy education begun in 1946.

An Office study of the technical instruction provided in agriculture in 20 Negro land-grant colleges has been under way for 2 years. The director of this study and a member of the staff of the Agricultural Education Service visited each of the colleges to determine the qualifications of the personnel employed, the suitability of laboratories and equipment for instruction, the nature of the instruction provided, the use made of the farm and its facilities, and the adequacy of the laboratory and reference material for instructional purposes.

EXCEPTIONAL CHILDREN AND YOUTH

The Office published studies of State legislation for education of exceptional children, enrollments in special schools and classes and instructional programs for hospitalized and for crippled children.

Interested nongovernmental agencies have both received and contributed service on specific projects. One of them—the National Society for Crippled Children and Adults, Inc., cooperated with the Office in publishing a report on teacher-education programs. Others, including the National Society for the Study of Education, the International Council for Exceptional Children, the American Association for Gifted Children, the American Epilepsy League, the National Foundation for Infantile Paralysis, and the National Tuberculosis Association have sought the help of Office of Education staff members, or have worked with the Office, in the preparation of publications.

Programs for Improving the Professional Status of Teachers

ELEMENTARY AND SECONDARY SCHOOLS

The three most significant developments in teacher education relate to supply of teachers, organizational efforts for the improvement of teacher education, and qualitative changes in the programs of teacher education.

Teacher Supply

The over-all supply of teachers increased in 1948–49. The supply of new teachers available for employment for the academic year 1949–50 will be greater than the number available in 1941. There

is imbalance, however, in relative numbers of elementary and secondary teachers that will be available. Whereas, in 1941, colleges and universities prepared 32,197 elementary teachers and 35,525 secondary teachers, in 1949 they prepared 24,908 elementary and 55,767 secondary teachers, including those, largely elementary, with less than 4 years' preparation.[1] Since in 1941 there was an ample supply of secondary teachers for such subjects as English and social studies, the supply of teachers for these subjects is greater than the comparison of 1949 and 1941 figures would suggest. The supply of elementary teachers, on the other hand, was not adequate in 1941, and the total number of 1949 graduates was only 77 percent of the number that were graduated in 1941. A favorable development, however, is that the new elementary teachers now being supplied by colleges have undergone longer periods of preparation than those in 1941. Each year fewer prospective teachers leave college with only 2 years of preparation, and a greater proportion are college graduates. This increase in the amount of initial preparation of elementary teachers is due in part to the raising of standards for certification.

Supply and demand in the college teacher field is fast becoming associated with supply and demand of elementary and secondary teachers; 12 percent of all new college faculty members in 1947–48 were recruited from secondary schools.[2] The percentages of faculty members, old and new, with bachelor's and master's degrees were 16 and 45, respectively. Thirty-four percent with the rank of instructor held bachelor's degrees and 54 percent held master's degrees. The college is, therefore, in competition with the high school for faculty members. Ordinarily, the master's degree would constitute a minimum requirement for college teaching. The facts that 69 percent of all new faculty members were at the instructor level, and that more than 60 percent of all college faculty members held master's or lower degrees indicate a shortage of adequately prepared, experienced teachers at the college level.

In 1947–48, 4,188 doctor's degrees were conferred. From a number of institutional studies and some national studies of recent years, it is clear that a majority of persons receiving doctorates will go into teaching. If 60 percent, or approximately 2,500 per year, should go into college teaching, that would hardly be enough for replacements. Latest information available in the Office of Education shows that about 190,000 college faculty members were employed in 1947–48. The annual turn-over would have to be only 1.3 percent for this supply of 2,500 per year to be adequate for replacements. More college

[1] Maul, Ray C. Teacher Supply and Demand in the United States. National Commission on Teacher Education and Professional Standards, National Education Association, 1949.

[2] Survey of Salaries and Occupational Attitudes of Faculty Personnel in Higher Education, 1947-48. Office of Education, Circular No. 254.

teachers will, therefore, have to be prepared if the colleges are to maintain faculties of the present size. To expand to the extent suggested by the President's Commission on Higher Education would require almost twice as many.

The teacher supply situation in 1948–49 may be summarized as follows:

(1) Supply met and exceeded demand in most—but not all—secondary school subjects the country over. The fact, however, that many of these persons have barely met minimum subject-matter and professional standards indicates that there was not yet an oversupply of well-qualified secondary teachers.

(2) The supply of elementary teachers, while improving, still was below the 1941 number by about 23 percent.

(3) There was a shortage of well-prepared college teachers for current enrollments. This statement is based on the assumption that a master's degree constitutes the minimum preparation acceptable for college teaching.

(4) Changes in the economic situation eased the competition for teachers all along the line from the elementary schools to colleges. Students are shifting in significant numbers from engineering, business administration, and strictly liberal arts courses to cirriculums leading to teaching. The greatest easement, however, was at the secondary school, where it is needed less than at the elementary school and college levels. The major problem, therefore, is to correct the imbalance between the supply of elementary and secondary school teachers. Based on a 4-year training period as a standard, the data show that there were almost 4 times as many secondary as elementary teachers prepared in 1949.

(5) The number of emergency teaching permits probably declined only slightly from the approximate 100,000 of 1947–48. This can happen despite an over-all increase in the number of teachers because most emergency permits are held by elementary and rural teachers; it is among these groups that shortages are still acute.

Organizational Efforts in Teacher Education

The second major development was in organizational efforts toward the improvement of teacher education. Interested organizations are becoming more closely knit and as a result are more potent forces for the improvement of teacher education. The Council on Cooperation in Teacher Education is using its influence to bring the highly segmented groups interested in teacher education together on problems of common concern. As an example of unification, the American Association of Teachers Colleges, the National Association of Colleges

and Departments of Education, and the National Association of Teacher Education Institutions in Metropolitan Districts merged in February 1948 into an organization called the American Association of Colleges for Teacher Education. This new association will carry on more extensive research and studies than was possible with each working separately.

The National Commission on Teacher Education and Professional Standards of the National Education Association expanded its services. Most of the States now have State commissions which are branches of the National Commission. This development is significant because it represents a fresh interest by the profession in improving teacher education programs. The National Commission in cooperation with the various State commissions held several regional conferences that have made large numbers of persons aware of some of the basic problems in teacher education.

Some 20 States have organized councils on teacher education. These councils generally represent a cross-section of all interested groups in a State. The State education association, the State department of education, and the teacher-education institutions are always represented; and the association of school boards and the State parent-teacher association are often represented. These State councils are generally extra-legal organizations that make recommendations to the State board of education through the State superintendent of public instruction on such problems as teacher recruitment and selection, teacher certification, and in-service teacher education.

Qualitative Changes in Teacher Education

Less obvious than supply and demand or organizational changes, but probably as significant, was a subtle qualitative change in teacher education. This change is hard to document, yet those most sensitive to developments in this area know that it has been taking place. Some of the evidences follow: Approximately 20 State departments of education are trying to improve their standards for approving colleges that propose to educate teachers; a significant number of colleges are making qualitative changes in their pre-service teacher-education programs; and some universities, notably Illinois, Nebraska, Syracuse, Texas, Georgia, Delaware, and Maryland, are improving their services to teachers on the job. Efforts to provide more field laboratory experience for prospective teachers are also becoming common enough to indicate a trend.

The major points to which attention needs now to be directed for further improvements are: (1) The basis for teacher certification;

(2) the internal organization of institutions preparing teachers; and (3) plans and procedures for the in-service education of teachers.

Most certificates to teach are issued by State departments of education. The regulations which the States set for the approval of institutions to prepare teachers and for certification of persons after they are prepared control to a large extent the supply of teachers generally, as well as the balance between the number of elementary and secondary school teachers that are prepared. At present the most common basis for certification is a transcript of credits from an accredited institution. If the transcript shows that a student has completed certain courses, the appropriate certificate is issued. This practice is open to abuse by institutions with only a minor interest in teacher education.

Another problem is the internal organization of institutions that prepare teachers. The President's Commission on Higher Education called attention to this problem. Many institutions are so organized that the intelligence of those competent in teacher education cannot be brought to bear on the improvement of the programs. Responsibility for policy formulation and program planning for teacher education is often widely scattered.

A third problem relates to the in-service education of teachers. With barely 60 percent of the elementary and secondary teachers in America holding college degrees and with changing conditions making new demands on teachers, it is imperative that those now in service develop new insights and skills. Furthermore, the positive influences of improved pre-service teacher-education programs will be largely negated unless teachers now in service are receptive to new developments in education. Teachers, administrators, college faculties, and local boards of education will have to find their appropriate roles in this in-service program.

Progress on In-Service Education

The emerging oversupply of teachers for secondary schools gives employing officers more choice in the selection of teachers. This selectivity in employment permits school and college administrators to exert a significant influence on improvement in the work of both incoming teachers and teachers with experience. Consequently, one finds a continuing increase in (1) the number and variety of workshops attended by employed teachers during the school year and summers; (2) the cooperative committee studies and activities carried on under the auspices of State and local school systems; (3) the supervisory personnel employed in the offices of county superintendents of schools; and (4) the emphasis by professional organizations on studies dealing with improvement of teachers after they are on the job.

During the past fiscal year the Association for Supervision and Curriculum Development issued its yearbook with the title, "Toward Better Teaching," a special issue of *Educational Leadership* dealing with improvement of the work of employed teachers was published, and the American Association of School Administrators was considering the preparation of a yearbook devoted to in-service education of teachers.

Specialists in the Office of Education contributed to the improvement of in-service education of teachers through the 2-week work conference for members of State departments of education, held in the spring of 1949. They also took part in more than 30 regional conferences for teachers in health and physical education, social studies, science and aviation, and industrial arts; and worked closely with educational leaders responsible for the development of teacher-education programs and curricular programs in the schools.

For all of the areas mentioned, specialists provided bibliographies and other publications for teachers. An example of the latter is "Report of the Regional Demonstration Workshop on Teacher Education for Health in Secondary Schools." This 2-week workshop was attended by 65 participants from Arizona, New Mexico, Oklahoma, and Texas, and was sponsored jointly by the Office, the American Cancer Society, and the University of New Mexico.

The Office had in progress a study on in-service education of teachers and another on achieving good staff relationships in the secondary school. These and other projected studies are aimed mainly at discovering outstanding supervisory programs, analyzing them for their points of excellence, and then describing their features and procedures.

Emphasis in Office consultative work in teacher education was on meeting the needs of children and society, developing good citizenship and an understanding of democracy, and providing pupils with a world point of view in the social studies program. To assist teachers and others in improving the curriculum and teaching of social studies, two publications were prepared, Social Studies Courses of Study (Selected References No. 17) and "Teaching the Social Studies" (Selected References No. 18).

In the spring of 1948, a National Conference on Professional Preparation in Health, Physical Education, and Recreation was sponsored by several national professional associations. Personnel of the Office participated in this conference and in several follow-up conferences held regionally in 1949. Office staff members also cooperated with national committees of the American Association of Health, Physical Education, and Recreation, and other organizations. Efforts were directed mainly toward improved curriculum and other standards

relating to pre-service and postgraduate professional preparation.

It is estimated that from 300 to 400 workshops in health and physical education were held during the summer of 1948 in addition to many other conferences, workshops, and other in-service activities during the year. Personnel of the Office, upon invitation, participated in many of these, and had direct association with thousands of teachers, administrators, public health personnel, and others in lay and professional groups.

The Office sponsored or participated in workshops on teacher education in health in Bowling Green, Ohio, and in New Mexico; on the social problems of children at Boston University; and on school health services in Colorado.

To encourage teacher-education institutions to examine and improve their offerings in science for elementary school teachers, a clearing house was established for the exchange of curriculum materials and descriptions of successful programs by teacher-training institutions. Two packets of exchange materials were sent to approximately 100 colleges. The packets included suggestions for teaching several subject areas, news items from letters received, samples of science sequences for elementary teachers, and basic principles to keep in mind in planning science courses for elementary teachers.

COLLEGE TEACHING

Improvement of College Teaching

The severe criticisms of the quality of instruction in colleges and universities, presented in the Report of the President's Commission on Higher Education, were doubtless one factor leading a number of institutions to undertake programs to assist their faculties to do better teaching. Colleges are using many devices to assist and to stimulate instructors in improving their teaching.

Particularly significant were the announcements of plans for a different approach to the graduate curriculum for the preparation of college teachers. Syracuse University was one of the first to develop a new-type doctor of philosophy program, in which the objective is broad education in subject-matter and professional preparation in teaching methods, rather than narrow training for research. Harvard University, Columbia University, and the University of Chicago also announced an interest in developing such programs.

Because the Federal Government annually contributes $5,030,000 to help meet the costs of instruction in land-grant colleges and universities, the Office of Education has a special responsibility in helping to improve college teaching. Accordingly, the Office began during

the year a study of devices for improving the effectiveness of college teaching. The Presidents of the land-grant institutions each named a member of his staff as a liaison officer with the Office in carrying forward the study. These liaison officers were sent two checklists to complete, one listing devices used by graduate schools to improve the training of prospective college teachers, the other listing devices used by colleges to evaluate and improve their teaching. The returns are being used in preparing a handbook on improving college teaching.

Teacher Attitudes Toward College Teaching

As a part of a more comprehensive survey of higher education faculty personnel, the Office asked a representative sample of college teachers a number of questions dealing with their attitudes toward their jobs. Tenure provisions were found to be the most satisfactory item to the full professors, while retirement provisions made the strongest appeal to instructors. Research opportunities were the least satisfactory to the professors, while office space was the least satisfactory to the instructors.

In general, 11 percent of those in the rank of instructor did not expect to remain in college teaching and 30 percent did not expect to remain in their present positions. Of the full professors, 97 percent expect to remain in college teaching and 91 percent expect to stay with their present institutions.

This survey should help colleges and universities increase their holding power with faculty personnel.

SPECIAL TEACHER GROUPS

Teachers of Adult Illiterates

One of the problems in reducing illiteracy in the Nation is the dearth of qualified teachers who understand the interests, needs, and psychology of adults. The project in literacy education sponsored by the Office of Education made an approach to the solution of the problem by training a group of teachers and leaders who could serve as "key men" in promoting and supervising classes for teachers in strategic centers.

All the institutions that participated in the project have expressed a determination to continue their interest in the preparation of teachers of adults. They plan to make the course for such teachers a part of the regular curriculum. In addition, they have individually or cooperatively conducted workshops and special summer courses for the preparation of teachers of adults.

Teachers of Exceptional Children

With the growth of special education for exceptional children and youth has come increased opportunities to prepare teachers for them. That was shown by a study of offerings made by colleges and universities in this field. The number of centers in which well-rounded curriculums in all or even in most areas of special education are offered is still small, totaling not more than a dozen. But more than 150 teacher-education institutions in the United States are offering courses, for example, in teaching the blind, the mentally retarded, the speech-handicapped, or one of the other groups of exceptional children. Staff members of the Office are advising with some of these institutions on the further development of their programs, and with State education officials on certification standards in special education.

International Educational Relations

IMPACT OF WORLD DEVELOPMENTS ON EDUCATION IN THE UNITED STATES

The end of traditional American isolationism involves new responsibilities for education. Membership in the United Nations and in several score of specialized international agencies requires a new awareness of world problems. In the midst of sensational headlines flaunting controversy and crisis in world affairs, American education must train for clear thinking on complex issues, and provide adequate and accurate information as the basis for sound public decisions.

The volume and type of requests for assistance coming to the Office of Education indicate that many American educators are awake to their responsibility, but that they feel a need for guidance. During 1948–49 American teachers, students, and civic leaders requested information about sources of suitable materials on other nations, assistance in developing international programs, reports on effective programs in operation in American schools. or guidance in establishing contacts with foreign schools for the purpose of exchanging correspondence, or arts and crafts or books and professional publications.

Technological advances also make international developments of greater significance to educators in this country than in the past. The development of atomic energy, for example, adds to our "international problems" (discussed elsewhere). Aviation also is a major aspect of world relations. Recommendations of the President's Air Policy Commission for a Nation-wide plan for the instruction of youth were referred to in the Office's 1948 annual report.

Relationship of UN to Education in the United States

Many American educators are also conscious of their obligation to help in implementing, on behalf of the United States, the resolution unanimously adopted by the General Assembly of the United Nations in November 1947, asking all member governments to "encourage teaching of the United Nations Charter and the purposes and principles, structure, background and activities of the United Nations in the schools and institutes of higher learning in their countries." Teachers and leaders of the educational profession are engaged in developing both curricula and teaching methods, especially in the social sciences, in order that students may better understand the new instrumentalities of international cooperation with which our government is increasingly cooperating.

Special announcements and new catalogs received by the Office indicate that an increasing emphasis is being placed on international relations in the curricula of American colleges and universities. Interdepartmental "area study" programs in international relations are broadening the approach to the study of international organization. Universities, State departments of education, professional organizations, and local school systems have sponsored workshops where teachers of social studies learn about the UN and how to teach the fundamentals of international cooperation. Their publication programs have included materials on world affairs and world understanding. In some school systems, separate units on UNESCO have been taught. In one State a number of high schools used assembly periods to show films on the UN and other aspects of international affairs today. These reflect the recognition of a new need for general orientation on international affairs in this country—not only for the relatively small group of students planning international careers, but for those who will become civic leaders in their home communities.

At the invitation of the American Council on Education nearly 100 leading educators, including officials from the Office of Education, attended a conference on The Role of Colleges and Universities in International Understanding held at Estes Park, Colorado, in June 1949. Probably the most significant action of this meeting was the designation of the American Council on Education as the American member of the proposed International Association of Universities and the decision to proceed aggressively with the organization of this Association and with plans for the proposed 1950 conference of the Association.

American delegates played a leading part at the conference of universities which UNESCO sponsored at Utrecht in the summer of 1948, when the foundation was laid for an international associa-

tion of universities; and American classroom teachers were represented at the UNESCO seminars on teacher training, early childhood education, and education for international understanding, which were held, respectively, in England, Czechoslovakia, and the United States. At the public sessions held during the meetings of the U. S. National Commission for UNESCO in Boston and Cleveland, the large numbers of teachers in attendance gave striking evidence of the eagerness of educators to share in the great effort to remove cultural barriers which separate the peoples of the world.

President Truman's "Point 4"

American educators were especially interested in President Truman's program known as "Point 4" to make the benefits of scientific and industrial progress available for the improvement of the under-developed areas of the world. While the emphasis in such a program would naturally be placed upon improving agriculture, expanding industry, conserving natural resources, and increasing communications, it became immediately apparent that the provision of basic education and technical training was essential to such a program of economic development. At the request of the Department of State, the Office of Education participated in the preparation of various educational projects designed to carry out the purposes of the program.

Exchange Programs

During the academic year 1948–49, the United States experienced the greatest influx of foreign students in its history. In spite of already crowded conditions in our institutions of higher learning, 26,759 foreign students were admitted, as against approximately 21,000 in 1947–48 and 16,000 in 1946–47. These students came from 151 countries, colonies, dependencies, protectorates, and absorbed states. They studied in fields ranging from architecture to zoology.

The foreign students enrolled in 1,500 institutions in the continental United States, Alaska, the Canal Zone, Hawaii, and Puerto Rico. In addition to the knowledge imparted in the various academic, technical, and scientific subjects, the students have received a general orientation in the life and background of the people of the United States.

According to the Institute of International Education the percentages of foreign students in the United States, by area of origin, were as follows: Europe, 16; Canada and Newfoundland, 16.5; United States Territories, 0.6; Latin America, 26.4; Africa, 3.5; Asia (including Near and Far East and South Pacific areas), 35.6; undesignated, 1.4.

Of the total number of foreign students, 35 percent came on their

own resources; the institutions of higher learning in this country aided 29 percent; private agencies and foundations here assisted 7 percent; private agencies in foreign countries helped 19 percent; foreign governments aided 8 percent; and 2 percent of these students were assisted by the United States Government.

The Department of State continued its programs of student, teacher, and professor exchanges, some of which operate under the Buenos Aires Convention and some under the Travel and Maintenance Grant program, as well as in-service training in many fields for educators from Latin America. Plans were made to extend these activities to areas other than the Western Hemisphere in 1949–50.

The Department of State has to date completed final agreements with 12 countries—China, Burma, the Philippines, Greece, Italy, Belgium and Luxembourg, the United Kingdom, France, the Netherlands, New Zealand, and Norway—under the Fulbright Act, which provides for cultural and educational exchanges with funds realized from the sale of war surplus materials abroad. Serving as screening agencies in cooperation with the Department of State are the Institute of International Education, the Office of Education, and the Conference Board of Associated Research Councils.

The Department of the Army in cooperation with public and private agencies initiated a program for exchanging students, educators, and leaders in certain professional fields with American-occupied Germany.

This exchange program is a significant phase of the total reorientation program of the U. S. Military Government for Germany. Under the program, Germans in various professional fields are sponsored by an organization, institution, or group in this country and brought here for a period of study and observation of the American way of life, as well as the operation of constitutional government based on the democratic ideal. The program also brings to Germany the best scholarship and training from both the United States and Europe.

An advisory Commission on the Occupied Areas, which works through panels of experts in the several fields of cultural and educational activity, has been established in the United States. The Commission and the panels assist the institutions and organizations which sponsor the visiting Germans by planning programs and visits to institutions where the visitors may observe and participate in their special field of activity.

During the fiscal year 1949 more than 500 German leaders visited this country for periods of from 2 to 12 months. For many of the groups, private foundations subsidized the total cost of the visit except for ocean travel. For other groups the cost was defrayed by Military Government.

IMPACT OF WORLD DEVELOPMENTS ON OFFICE ACTIVITIES

Exchange of Materials and Information

The growing concern of teachers and civic leaders with their role in the postwar world is reflected in the thousands of requests to the office for information and materials. Formerly by far the greatest number of these requests were for material on the other American republics. However, with the creation of the United Nations, requests for material and information on countries outside this hemisphere, as well as on world organizations, such as the UN, UNESCO, and WHO (World Health Organization), formed a large proportion of the correspondence. Teachers asked for information about effective programs of international understanding or intercultural education in operation, with a view to pooling experiences or obtaining practical suggestions for developing similar programs.

To meet the needs in part, a "Selected Bibliography for Teaching About the United Nations" was prepared by the Office's Division of International Educational Relations. A bulletin on developing world understanding in the elementary grades and another on orientation and English instruction for students of other lands were also prepared.

Teachers and supervisors of elementary and secondary schools indicated a growing interest in exchanging materials, such as art work, notebooks, school publications, photographs, and textbooks, with schools in other countries. The Division assisted individual classes in arranging such exchanges with several schools in Latin America. To stimulate interest in the educational possibilities of such exchanges, the Division in cooperation with the Pan American Union displayed an exhibit of arts and crafts received from schools in Chile, Honduras, Japan, Korea, and Venezuela during the conference of leaders of elementary and secondary education held in the Office of Education in May.

The Office also received during the past year approximately 70,000 letters from young people abroad who wished to establish correspondence with American youth. Some 50,000 of these letters came from Germany, and about 12,000 from Japan; in both these countries the project is sponsored by the Military Government authorities. The rest came mainly from England, Holland, and Australia, with a scattering from many other countries.

The number of requests from educators and students in foreign countries for material on every phase of American life was more than double the number received the previous year. In addition, the Office had numerous inquiries from persons abroad who wished to know

where in the United States training in specific lines of work was offered, or who requested publications on the subject.

Numerous invitations also came from American Embassies to send exhibits of text, trade, and professional publications, art work, and other visual aids for inclusion in expositions held in foreign countries. At the request of the Education and Cultural Relations Division of OMGUS (Office of Military Government for Germany [United States]) the Office sent a collection of materials and suggestions for the forum programs sponsored by the Military Government as part of the reorientation program in Germany.

Exchange of Educational Personnel

During 1948–49 the Office of Education continued to administer the exchange of graduate student programs under the Convention for the Promotion of Inter-American Cultural Relations and the nontreaty travel and maintenance grant program for United States and Latin-American graduate students. The first of these was carried out in close cooperation with the Department of State and the second, in cooperation with the Department of State and the Institute of International Education. These programs have served as pilot projects, and through the experience gained in administering these fellowships over a period of years the Office has been able to assist public and private organizations, civic groups, colleges and universities, and international organizations in setting up similar fellowship programs.

Students were received from 11 of the other American Republics participating under the Convention. Five countries did not submit candidates during the year. The United States submitted candidates to 7 of the Latin-American Republics, with panels for other countries in process of being formed. Thirty-seven Latin-American Convention students studied in 29 separate universities in the United States, 14 of these being students whose grants carried over for one semester or more from the previous academic year. Under the travel and maintenance grant program, 18 United States graduate students received awards for study and research in 8 Latin-American countries. The Advisory Fellowship Selection Committee, at its April 1949 meeting, chose 22 United States students for grants during 1949–50. Also, during 1948–49, 50 Latin-American graduate students received travel grants, and 157 maintenance grants were awarded for special training in our colleges and universities. Reports from these students and those who have returned to their homes indicate that they not only have become more proficient in their fields of special study, but also have been able to give a more authoritative and friendly interpretation of this country to their own people.

As one of the participating agencies in the Interdepartmental Committee on Scientific and Cultural Cooperation, the Office has continued its programs for teachers from the other Amercian republics. In-service training was provided this year to teachers from Bolivia, Colombia, Ecuador, El Salvador, Guatemala, and Uruguay in elementary school administration, secondary school organization and curriculum development, rural education, the teaching of English as a second language, and clinical psychology. This program, and the grants for students in the scientific and technical fields particularly, have made a contribution to the program of technical assistance recently proposed by President Truman to aid under-developed countries in these critical fields.

The Office continued its cooperation with public, private, and international organizations, such as the United Nations and UNESCO. Ten United Nations or UNESCO Fellowship grantees were aided by the staff of the Office through informational materials, counsel, and program planning. Fellows were received from Denmark, Norway, Finland, China, India, and the Philippine Islands.

Under the direction of the Office, 126 exchanges of teachers between the United States and foreign countries were in operation during the school year 1948–49. These included 112 British teachers, 7 French teachers, and 7 Canadian teachers in schools in this country and the same numbers of American teachers in schools abroad. These exchanges involved schools in a total of 104 different cities in 31 States and the District of Columbia. Fifty-nine of these exchanges were at the kindergarten and elementary level, 25 at the junior high school level, and 42 at the high-school and junior college levels.

During the year more than 400 American teachers applied to the Office for positions as exchange teachers in foreign countries. These applications were submitted to 25 regional interviewing committees throughout the United States. By the end of the year, 97 exchanges had been arranged between British and American teachers, 7 with France, and 16 with Canada for the school year of 1949–50. A total of 458 inquiries were received from teachers in this country concerning teaching positions in United States territories and possessions. Under the Fulbright program, arrangements were completed for two Belgian teachers to teach French in schools in the United States, and applicants were recruited to fill three secondary school positions in France and two in Burma. Five teachers were recruited and recommended for positions in Afghanistan, and four panels of nominations for Philippine Fulbright professorships in adult, higher, secondary, and vocational education were submitted to the Conference Board, which is an organization supported by the four American learned councils to screen applications.

The Washington (D. C.) Orientation Center has been operated continuously by the Office since 1942 to provide orientation and English instruction to students and in-service trainees brought to the United States by many Government agencies. Using its experience with this Center, the Office has stimulated the establishment of regional orientation centers in colleges and universities strategically located over the United States.

During the year, the Office made a survey of such centers and the types of instruction given. The results indicated that a growing number of institutions recognized this need, and 34 replied that some type of special instruction in English or orientation to American life and customs, or both, was given. Fifteen universities offered special orientation institutes during the summer. The Office also called a conference of the directors of some of these centers to discuss problems relating to orientation. All agreed that this initial preparation often made the difference between a successful and an unsuccessful academic year.

During the year the Office approved for admission to the Washington Orientation Center 353 foreign visitors from 33 different countries. These applicants were recommended by 29 different government agencies or bureaus, 15 foreign embassies, and private agencies.

All of these programs and activities relating to the exchange of educational personnel were carried out in cooperation with the Department of State. Through these programs, in some measure, the critical needs of participating countries have been supplied. They have served to bring about mutual respect and understanding among the peoples concerned, which in turn has strengthened world peace and security.

Evaluation of Foreign Student Credentials

The postwar rise in the numbers of foreign students seeking admission to United States institutions has naturally resulted in an increase of requests for evaluation of credentials, from 1,040 in 1938–39 to approximately 3,000 in 1948–49. (The latter figure is slightly less than that for the previous year, probably because of experience gained by admissions officers, as explained below.) In addition to the increased numbers of students, two other developments are reflected in the volume of credentials being submitted to the Office of Education. One is that relatively more students are coming from countries which formerly sent few students to the United States, and educational systems with which American university officials have little familiarity. Figures for the following countries, based on evaluation requests made to the Office, illustrate this point:

	1939–40	*1948–49*
Afghanistan	7	38
Burma	2	71
Egypt	38	335
India	70	1, 281
Iran	11	478
Iraq	40	389

The second development is that there is a growing effort to distribute foreign students among a larger number of United States institutions, and, wherever it is advisable in the light of their fields of study, to place them in small institutions, where they may make personal adjustments more easily and where they may have a more intimate experience with American ways of life than in large institutions.

Although the admissions officers of some of the larger institutions have gradually acquired experience and competence in the evaluation of foreign credentials, so that they now refer to the Office only the complicated cases, the officers of the smaller colleges are usually unfamiliar with foreign educational systems and need the assistance of the Office on all credentials submitted to them.

To meet these needs, the Office not only continued its regular procedure of making evaluations in specific cases referred to it by institutions and State boards, but also took steps to assist these officers to develop sufficient competence in evaluating foreign credentials so that eventually they may make most evaluations routinely and refer only the most complex and exceptional credentials to the Office. A series of one-page outlines of the educational systems of a number of foreign countries was distributed to college admissions officers, and additional outlines of this type were in preparation.

Advisory Service to Foreign Visitors and American Students

Through personal conferences and group meetings the Office provided foreign visitors from nearly every country in the world with information and materials to explain the organization, objectives, problems, and trends of education in the United States. Specialists of the Office have assisted these visitors in arranging itineraries by which they could best observe American methods in their respective fields of specialization, and have made it possible for them to meet with experts with whom they might discuss their special interests.

Considerable attention was also given to advising numbers of American students who wished to study abroad. Office staff members replied to hundreds of inquiries from American teachers and students—many of them veterans—seeking information on admission and degree requirements of foreign institutions, living conditions, tuition costs, teacher-training facilities, and other particulars. Publishing houses,

manufacturers of school equipment, and other commercial concerns frequently request up-to-date information about foreign schools. Also, in its cooperation with such UN specialized agencies as ECOSOC (Economic and Social Council), UNESCO, and the Trusteeship Council, the Department of State is increasingly calling upon the Division for technical information concerning foreign education.

Studies of Foreign Systems of Education

At no previous period since the establishment of the Office of Education has there been such an urgent demand for accurate, up-to-date information on foreign school systems as during the past year. College and university officials engaged in admitting, placing, and counseling foreign students feel keenly the need for accurate information on foreign school systems; the Division of International Educational Relations has become the agency to which—perhaps more than to any other, public or private—they look for assistance. A vast amount of information, gathered from reports of the United States Foreign Service, the publications of foreign ministries of education, foreign and domestic professional journals, private research projects, and occasional on-the-spot investigations by members of the Office staff, was assembled and evaluated by the various area specialists. Bibliographical guidance on education in individual countries has been provided to scores of professors and students of comparative education.

Bulletins on education in three of the other American Republics, Bolivia (Bulletin 1949, No. 1), Panama (Bulletin 1948, No. 12), and Venezuela, (Bulletin 1948, No. 14), were published during the year. These bring the total number of such publications to 14. In response to an invitation from the Sweden-America Foundation of Stockholm, an Office specialist made field surveys of education in Denmark, Finland, Norway, and Sweden.

Programs of American Military Government

The Office sponsored five groups—with a total of 25 men and women—of German educational leaders who came to the United States to study various phases of vocational education. These visitors first spent a week in Washington to study the organization of vocational education programs in this country. Then, with the cooperation of State and local school officials, itineraries were made for each group which permitted them to see vocational schools and classes of all types in more than 60 cities in 16 States. Opportunities were also provided for them to visit homes, farms, and industries for which the vocational schools are training workers.

Participation in International Conferences

With the growing responsibility of the United States in world affairs, it has become increasingly important to have official representation at the various international conferences which are concerned with education or to which educational experts can make a valuable contribution.

INTERNATIONAL CONFERENCE ON PUBLIC EDUCATION

The Director of the Division of Secondary Education in the Office was chairman of the United States delegation and one of the three conference vice-chairmen at the Eleventh International Conference on Public Education, held in Geneva, Switzerland, June 28–July 3, 1948. Jointly sponsored by UNESCO and the International Bureau of Education, and composed of 81 delegates representing 45 countries, the conference considered reports from each country on "Educational Developments during 1947–1948." It also formulated draft recommendations to the national governmental agencies in each country on "The Role of Educational Psychologists," "The Teaching of Writing," and "Teaching Regarding the United Nations and the Specialized Agencies."

UNESCO CONFERENCE AT BEIRUT

The Third General Conference of UNESCO, which was held in Beirut, Lebanon, November–December, 1948, marked the completion of the first 2 years of that specialized agency in the United Nations. Despite political and financial difficulties which could not have been foreseen when the organization was launched, it was apparent at the conference that real progress had been achieved in both administration and program. This was especially true in the field of education, where an administrative consolidation of various scattered projects was followed by a sharpening of emphasis upon a few broad functions in which the limited staff resources could be made most effective. Chief among these functions is that of an educational "clearing house," in the promotion of which the UNESCO specialists will, on the one hand, seek to ascertain the most pressing educational problems of member States, while, on the other hand, they will endeavor to discover the outstanding contributions which member States are making to the solution of these and other problems. In its efforts to bring member States together for these purposes, UNESCO planned to use consultative missions as one device. Two such international missions were sent by UNESCO in 1948, one to the Philippines and one to Siam; and arrangements were also made for a third to go to Afghanistan.

The Beirut conference, at which a member of the Office of Education staff served as advisor to the United States delegation, was entrusted with the task of appointing a new director-general of the organization. Dr. Jaime Torres Bodet, a former minister of education of the Republic of Mexico, was selected.

UNESCO SEMINAR ON CHILDHOOD EDUCATION

During the summer of 1948 UNESCO brought educators together to consider ways and means of developing world-mindedness in children. In this study, seminar members discovered that they were having an experience in international living and learning which had meaning not only for themselves, but for the planning of similar experiences for children in their own countries. Thus, the seminar set in motion a chain of activities which will extend into many parts of the world. One of the two official participants of the United States at the seminar on Childhood Education in Podebrady, Czechoslovakia, was a member of the Office staff.

WORLD COUNCIL OF EARLY CHILDHOOD EDUCATION

The first meeting of the World Council of Early Childhood Education was held in Prague, Czechoslovakia, following the UNESCO seminar. The Office participant in the seminar was, therefore, designated to attend this international assembly. The conference work centered on the need for cooperative activities between educators in the 18 countries present, and considered the formation of a world organization which would serve as a clearing house for information on developments around the world on early childhood education. There was agreement that education of children must become an international cooperative enterprise.

INTER-AMERICAN CONFERENCE ON CONSERVATION

The Inter-American Conference on Conservation of Renewable Resources, held in Denver, September 1948, marked the beginning of a period which spotlighted conservation problems as never before. Within the last 10 months of the fiscal year, five international conferences on the conservation of natural resources were held, and the International Union for the Protection of Nature was established at Fontainebleau, France, October 1948.

A member of the Office staff participated in the Denver conference and served as a member of the United States Organizing Committee to formulate plans for the program of the forthcoming International Technical Conference on the Protection of Nature, held concurrently with the United Nations Scientific Conference on the Conservation

and Utilization of Resources, Lake Success, New York, August–September 1949.

CONFERENCES ON COMMUNICATIONS

International conferences in the field of communications were held with UNESCO in September 1948, resulting in a world-wide survey of radio broadcasting for education. The Office of Education completed the United States report in April 1949.

Conferences with eight radio educators for the Occupied Zone of Germany were held in May 1949 in Washington, where agenda were prepared for the second annual meeting of the society for teaching with modern Lehrmitteln in Nurnberg in October 1949. A similar conference in Washington in June 1949, with representatives of Japan and Korea, resulted in new outlines for educational broadcasting in our Far Eastern occupied lands.

In June 1949, a 2-week Seminar in Communications was held under auspices of the Rockefeller Foundation at the University of Illinois, with representatives from Denmark, the Philippines, Japan, Korea, Canada, and the United States. The Office took part in the planning and in the deliberations on the status of educational broadcasting and future use of television, facsimile, and kinescoped film for schools. The report of the Seminar lists 110 educational broadcasting stations in schools, colleges, and universities in the United States and 11 applications for television stations (one under construction) to be operated as educational stations under regulations of the Federal Communications Commission.

Planning for Fundamental Education

The purpose of the UNESCO project in fundamental education is to assist member states in carrying out programs of basic education, to reduce illiteracy, and to raise the general level of the people's health and welfare. The stimulation which UNESCO is giving to a world-wide attack on illiteracy constitutes one of its most significant contributions to peace and progress. Especially in the Western Hemisphere, where 50 percent of the 140 million people of Latin America cannot read or write, governments are turning to UNESCO for assistance in undertaking mass education movements or in increasing the effectiveness of those already in operation. Under the joint auspices of UNESCO and the Organization of American States, an international seminar on the methods of eradicating illiteracy was scheduled to be held at Rio de Janeiro, in the summer of 1949. The Office of Education participated in the arrangements for this important cooperative enterprise.

CONFERENCE ON THE REHABILITATION OF THE CRIPPLED

An Inter-American conference was called in Mexico City to consider the educational, medical, and vocational aspects of an all-round program on the rehabilitation of crippled persons. The United States Government sent a delegation of 10 persons to this conference, one of whom was an Office of Education representative. The delegates formulated 18 resolutions outlining a minimum 5-year program for the crippled. Highlights of the resolutions are: The "right" of the handicapped person to receive the services he requires; the need for coordination of educational, medical, and vocational service; the need for an adequate census; and the need for prevention.

INTERNATIONAL CONFERENCE ON CORRESPONDENCE EDUCATION

The Second International Conference on Correspondence Education, held in Lincoln, Nebraska, October 1948, was attended by an Office staff member. There were 117 delegates from Australia, Canada (17 Provinces), New Zealand, Norway, the Philippines, and the United States (20 States).

CONGRESS OF EDUCATIONAL FILMS

A staff member served as representative of the United States to the First International Congress of Educational and Instructive Films called in Paris, October 1948, by Comité International pour la Diffusion des Artes des Lettres des Sciences par la Cinématographe The Office also assisted in the development of an international cata logue of films, and of visual aids for fundamental education.

Appendix

PUBLICATIONS ISSUED BY THE OFFICE

Bulletins, Pamphlets, Leaflets, Etc.

With *Liberty* and *Justice* for All. Bulletin 1948, No. 15.
Radio and Television—Bibliography. Bulletin 1948, No. 17.
Education in Bolivia. Bulletin 1949, No. 1.
State Legislation for Education of Exceptional Children. Bulletin 1949, No. 2.
School in the Hospital. Bulletin 1949, No. 3.
100 Evening Schools. Bulletin 1949, No. 4.
Science Teaching in Rural and Small Town Schools. Bulletin 1949, No. 5.
Accredited Higher Institutions, 1948. Bulletin 1949, No. 6.
Teaching of United States History in Public High Schools. Bulletin 1949, No. 7.
Statistics of Land-Grant Colleges and Universities, year ended June 30, 1948. Bulletin 1949, No. 8.
Petersburg Builds a *Health* Program. Bulletin 1949, No. 9.
A Directory of 897 16mm. Film Libraries. Bulletin 1949, No. 10.
The Place of Subjects in the Curriculum. Bulletin 1949, No. 12.
Improving School Custodial Service. Bulletin 1949, No. 13.
Selected Bibliography on School Finance, 1933 to 1948. Bulletin 1949, No. 14.
Adult Education Activities of the Public Schools, Report of a Survey, 1947–48. Pamphlet No. 107.
Preparing Your Child for School. Pamphlet No. 108.
Federal Government Funds for Education, 1946–47 and 1947–48. Leaflet No. 79.
Education of Crippled Children in the United States. Leaflet No. 80.
Space and Equipment for Homemaking Programs. Misc. No. 9.
The Structure of State Departments of Education. Misc. No. 10.
Evaluating and Reporting Student Progress in Business Education, Vocational Division Bulletin No. 238.
Frontiers in Homemaking Education, Vocational Division Bulletin No. 239.
An Evaluation of Local Programs of Vocational Education in Agriculture, Vocational Division Bulletin No. 240.
Business Experience for Business Teachers,—Plans and Procedures, Vocational Division Bulletin No. 241.
Digest of Annual Reports of State Boards for Vocational Education, Fiscal Year Ended June 30, 1948.
College Building Needs. Special Series No. 1.
Records and Reports for Pupil Transportation. Special Series No. 2.
Directory of Secondary Schools in the United States. Circular No. 250.
How Large Are Our High Schools? Circular No. 304.
Class Size—The Larger High School. Circular No. 305.
Large and Small Classes in Secondary Schools. Circular No. 306.

Biennial Survey of Education in the United States, 1944–46

Statistical Summary of Education, 1945–46. Chapter I.
Statistics of State School Systems, 1945–46. Chapter II.
Statistics of City School Systems, 1945–46. Chapter III.
Statistics of Public High Schools, 1945–46. Chapter V.

Education Directory

Federal Government and States, 1948–49. Part 1.
Counties and Cities, 1948–49. Part 2.
Higher Education, 1948–49. Part 3.
Education Associations and Directories, 1948–49. Part 4.

Miscellaneous

Annual Report of the Federal Security Agency, Office of Education, 1948.
Classroom Growth Record.
Growing Into Democracy.
Life Adjustment Education for Every Youth.

Periodicals

School Life (9 issues—October 1948–June 1949, inclusive, with Supplement to March issue entitled "Atomic Energy Here To Stay").
Higher Education (18 issues—September 1948–May 1949, inclusive, including special issue February 1 on "Atomic Energy and Higher Education").

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Annual Report of the

FEDERAL SECURITY AGENCY

1950

Office of Education

The Annual Report of the Federal Security Agency contains the Administrator's report and the reports of all the Agency's constituent organizations. In addition, the following reports are issued as separate reprints:

THE ADMINISTRATOR'S REPORT
SOCIAL SECURITY ADMINISTRATION
PUBLIC HEALTH SERVICE
OFFICE OF EDUCATION
FOOD AND DRUG ADMINISTRATION
OFFICE OF VOCATIONAL REHABILITATION
SAINT ELIZABETHS HOSPITAL

Both the consolidated volume and the separate reports are available at nominal cost from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

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Annual Report of the

FEDERAL SECURITY AGENCY

1950

Office of Education

FEDERAL SECURITY AGENCY

Oscar R. Ewing, *Administrator*

OFFICE OF EDUCATION

Earl James McGrath, *Commissioner*

Deputy Commissioner of Education, Rall I. Grigsby.
Associate Commissioner of Education, Bess Goodykoontz.
Assistant Commissioner for Vocational Education, Raymond W. Gregory.
Director, Division of School Administration, Henry F. Alves.
Director, Division of Elementary and Secondary Schools, Galen Jones.
Director, Division of Higher Education, John Dale Russell.
Director, Division of International Educational Relations, Kendric N. Marshall.
Director, Division of Special Educational Services, Ralph C. M. Flynt.

Letter of Transmittal

Federal Security Agency,
Office of Education,
Washington, D. C., October 30, 1950

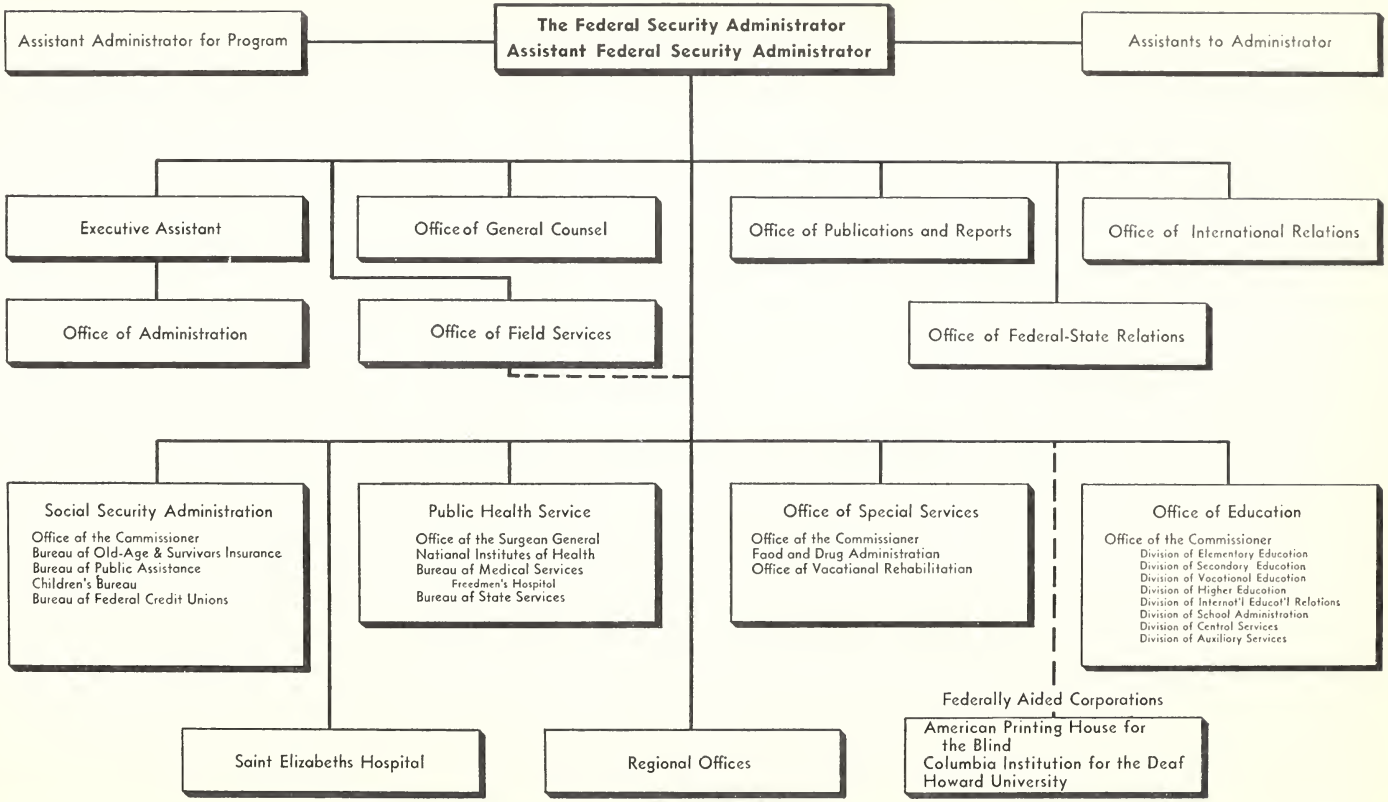
The Honorable Oscar R. Ewing,
Federal Security Administrator.

Dear Mr. Ewing: I herewith submit the annual report embracing the activities of the Office of Education for the fiscal year ending June 30, 1950.

Respectfully,

Earl James McGrath,
Commissioner of Education.

FEDERAL SECURITY AGENCY



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Office of Education

In recent years it has been customary for the annual report of the United States Commissioner of Education to confine its description of Federal educational activities primarily to those in which the Office of Education has taken some part. The present report, in this midcentury year, however, speaks more broadly. The first half deals with the demands on American education at this midcentury point. The second half sets forth the Government's efforts to help the schools and colleges of the Nation meet these demands, and the direct operations of the Government in providing educational services to the people and to the States.

Congress has directed the Commissioner of Education to present annually "a report embodying the results of his investigations and labors together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which the office is established."

In the Commissioner's judgment, the facts reviewed in this report are essential to serve the purpose for which the Office was established.

Democracy's Demands

Midway in the twentieth century, American education presents a picture which is at once encouraging and disquieting. The background for the educational picture is furnished by the American ideal of equal opportunity for all to obtain a good education. This American belief in education for all rests squarely on the American concept of democracy, for a democracy more than any other form of social and political organization must depend upon the enlightenment of the people—all the people. Uneducated or miseducated people can easily be misled, swept about by winds of doctrine, even

stampeded by fears or enticed by demagogic promises into accepting some easy substitute for the arduous and painful tasks of thoroughly developing public policy. Education is the indispensable foundation of a democratic society.

The intrinsic quality of the democratic ideal in itself evokes compelling loyalties. We Americans are told, over and over again, that the followers of totalitarian ideologies believe their dogmas, while the citizens of democratic America merely accept theirs. This simply is not true. A Nation which, twice within a half century, has thrown its total resources into a world struggle to protect democratic institutions and the democratic way of life cannot be accused of indifferentism. And the half century ended on a note of high affirmation, as the United Nations, on the fifth anniversary of the signing of its Charter, issued a judgment never before recorded in human history—the collective judgment of nearly all the member nations of UN, through their regular representatives—unitedly condemning an act of international aggression. American leadership made this epochal development possible.

Rooted in the conviction that every individual is of incalculable worth, the democratic belief which is thus espoused with such unequivocal determination calls on a democratic Nation to provide the fullest opportunity for self-development by every person. Within the limits of his potential growth, each child or youth, if the democratic ideal is to prevail, must be afforded equal access to the best possible educational opportunities, as his right.

Imperatives of New Dimensions

If American citizens are to play their part in a changing world, education must keep abreast of the times. Most educators realize this fact and insist on it, but outside the profession there is considerable confusion on the point. Men who have accustomed themselves to jet planes still tend for some anomalous reason to think of education in terms of the horse-and-buggy education of their own youth. The plain fact is that the schools and colleges which were good enough for 1900 are not good enough for 1950 and will be hopelessly inadequate for 1975. Six features of contemporary life will illustrate the issues which now confront American education.

POPULATION TRENDS AND MOVEMENTS

The high birth rates of the 1940's produced a larger group of children than ever before in American history. The decade closed with an estimated 3,580,000 registered live births in 1949, exceeding any other year except 1947, in which approximately 3,700,000 live

births were registered. Infant mortality is lower than ever before, and life expectancy has increased phenomenally. The child born in 1900 could, on the average, expect to reach age 49; the child born at midcentury may, on the average, expect to approach his 68th birthday. During the half century, nearly one-fifth of a century has been added to our average life expectancy at birth. Many more children than ever before, with a longer life expectancy, set the quantitative dimension of the midcentury population trend, and pose some of our most pressing educational problems.

These larger numbers of longer-living persons, moreover, are caught up in new complexities of relationship. As the century started, only 4 out of 10 children of school age lived in urban areas; but at midcentury, despite the continuing larger than average size of rural families, so many persons had moved cityward that probably less than 3 in 10 children of school age were found on the farms. A whole new category has been recognized by students of population: the "highway dwellers" whose homes cluster along the ribbons of concrete, and who, while living in the country, have few of the psychological and sociological characteristics of the old-time farm family. The shift of the American cradle from the country to the city is one of the more profoundly important trends of the half century. The qualities of urban experience as contrasted with those of the farm are symbolized by the fact that the city boy has few, if any, family chores to do. The place of the family, of the common tasks and routines of the home, and of the intimate community institutions of church and school in the life of the child—all of these are markedly different.

Mobility of population marks 1950 as contrasted with 1900. From colonial days, many Americans have been pioneers or settlers, and the pioneering spirit has been part of the American tradition. But as long as there was a geographical frontier, the movement was from the centers of population toward the sparsely settled areas, with, of course, a considerable feed-back into the cities from the country. With the passing of the geographical frontier and the coming of the automobile, the new century has seen an interregional and Nation-wide mixture of populations. Thus, for example, every third person living in California in 1950 had come to that State during the preceding decade, and these in-migrants represented every State in the Union.

The effect of these population trends and movements on the quality of family life, together with the equally important tendency to shift many responsibilities formerly carried by parents to the school, results in a complexity of problems which severely challenge 1950's schools. Whatever could have been said about the importance of *good* schools in 1900 can be said in 1950 with greatly increased force.

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TECHNOLOGICAL DEVELOPMENTS

1950 was the year in which people watched and listened to the United Nations General Assembly over television. The revolution in communications, in transportation of people and things, in the transmission of ideas, not only speeds the communication processes, with resultant intimacy of all persons everywhere, but also means that differences which were not brought into close contact are now the occasion of sharp international conflicts and tensions.

1950 was also the year in which the H-bomb cast its shadow across the world. A century, beginning with a science which had not heard of the theory of relativity or of the quantum theory, at its midpoint accepts the fruits of both theories in isotopes and the promise of atomic power for industry.

Meantime, mass production and assembly line processes have extended to all parts of the world and to all economic aspects of life, including agriculture. A century and a quarter ago, 1 person engaged in farming was able to provide food for himself and 3 or 4 other persons; today the person engaged in agriculture on the average provides food for himself and 13 or 14 other persons. The young man on a farm during the middle nineteenth century as likely as not had grown up in a home where the family raised the sheep, clipped and carded the wool, wove the cloth, and made the clothes he wore—"store clothes" were the exception, not the rule. Today, the self-sufficient farm unit is gone, or is rapidly passing from the scene. Likewise, no city, no state, no nation is today economically self-sufficient. The total interdependence of the economic life of all men is apparent.

Technology and science, commerce and trade, communications and travel, have made of the world a neighborhood: it remains to make it a brotherhood. How best can education play its part in such a day?

LABOR RELATIONS AND EMPLOYMENT PRACTICES

The science of human relations has only lately begun to operate extensively in the industrial management field. Technological progress has made the employment of highly skilled, highly paid labor more profitable than the employment of younger, less skilled workers at lower wages. As younger laborers fail to be employed, there is also a noticeable growth in the tendency to retire older workers and to provide pensions. The 1930's saw the trebling of membership in the organized labor movement. The net result of all these factors is an increasing proportion of employed workers in the middle years, performing more skilled operations, drawing higher wages and enjoying greater job security, with an increasing percentage of the under- and over-age employables not holding jobs. The increasing numbers of youth, and of the aged for whom in all probability addi-

tional educational programs must be made available, together with the question of what types of educational offerings best meet the changing needs of these groups, present further concerns for educators in 1950. They also place a financial burden for education on those who are employed.

RECREATION AND THE USE OF LEISURE TIME

Social, technological, and economic changes which have shortened the workweek, limited child labor, and reduced the need for younger and older workers, together with the advances of labor-saving devices in the home, have brought into sharp focus the problem of the best use of leisure time. With many young workers dissatisfied with their jobs, the escape into leisure-time excitement tends to become a psychological compulsion. For about one in every five families there was in 1950 little expectation that the leisure-time problem could be considered constructively, let alone solved, within the family circle. For probably another two-fifths, the family resources of imagination and ingenuity were too meager, or the financial resources too limited, to produce a satisfying recreational life for family members. Fully half of the money spent for recreation, according to figures available for 1940, went for movies, radios, and spectator sports, giving relatively little opportunity for the development of creative recreational abilities in the spectator.

The reading habits of American adults reflect a serious national problem. An estimated 50 percent of adults read only the sports page and the comic strips in the daily newspapers. When polled on public questions about 20 percent commonly answer "don't know." The low interest in public and civic questions is further expressed in the fact that only about half of the persons eligible to register and to vote actually vote in even the most heated national elections.

Finally, over the past decade or two, an increasing percentage of persons arrested for breaking the laws is in the age group under 25 and particularly in the age group 18 to 21. This fact suggests the need for educational and community adjustments designed to enlist juveniles in useful and meaningful activities.

THE WORLD SITUATION

The role of the United States and of the United Nations in the world of 1950 inescapably influences the task of American educators. The sharp ideological conflicts which increasingly separate East and West; the spreading infection of the totalitarian virus feeding on the discontent of the oppressed and disinherited, designedly exploiting nationalistic aspirations, and cynically threatening to plunge the

world into military combat; the crippling effect on international relations of the withdrawal of the Soviet Union from a succession of agencies of peace—these features of the 1950 world situation, coupled with the dislocation growing out of the decline of colonialism and the struggles of newly freed peoples in the Near and Far East to establish themselves, emphasize the truth that a divided world spells insecurity and fear. If the United States is to fulfill its obligation as a world power, it must have trained leaders supported by an informed electorate. In helping to meet this need, American education faces one of its greatest challenges. An educational program that merely acquaints youth with our problems at home is inadequate to prepare them for their responsibilities in a constantly contracting international sphere.

FINDINGS IN PSYCHOLOGY AND PSYCHIATRY

The relatively young sciences of psychology and psychiatry reveal facts which aid in understanding how living under the tensions and difficulties of the midcentury domestic and world situation affects the personality. Life in a divided world tends to make divided men. Estimates by the Public Health Service indicate that 1 in every 20 persons will spend some part of his life in a mental hospital—unless remedial steps are taken with regard to both individuals and our social structure. The whole conception of mental health is becoming a central rallying point in defining educational objectives. Psychosomatics, with its emphasis on the singleness of mind and body, of physical and mental health, points up the long-recognized truth that the whole person is the proper subject of educational purpose.

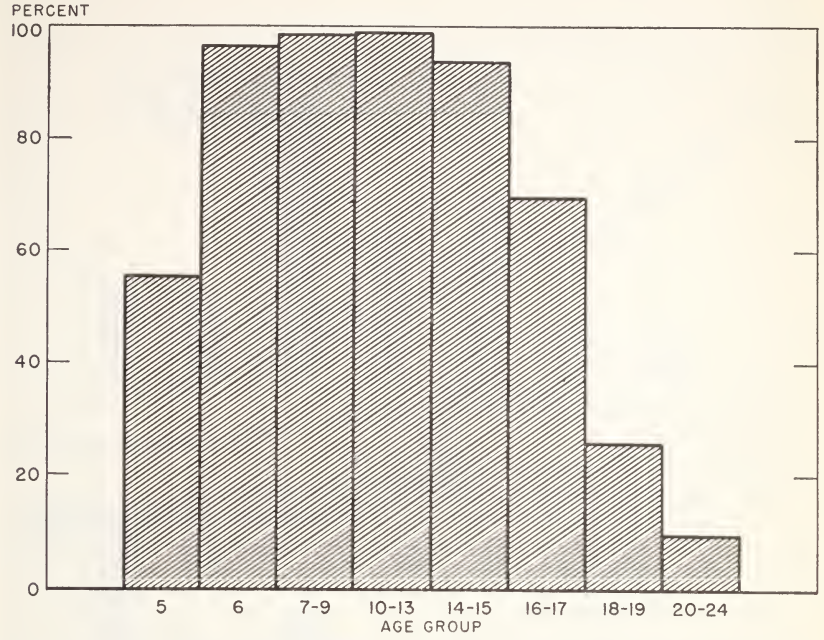
These developments of the past half century are only illustrative. No more need be cited to prove that education for 1900 will not do for 1950. Democracy, which has always demanded good education, now demands education good enough for today and tomorrow. In this rapidly changing world, education dare not be static. Furthermore, education—good enough for 1950—must be open to all, for each to develop his particular abilities to the fullest. These things democracy demands of education and for education in behalf of all of the Nation's youth.

Accomplishments

The progress of American education in approaching the ideal of universal educational opportunity is most encouraging. In this progress we have an effective answer for those who would condemn American education for its failure to reach our ideal objectives. At no other time in human history and in no other nation have the educational

Chart 1.—SCHOOL ENROLLMENT

Percentage of persons 5–24 years, by age group, October 1949



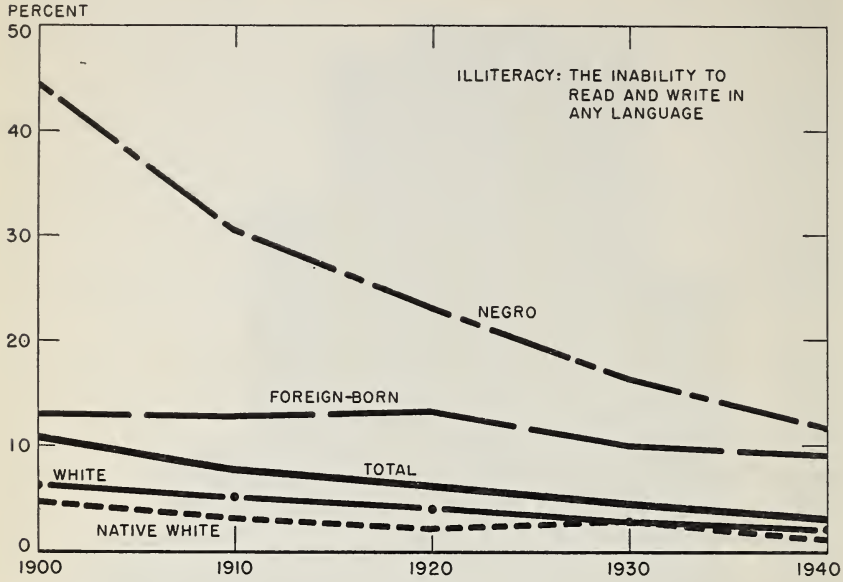
opportunities provided been as varied, as accessible to all, and as high in quality as in the United States in 1949–50.

SCHOOL ATTENDANCE GROWS

As of October 1949 there were approximately 26 million persons 6 to 17 years of age, inclusive, enrolled in school. This was 93.3 percent of the age group. In the age group for which school attendance is compulsory in all States (7 to 13 years of age, inclusive) more than 98.6 percent were enrolled in public or private schools. In the 14- and 15-year-old group, for which attendance at school is also compulsory in all States unless working papers are obtained, 93.5 percent were in school; and more than two-thirds of the 16- and 17-year-olds and more than one-fourth of the 18- and 19-year-olds were attending school. (See chart 1.) Meantime, more than half of the 5-year-old children were in either kindergarten or the first grade. Thus, at one end of the scale, more than half of the 5-year-old children had begun their schooling; and at the other end of the scale, more students were enrolled in colleges and universities in 1949–50 (estimated 2,700,000) than had been enrolled in the high schools of the Nation in 1919–20 (2,500,000).

Chart 2.—ILLITERACY IN THE POPULATION

Persons 10 years and over, by color and nativity, 1900–40



ILLITERACY IS REDUCED

By 1940, the problem of illiteracy (defined as the inability to read and write) had become so unimportant for the population as a whole that the Census Bureau omitted the question.

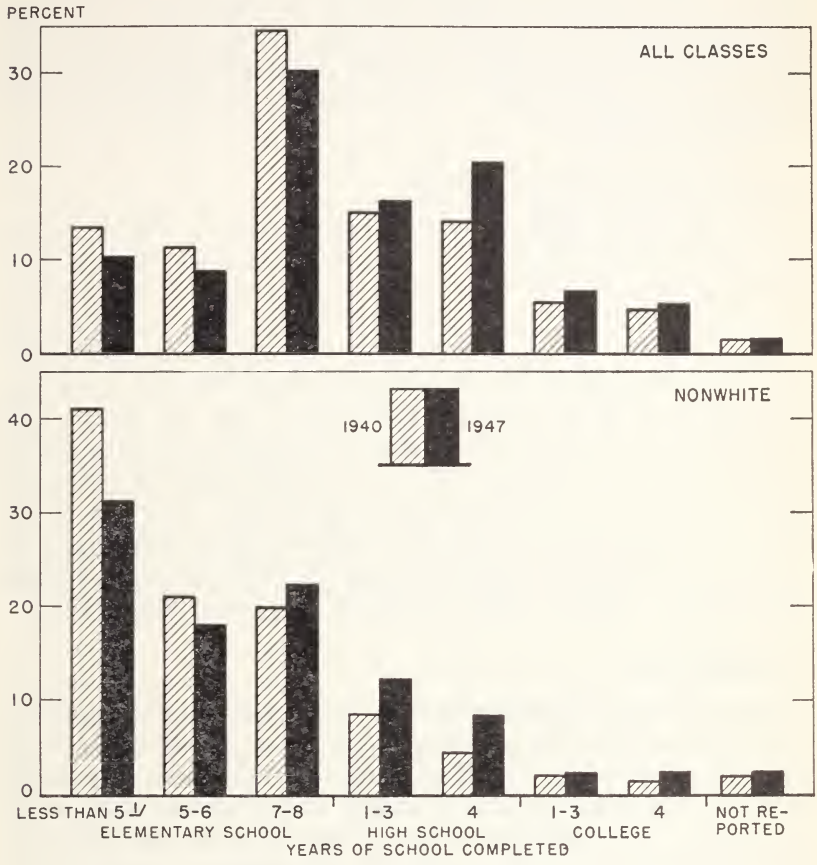
Nevertheless, there are areas of illiteracy in which encouraging progress can be reported, but considerable work still needs to be done. The Bureau of the Census has estimated that the percentage of the total population 10 years of age and over who cannot read and write in any language decreased from 10.7 percent in 1900 to 2.9 percent in 1940. Most rapid progress was indicated in the Negro population, where illiteracy decreased from 44.5 percent in 1900 to 11.5 percent ("non-white") in 1940. The largest numbers of illiterate persons as the half century drew to a close were found among the foreign-born; but even there, the percentage had decreased from 12.9 percent in 1900 to 9.0 percent in 1940. Chart 2 shows these changed percentages and the progress made toward literacy in each category and for the population as a whole.

EDUCATIONAL ATTAINMENT OF ADULT POPULATION SHOWS IMPROVEMENT

The median school year completed by the population 25 years of age and over, according to 1947 estimates of the Bureau of the Census, was the 9th grade. The corresponding figure for 1940 was 8.4 grades.

Chart 3.—YEARS OF SCHOOL COMPLETED

Persons 25 years and over in the civilian population, April 1947, and total population, April 1940



[1] Includes persons reporting no school years completed.

In the total population in April 1947, almost 10,000,000 persons 25 years of age or over had finished 1 or more years of college work. That was almost 1 in every 8 of the population of that age. Almost 1 in every 3 had finished high school and almost half had finished or gone beyond the first year of high school.

Between 1940 and 1947 the percentage of the population 25 years of age and over who had not completed any high-school work decreased from 59.5 to 49.5. The percentages of those called "functionally illiterate" (having completed fewer than 5 years of elementary school) decreased from 13.5 percent to 10.4 percent. For the non-white population alone, the corresponding figures were: 41.1 percent in 1940 and 31.4 percent in 1947.

Nevertheless, the effect of educational differentials of previous years was still noticeable in the adult population. While a little less than half in 1947 had received no high-school education, almost three-fourths of the non-white adults had had no high-school education. And whereas almost 1 in every 3 adults had been graduated from high school, only a little more than 1 in every 8 non-white adults had been graduated from high school. Chart 3 shows these facts, revealing encouraging progress.

RACIAL DIFFERENTIALS DIMINISH

As the century began, educational opportunity of Negroes in the United States was definitely inferior; but during the half century, steady progress has been made. In every age group, larger percentages of Negroes are attending school today than the comparable percentages of whites attending as the century began; and in all but the 15- to 20-year age group, the gap between Negroes and whites had been substantially reduced. American democracy does not accept with equanimity the fact that the proportion of Negroes attending college is smaller than the proportion of the total population attending college. While there can be no cause for complacency so long as a serious differential continues, the noticeable progress toward providing more nearly equal educational opportunity for all American youth without regard to race, creed, or color is a distinct cause for satisfaction.

Discrepancies

Despite the encouraging progress which is noted in the preceding section there remain certain disquieting discrepancies between the ideal and the actual in American education. The American people should face these discrepancies frankly, for one of the strengths of democracy is that self-criticism is welcomed as the best means of improvement. Taking some justifiable encouragement from a survey of its past accomplishments, without in any way minimizing progress, American education addresses itself soberly to the difficulties now before it. These difficulties are directly connected with the effort to realize the democratic ideal. If our ideals were lower, our problems would be fewer and less severe, for many present difficulties, particularly shortages of classrooms and teachers, have resulted from our effort to provide educational opportunity for all.

SHORTAGES IN BUILDINGS AND FACILITIES

Every State is faced with a grave shortage of school facilities. Owing to population shifts and economic differentials the shortage is more acute in some sections than in others; but everywhere throughout the country the rising tide of war babies is beginning to engulf the

lower grades. The crest of the wave will advance, year by year, through the elementary and high schools to the colleges. During the next 10 years, in the elementary and secondary schools alone, there will be a net increased enrollment of approximately 8 million. School construction was almost entirely suspended during the war years. And while normal replacement of obsolescent structures was thus postponed, temporary structures erected in many instances to take care of increased populations due to the war emergency have almost served their day. The need to replace obsolete facilities and the population increase place upon us now a heavy burden of school construction.

The demand for more school facilities resulting from population increases and the postponement of construction is increased by the need for widespread reorganization of school districts and the extension of public education to new age groups. In many States, 10 years ago, a large proportion of the school districts were so small that there were not enough children to permit the maintenance of an adequate school program and limited resources further restricted the educational program. The steps taken in more than a dozen States have resulted in a reduction of 117,000 school districts in 1940 to 101,000 in 1945. The estimated figure for 1949 is 88,000, a reduction of 29,000 in the 10 years. This 25-percent decrease in the number of school districts within a single decade is a notable forward step in American public education. But a great many districts affected by consolidation require modern and properly located school facilities. Many States are extending school programs at public expense by adding kindergartens at one end, and 2-year community colleges at the other.

The cumulative effect of these developments is a need for at least 500,000 elementary and secondary schoolrooms. Estimates of the Council of State Governments, determined before the 1949 Census Bureau forecasts of increases in school enrollment, put the cost of *urgent* needs of the next 5 years alone, for additional public elementary and secondary school facilities, at nearly $8 billion. If all the factors, including population forecasts, are taken into consideration, the estimates rise to $13.5 billion for the next 10 years, or an annual average expenditure of $1.35 billion. These amounts presumably would come largely from sources within the States.

Some progress in school bulidings has been made since V-J Day. It can be estimated that during the past 5 years there have been authorizations and contracts for from $3 billion to $3.5 billion for school and college construction, about $1 billion of that amount in 1949–50. For the 5-year period, this is roughly half the annual amount estimated as essential to meet the minimum urgent needs of the Nation.

In view of the present international situation, the timing of additional school construction is important. But the fact remains that we

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must have more schools now. In an international emergency, expenditures for many things can legitimately be reduced or postponed, but education is not one of them. Democracy's future depends on it. The Nation's children cannot be put into educational cold storage for the duration of the emergency, and then later moved into an academic hothouse for forced growth.

IMBALANCE IN SUPPLY OF TEACHERS

One of the greatest weaknesses in our present educational program is the serious imbalance between the supply of and the demand for teachers, in both elementary and secondary education. There are far too few teachers for elementary schools, and too many for most subjects in secondary schools. Yet, if this double imbalance were corrected, another equally serious deficiency in teacher supply would probably confront the secondary schools in the late 1950's.

Every year the elementary schools need new teachers to replace those who leave the profession. In addition, because of the shortage of elementary school teachers, at least 1 in every 10 teachers is serving on an emergency basis. Most of these emergency teachers need to be replaced. The normal demand for elementary school teachers will be further swollen in the next 8 or 10 years by the tide of war babies. To meet the total need for qualified elementary school teachers, the present rate of replenishment from the colleges is wholly inadequate. Probably more than 100,000 new teachers will be needed for the elementary schools each year for the next decade. The present rate of production is barely one-third that number. Even more serious, the number of *fully qualified* elementary school teachers graduating each year from 4-year courses of training is slightly more than *one-fifth* of the 100,000 needed. The implications of these facts for American education are serious enough to justify the use of the much-overworked word "crisis"—in its fullest meaning.

For secondary schools, the relation between supply and demand is reversed: there are too many teachers. If the ratio between students preparing for elementary and secondary teaching were the same as the ratio between elementary and secondary teachers who are employed, about three times as many persons would be preparing for elementary teaching as for secondary teaching. In fact, however, four times as many are training in 4-year colleges for secondary teaching as for elementary. Needing about 25,000 to 30,000 new high-school teachers a year, the colleges of the Nation during the past 2 years prepared 67,000 and 85,000 persons, respectively, qualified for certification—more than double the number needed.

When attention is turned to the colleges and universities, the relationship between supply and demand of teachers suggests that one

way to solve the problem of oversupply at the secondary school level might be to encourage more students to prepare for college teaching, especially in the developing community colleges. Before World War II, the common assumption in colleges and universities was that a ratio of 1 teacher to 10 students was "satisfactory." Under the pressures of postwar enrollments, that ratio has been generally disregarded. Furthermore, all estimates of future college enrollments over a period of years indicate a continuing upward trend. These estimated increases are to be welcomed in the national interest and need encouragement if the "national loss of the able" is to be corrected. Assuming merely normal enrollment for higher education in the decade ahead, the colleges will need approximately 20,000 new full-time teachers annually for the next 10 years. Over against this need is the tragically inadequate supply of well-qualified personnel. The number of doctorates awarded to persons entering or continuing in college teaching in any one year has never exceeded 2,116. That was less than half of the normal number of retirements and deaths in the profession. While the doctorate may not necessarily be a prerequisite for *all* college teaching, the maintaining of educational standards in the face of facts such as these has become a major difficulty for American higher education.

INAPPROPRIATE EDUCATIONAL PROGRAMS

Schools and colleges of the Nation are concerned about the inability of current educational programs to attract and hold students.

Chart 1 shows that "drop-outs" increase in number among students 16 years of age and over, when laws in many States do not require further school attendance. During the past 20 years, of those who entered fifth grade, the highest percentage to be graduated from high school was 48.1 in 1948; the lowest percentage was 27.0 in 1931; and the median percentage was 40.3 in 1937. Many young people leave school at the age at which legal compulsions are removed when in fact the holding power of the schools is given its first sharp test. While many other factors, such as the necessity of augmenting family income through the child's earning power, must be considered in studying the problem of drop-outs, forward-looking educators rightly believe that their primary point of attack on the problem is the improvement of the school program. Schooling ought to be so vital, so interesting, so impelling in its appeal to the developing young man and young woman that few leave until they have completed all the education their potential abilities justify their having. Much credit is due our schools for their notable achievement in serving the present large percentage of American youth, but the educational programs can be improved sufficiently to cut down significantly the roughly 50 percent who now leave before completing any program.

In addition to those who leave school, an unknown number attend without fully profiting from their education because it does not fit their needs either as individual persons or as citizens. The most significant development in recent years in curricular improvement has been accomplished in the Life Adjustment Education program in the high schools and the General Education movement in the colleges.

There are two other groups in our population for which present educational programs are inadequate—exceptional children and adults. Among exceptional children are included about 2 million between the ages of 5 and 19, such as those suffering from impairments due to infantile paralysis, cerebral palsy, blindness or partial blindness, deafness, cardiac ailments, and speech defects. Less than 450,000 of these estimated 2 million are now receiving special educational services through State and local public-school systems. The other 75 percent of physically handicapped are permitted to make their way as best they can with little or no special educational help. Some of these are home-bound or hospitalized and need instruction at their place of confinement. Others need special day school classes. Still others must be cared for through residential schools which most States provide for special categories of the handicapped, such as the blind and the deaf. In addition to the physically handicapped, are other categories of exceptional children—the mentally retarded, the gifted, and the emotionally disturbed or the seriously maladjusted. When these are added, the number of exceptional children approaches 4 million, for all of whom the usual programs of education for normal children are inappropriate. The Nation needs a better educational program for these young people who, through no fault of their own cannot profit fully from the usual opportunities, but who with proper education can become fully productive and happy members of society.

As for adult education, the modern view assumes that education is a life-long process, and that the formal school years are designed primarily to begin the process rather than to complete it—that "Commencement" is an educational transition rather than a breaking point. The size of the task of providing education for our large adult population can be judged from a study of the amount of schooling certain population groups have. Although 8 or 9 million adults have 4 or fewer years of formal education, and may be considered functionally illiterate, fewer than 100,000 of them are currently enrolled in literacy classes. An estimated 40 million adults are conscious of the need for further learning under instruction, mainly in public affairs, homemaking including family life and parent education, vocational skills, commercial and business education, and recreation including physical education and arts and crafts, but at last count the public schools enrolled only about 3 million of them. The rest of the adult popu-

lation could profit from imaginative community-wide educational undertakings in civic education and competence, consumer education, family-life education, human relations, and the understanding of world affairs. Practically all of the adult education offered by the schools is designed to serve individuals. Schools are doing very little to improve the effectiveness of groups in their intergroup relationships.

NATIONAL LOSS OF THE ABLE

It is true that a higher percentage of qualified youth go to college and university in the United States than in any other nation; but it is also true that no nation—the United States included—has begun to approach numerical adequacy in its higher education system. The President's Commission on Higher Education estimated that at least half of the Nation's youth have abilities to pursue education for 2 years beyond the high school with profit both to themselves and to society. This same body also estimated that at least a third have abilities which justify their continuance through 4 or more years of college or university studies. We have not yet come near reaching this goal. Even in the peak year of 1941—disregarding the abnormal enrollments in the postwar years—only about 7 percent of the college age group finished a college education. Compared to the estimates of college abilities, that figure was less than one-fourth of the potential student enrollment. In the top 5 percent of high-school graduates, studies show that 1 out of 2 fails to go to college. Among the top third, 2 out of 3 do not continue their education. If allowance is made for the fact that some persons with college abilities may not care to pursue their education beyond high school, the conclusion is that a number *at least* equal to those enrolled, having both the ability and the ambition to go to college, do not do so.

A democratic nation can ill afford this continuing loss of its ambitious and able youth who, year after year, are trained below the limits of their potential development.

EDUCATION AND THE INTERNATIONAL SCENE

The first half of the twentieth century witnessed a broad change in the consensus of the American people on the position and responsibility of the United States in world affairs. Essentially a peaceful people, accepting with unquestioning calm the inevitability of democratic progress, Americans formerly felt secure from armed intrusion because of ocean barriers. By midcentury they knew that the oceans no longer offered them security and had come to trust more in collective security through the United Nations, and in the building of the world community with its structure of law, relying on international police

action against an aggressor. Along with this, the American people found that democracy was not unchallenged in its progress, that totalitarianism was bidding for control over the minds and lives of men—totalitarianism both from the right and from the left, both from foreign and from home-grown versions. And the twice recurrent necessity of armed defense, attended by fundamental and almost universal disruption of normal civilian peacetime processes of life, together with the heavy postwar fiscal and civic burdens and the long trials of the depression of the early thirties has created a new and different mental climate in which American youth learns its lessons of international life.

Educators have played their part in these changes. Like men and women in all other professions and occupations, some educators have been leaders while others have lagged; some have believed that the future could be made at least in part by taking thought about it, while others have been inclined to drift with the currents and let the future take its own course. Valuable and far-reaching efforts of many imaginative educators, however, have carried through revisions of curriculum content which have increased the ability of American youth to understand world developments, to grasp the fuller significance of the American heritage of democratic freedoms, and to form their own convictions as to the place of the United States in the world scene. The numbing effect of the cold war which chilled the capitals of the world as the half century drew to a close was felt in the schools and colleges also. The electrifying action of the United Nations on June 27, 1950, was to have an effect which could not be fully and clearly foreseen. Would it mean that democracy was to become vital and strong, firm in its faith in the people and hopeful of the future for all men everywhere, unafraid and undaunted in the face of the threat of total war? Or would it mean that democracy was to falter? Education could play a decisive part among our people in answering these questions. The schools and colleges will unquestionably give more attention and a larger place in the entire program of the schools to studies and other experiences which prepare youth to understand the complex international situation, and the part the United States must play in creating international undestanding and peace.

Summary of the Half Century

Midway in the twentieth century, educators could look back upon 50 years of progress which, taken by itself, was most encouraging. They could see schools and colleges reaching a larger number of people than ever before with more varied programs of higher quality than ever before. They could see significant reduction of racial differen-

tials in educational opportunity. They could draw on the intellectual and spiritual fruits of modern man's scientific and cultural advance as resources in their efforts to continue the progress so well begun.

But when educators put this progress in context with the march of men and events, and when they consider the grave deficiencies, both quantitative and qualitative, with which education is handicapped, they might conclude soberly that the midcentury brings at least as much of challenge as of congratulation.

In this frame of mind, educators might then inquire more precisely into the events of the year 1949–50, to see what more immediate hope arises and what more direct light is shed on the path ahead by the happenings in the educational world during the past year.

1949–50 in Review

Laymen Become Active—and Organize

One of the most encouraging developments of the year under review was the further growth of citizens' interest in education, and the organizing of that interest to make action effective. As the year began, there were about 150 organized citizens' groups scattered throughout the country, each working on local educational problems. As the year ended, that number had doubled, and encouraging results were being achieved in every part of the Nation. These groups supplemented, and often grew out of parent-teacher associations, of which there were approximately 33,000 in the Nation. Feeling the force of the shortages and inadequacies discussed earlier in this report, the people were gathering strength to meet the midcentury challenge. They were demonstrating what awakened and informed public intelligence *can* do in solving community problems.

Much credit for growth of the movement during the past year goes to the recently formed National Citizens' Commission for the Public Schools—itself a lay movement on a national scale. Cooperating with the Commission is the Citizens' Federal Committee on Education, an advisory group of representative laymen established by the Office of Education in 1946. The national information program on the need for better schools, originated in 1947 by the Citizens' Federal Committee, has been expanded in the past year by the added strength of the National Citizens' Commission for the Public Schools. Through joint action of these two national committees, and the Advertising Council, Inc., and with the support of parent-teacher associations and business groups throughout the country, this Nation-wide campaign has been conducted through the press and radio, and through the use of outdoor posters and cards in streetcars and busses. The campaign

has brought to the general public the sense of impending crisis under which the schools of the Nation operate and the need for lay activity. The Chamber of Commerce of the United States, labor organizations, and many service organizations as well as parent-teacher associations have reached their constituents with the same message. America begins to realize that the time for action is *now*.

The movement is not regimented. It is in the true tradition of a democratic people. In many instances, local citizens' groups have been formed in response to the leadership of a member of the school board or the principal or superintendent. In many other cases, someone who has heard about a citizens' committee in another town or school district, asks his neighbors, "Why not here, also?" Usually, these citizens' committees began by surveying their own communities, to find out why there were not enough qualified teachers for the elementary grades, or why long-postponed school building needs were not met, or why older high-school pupils were dropping out of school and sometimes turning up as names on the police blotter. They were surveying their own communities in much the same manner as the national scene is summarized in this report. They were putting into the public record, and into the minds of local citizens, the story of accomplishments and deficiencies of their own schools.

These activities, added to those of long standing carried on by parent-teacher organizations, brought results. Bond issues were voted to meet accumulated building needs; and the year 1949–50 saw an estimated $1 billion of school and college construction contracted for or under way. Teachers' salaries began to climb to more nearly adequate levels: the average salary for the Nation's elementary and secondary school teacher rose from $1,475 in 1940–41 to $2,985 in 1949–50. Even this doubling of the national average, however, did little to increase the real wages of teachers because of the rise of the price level during the decade. While much of the improvement took place in localities where no special citizens' group had been formed, there is no question that the interest of lay persons in the plight and progress of the public schools is having its effects. The National Citizens' Commission predicts that the 300 local citizens' groups existing in June 1950 will increase to somewhere between 500 and 1,000 by the end of the year.

State Governments Act

Only 10 State legislatures held regular sessions during the year. Nevertheless, the record shows an active interest in educational matters at these regular sessions, and in several States special sessions dealt with educational matters even though they were convened primarily for other purposes. California's State Legislature, for

example, in extraordinary session appropriated an extra $4,650,000 to help school districts begin to catch up to the demands of a growing population. The funds appropriated were in part allocated to give greater proportionate State aid to the school districts having lower taxable valuations. Georgia adopted a "merit system" for "all employees of the State Department of Education," reflecting the need for improved professional status. The Idaho Legislature, in special session, buttressed the reserve fund for teachers' retirement by adding $1 million for the fiscal year 1951. Maryland increased from $200 to $600 the amount which the State pays toward the education of each physically handicapped child. Mississippi moved to eliminate conflicts and confusion in the fiscal base of its school districts, a step essential to sound fiscal progress. New York added 1,200 scholarships for veterans pursuing college work in the State and established scholarships of $750 a year in medical and dental schools. New York also advanced moneys to school districts for emergency school building needs; established a temporary commission to study the needs for public-school buildings and their costs, and, in light of the financial ability of localities, to make recommendations and to prescribe standards for emergency school construction; and revised the basic legislation on which the developing State University system is to rest. Virginia broadened the tax base of its school districts and authorized 30 annual medical scholarships of $1,000 each to be used by Negro students for out-of-State study under the regional college plan developing in the South.

The regional college plan, under which 12 Southern States pool their resources in certain branches of higher education, began to reach effective dimensions in the school year 1949–50. Contracts with four institutions for veterinary medicine, with seven for medical education, and with six for dental education provide that students from States not now having adequate facilities in these fields will be received at the contracting institutions, and that the States concerned will pay stipulated amounts toward the expenses of educating such students. In 1949–50, 388 students were enrolled under these regional contracts. The regional plan of interstate cooperation in education, particularly higher education, will be observed and studied with considerable interest in all parts of the country. One region, for example, the Rocky Mountain States, has only two medical schools, one school of veterinary medicine, and no dental school whatever in the entire region. And together with the institutional arrangements to provide cooperatively for students in curricular areas not otherwise covered, there is a correlative development which, if followed through, will integrate across institutional lines the courses, faculties, and students

of separate universities within a region. The interstate agreement of the University of West Virginia and the Medical College of Virginia on the transfer of credits in medicine, and the southern regional training program in public administration are examples of this new development.

Emphasis on Realism in Education

It cannot be said that growth and development in the content of the educational experience has taken place in any single school year, but 1949–50 is a good year from which to survey what has happened in making school life a realistic training for life itself. Education in America has begun to move out from its cloistered preoccupation with the three R's; and, without sacrificing the values of academic fundamentals, the schools are now doing a better job than ever before in educating youth so that tomorrow's adults will be effective citizens and successful homemakers, informed on world relations, prepared to make a living and to enjoy leisure constructively, adjusted to life in a modern urbanized and technological civilization, and rooted in the community in spite of the high degree of mobility that characterizes our society.

At the same time, these schools are actually doing a better job at teaching the three R's than the old school of the McGuffey Reader and the blue-backed speller days. A misconception about the modern school needs to be corrected. There are those who try to discredit it by saying that it is "getting away from teaching the fundamentals." Extravagant charges are made that the schools of today are turning out graduates who cannot read, write, spell, and count; that the schools are fast becoming the haven of incompetent teachers and idle or lazy pupils; that school funds should not be spent for such courses as "education for family life," but that a greatly reduced budget should be used to return the schools to their primary tasks. None of these charges can be sustained by an impartial assessment of the evidence.

On the contrary, incompetent teachers can best be eliminated not by reducing school budgets but by increasing budgets so that competent persons can replace many of the 1-in-every-10 elementary teachers now serving on an emergency basis. The so-called "lazy" pupil needs not to have his nose forcefully thrust between the covers of a speller or an arithmetic book; he needs to have the kind of school which successfully competes for his active interest. More than a half century ago, American educators accepted the fundamental view that learning is closely related to pupil interest. Is it not time that more laymen shared this idea? Such evidence as is available points to the conclusion that the schools of today are on the whole doing a better

job than formerly—not merely as good a job, but a better one—in teaching reading, writing, and arithmetic. One of this year's publications of the Office of Education, The Place of Subjects in the Curriculum, shows specifically how elementary school children are learning the fundamentals in ways that are real and important to them. And all available evidence also indicates that the students of today are getting something their forebears did not find in school in anything like the same proportions: they are learning the three R's of citizenship—Rights, Respect, and Responsibilities.

The life adjustment education movement, sponsored by the Office of Education along with nine national associations of professional educators, is a manifestation of the growing interest in education with real life situations and in activities and responsibilities of life as it is lived. The Commission on Life Adjustment Education for Youth, through which the work is done, recognizes two guiding principles in developing a rounded high-school program for all youth: (1) each school should attempt to enroll and retain all youth of the community; and (2) for each pupil life adjustment education is an individual matter. Progress toward these goals is a matter of development in each local community, with no standard patterns or regimented programs superimposed. Essential to good education is the basic notion that *each* pupil should be given educational tasks and opportunities for experiences which are suited to *his* needs and abilities, both as a person and as a member of his society. Furthermore, each pupil should be measured and judged in his progress not by some arbitrary average or standard, but by the degree to which he has learned to use his own *native* ability. The Procrustean curriculum of 1900 deserves the indignation of 1950's citizenry wherever it still survives: That curriculum does not meet today's needs.

The children and youth of America need to explore their own communities, through work experience associated with their schooling. As long as any significant proportion of the young workers of the Nation are dissatisfied with their jobs, they have need of vocational counseling and training, so that legitimate ambition may replace frustration and disillusioned apathy. As long as half of the money spent for recreation goes for purely spectator sports, is it not in order for the schools to develop a more constructive attitude toward the use of leisure? As long as one in every five families plunges into domestic difficulties, ought not the schools to work to reduce family maladjustments through education for family life?

Does not the fact that about half of the draftees in World War II had some disqualifying defect indicate that education has some share of responsibility for providing good school health services and for encouraging sound health habits and knowledge? When for about

1 in every 20 Americans there looms the prospect of treatment for longer or shorter duration in a mental hospital, is there nothing that the schools can do to help build the inner resources of mental and spiritual poise which are adequate to the tensions of modern living? When scarcely half of the eligible adult citizens care enough about their democratic rights to cast their votes on election day, can it be argued that the schools have devoted too much time and attention to the fundamentals of citizenship education? When an increasing percentage of persons arrested for lawbreaking is in the age group under 25, can it be maintained that the community has succeeded in providing schools which train youth for the full assumption of adult responsibilities? And as long as large numbers of students drop out of school when they reach the age at which the compulsory attendance controls are lifted, can it be maintained that the schools are erring in trying to make their curriculums vital and relevant to the student's own concerns and sense of need?

Without sacrificing any of the values of the old-line high school which was designed primarily to train its graduates for college entrance, the secondary schools have at this midcentury come to accept their fuller obligation to the 60 to 80 percent of their students who will never go to college. The broadening and enriching of curriculums, the use of unconventional teaching techniques, the stimulation of joint planning by teachers and pupils, the employment of improved guidance and counseling processes, the replacement of descriptive appraisals of progress for outmoded mechanical marking systems, the extension of the local public-school system through the thirteenth and fourteenth grade-year with the addition of terminal and vocational courses of study—these and other concomitant developments are a yeasty ferment at work in the secondary schools of the Nation at midcentury.

Most of the essentials of life adjustment education have already won their way in the better elementary schools, where flexibility of subject matter has permitted adjusting the teaching process to the needs, aptitudes, and abilities of individual pupils. There the curriculum has become a tool rather than a tyrant. As the movement to make education rational and genuinely educative now builds up through the secondary schools, it will increasingly undergird the effort in the colleges and universities to focus the undergraduate curriculum on general education. Along with the increased interest of lay persons in education, this effort to give education a functional relationship to life is the second hopeful trend in American education at midcentury. And it is significant that one of the greatest points of strength in the life adjustment and general education movements is their involvement of the lay public. By midcentury, 15 States had established

State committees on life adjustment education for youth; and in 8 of these States the programs were being vigorously carried on. In 10 additional States vigorous programs were carried on in cooperation with the national Commission, although the "life adjustment" label was not used.

Federal Participation in Education

From early times, the Federal Government has been interested in the promotion of education. Traditionally and rightly, the primary responsibility for the furtherance and control of education has rested on the States and local communities. The people of the Nation, without in any way modifying State and local control, have increasingly employed the Federal Government to achieve educational objectives not otherwise attainable. These may be discussed under a dozen headings.

RESEARCH CONTRACTS

Perhaps the most significant development in the relationship between the Federal Government and higher education during the past 10 years has been the increased use by Federal agencies of the facilities and personnel of colleges and universities for research purposes. In carrying on research, the Government has the alternatives of (1) establishing its own research institutions and processes at great cost and recruiting personnel mostly by bidding against the colleges and universities, or (2) contracting with established research centers such as colleges and universities to do the work with staffs and facilities which are augmented for the purpose if necessary.

In fiscal 1949 (latest figures available) total Federal obligations for research and development including construction for research facilities approximated $1.2 billion, of which $96 million, or 8 percent, was conducted by colleges and universities. By far the largest proportion of this expenditure ($94,868,000) was in the natural sciences, with research in the social sciences receiving 2.5 percent of the total Federal expenditure for this purpose.

Departments and agencies contracting for research in 1950 were: Department of Defense (Army, Navy, and Air Force), Commerce (Civil Aeronautics Administration and Weather Bureau), Agriculture (Office of Experiment Stations, Agricultural Research Administration, and Soil Conservation Service), Interior (Bonneville Power Administration and Fish and Wildlife Service), Atomic Energy Commission, Federal Security Agency (Public Health Service), and the National Advisory Committee for Aeronautics. No funds were appropriated to the Office of Education for use in contract research.

When the Government contracts for research, each bureau or agency contracts with the institutions of higher education, usually to carry out a specified piece of research. No comprehensive study has been made of the possibility of overlapping and duplication in these contracted services. Studies made so far have uncovered no instance in which an institution has complained that an agency of the Federal Government has attempted to exercise any coercive pressure or undue influence through its research grants and contracts. It is also worth mentioning that the heavy emphasis on the natural sciences in federally supported research has had a decided effect on the higher educational scene.

VETERANS' EDUCATION

All indications suggest that the enrollment of veterans of World War II in educational institutions with the aid of Federal funds provided through the Veterans' Administration under Public Laws 16 and 346 has passed its peak. That agency reports that an average of more than $2¼ billion a year has been paid in benefits to veterans under these laws. The authorized expenditure for 1950 was $2,800,000,000 and an average of 2,158,000 veterans were using their educational benefits under the GI bill of rights. Of these, an average for the year of 655,000 were enrolled in institutions of higher education, 839,000 in schools of less-than-college grade, and 664,000 in courses related to on-job and on-farm training. The Housing and Home Finance Agency has helped to house the veterans enrolled in higher education, providing some 129,000 temporary housing units on or near the campuses. Almost every campus has had its veteran students, and available information indicates that perhaps half of these men would not have been in college or university at all if they had not had the financial aid provided by Federal action.

MILITARY EDUCATION

To provide a supply of junior officers for the armed services, the Government helped to maintain training programs in 231, or one-eighth, of the 1,808 institutions of higher education in 1950. Only 30 of these institutions had units representing all three major services—ROTC (Army), AROTC (Air Force), and NROTC (Navy). Another 78 had units representing two of the services. Several hundred institutions had applications pending, looking toward the establishing of units on their campuses. The authorized expenditure for Officers' Reserve Corps programs in both secondary and higher institutions for 1950 was more than $16 million, which did not include the pay of the 5,000 to 6,000 military instructors assigned to the institutions. The additional costs to the institutions

involved have not been estimated. Military training of some sort is "compulsory" at 120 institutions out of the 231—the degree of compulsion varying widely. Enrollments in the senior reserve programs (usually the junior and senior years) in 1949–50 approximated 100,000 for the Army, 11,000 for the Navy, 48,000 for the Air Force, and 1,400 for the Marine Corps. Five of the 17 land-grant colleges for Negroes have units, and 8 other non-land-grant institutions attended predominately by Negroes have Army ROTC units. Two have Air Force units, and none has a Navy unit.

The programs of the three branches of the service are not uniform, either in the proportion of a student's curriculum which is "required" or which falls into the military science field, or in the benefits offered to reserve officer candidates. The Navy's "Holloway plan" pays a student $50 per month during the school year for the full 4 years of study, and $78 a month during the summer cruises, and bears the cost of tuition, fees, and textbooks. The student is required to complete 29 semester hours of specially prescribed work for which 24 hours of credit is given. The Army and Air Force ORC programs make generally smaller demands on the student's time, and in the level of benefits paid are at present considerably below those paid by the Navy during the first 2 years.

SCIENCE EDUCATION

On May 10, 1950, Public Law 507, establishing the National Science Foundation, received Presidential signature. A National Science Board of 24 members is to be appointed by the President, by and with the advice and consent of the Senate, plus a Director, similarly appointed, who is an ex-officio member of the Board. The Foundation is authorized to promote basic research and education in the sciences (more particularly, the physical, biological, and medical sciences and mathematics and engineering), both by contracting to have such research done and by initiating and supporting such research. A special concern of the Foundation is to be research connected with national defense. Scholarships and fellowships may be granted in the mathematical, physical, medical, biological, engineering, "and other" sciences. Appropriations are authorized (but funds not yet appropriated) at not to exceed $500,000 for the fiscal year 1951, and not to exceed $15 million for each fiscal year thereafter.

As the bill establishing the Foundation moved toward passage, there was considerable discussion over the security provisions of the proposed legislation. It was finally agreed that clearance based on Federal Bureau of Investigation reports is to be required for all persons dealing with "restricted" materials and information. Holders of scholarships and fellowships are to sign a non-Communist affi-

davit and subscribe to the oath customarily required of all government employees and elected officials and members of the armed forces.

The law provides that the National Scientific Register, formerly known as the National Roster of Scientific and Specialized Personnel, be placed under the jurisdiction of the National Science Foundation. The Register is now in the Office of Education.

There is a growing concern among the Nation's educators and statesmen over the possibility that Government action in one narrowly defined area may lead to an undue emphasis on the natural sciences and result in an imbalance in education and in the national culture. The Congress may well consider whether its necessary and desirable action in behalf of the natural sciences has not brought upon it the further obligation to act with similar effectiveness in the fields of the social studies and the humanities. While it may be true that the natural sciences are more closely related to national defense than are other fields, it is also true that by no means all of the best brains and highest talents of the Nation can or ought to be enlisted in the natural sciences. And since the Federal Government is created not only "to provide for the common defense" but also "to promote the general welfare," action on a broader front may be in order. Dr. Vannevar Bush, in *Modern Arms and Free Men*, puts it this way:

> It is essential that we provide equality of opportunity of higher education in the full sense, so that talent and intellectual ambition shall have no artificially imposed limitations, so that highly endowed youngsters, wherever located, may come forward with full educational equipment to attack the great problems of the future, in law, medicine, principles of government, social relationships, science, engineering, business theory and practice, and in the humanities that underlie all our thought on the problems of civilization.
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> More broadly, all of the professions are essential to our strength and progress as a nation. Some day they should all be led by the most highly qualified individuals in the entire population, regardless of personal circumstances, furnished at public expense with all the educational opportunity they can usefully absorb.

MEDICAL EDUCATION

In addition to research grants awarded by the Public Health Service for the support of investigation of basic sciences important to health and the control of disease, fellowships and grants for training are also awarded by the Public Health Service, principally through its National Institutes of Health. For fiscal 1950 about $2,875,000 was appropriated for this program, designed to encourage highly promising students to become more proficient in research in medical and related sciences. Fields included were not only the older branches of medicine but also some of the newer phases of mental health, in psychiatry,

clinical psychology, psychiatric social work, and psychiatric nursing.

The Veterans' Administration in the fiscal year 1950, carried on a program of internships or "medical residencies" under which some 2,456 men were acquiring the experience and training which better fits them for the practice of medicine. The authorized expenditure for the year was $8,247,600.

The critical financial situation in which most medical schools of the Nation find themselves has highlighted the question of Federal aid to medical schools. The short supply of doctors, dentists, and nurses for the full civilian and military needs of the Nation is cited as justification for special Federal action in aid to medical education. Considerable interest was evidenced in these matters during the past legislative year, but final action is yet to be taken by the Congress.

EXTENSION SERVICES AND SPECIAL EDUCATIONAL GRANTS

Several departments and independent agencies have extension services each of which serves a particular purpose. Through the largest program of this type, the Department of Agriculture disseminates scientific and other information to farmers for the development and improvement of agriculture and home life on farms. About $32,573,360 was available in 1950 to the Extension Service, to keep farmers abreast of current developments in agriculture and their wives in home economics and to support 4–H clubs for young people. Legislation now under consideration would lodge somewhat similar extension service functions with the Department of Labor, in reaching the nonagricultural workers of the Nation.

In every State there is at least one land-grant college or university, established and nurtured under the first Morrill Act and subsequent legislation. In 1950, $5,030,000 was available from the Federal Government through the Office of Education in direct support of instruction in these institutions, an amount slightly greater than that appropriated for Atomic Energy fellowships. The program is designed to ensure instruction at the college level in agriculture and the mechanic arts, although none of the land-grant colleges is by Federal action restricted to these fields. The Office of Education is responsible for administering these funds for land-grant institutions.

In 4 States—California, Maine, Massachusetts, and New York—Maritime Academies are operated to train men for maritime service. These academies received a total of $1,053,492 granted by the Maritime Administration of the Department of Commerce. The Federal Government also expends funds for the operation of Federal Merchant Marine Academies, the Military Academy at West Point, the Naval Academy at Annapolis, and for Coast Guard Academies. A total of approximately $15,836,573 was expended for these purposes during

the 1950 fiscal year. Budget figures are not available for the graduate schools of the Department of Agriculture and the Bureau of Standards which are largely self-supporting and require almost no Federal funds.

Federal aid is extended to Howard University and the Columbia Institution for the Deaf, both in Washington, D. C. These two institutions, one for the higher education of Negroes and the other for the deaf, respectively, are federally aided private corporations, each serving a special educational purpose which the Congress has long recognized as a Federal responsibility. Other schools operated by the Federal Government primarily for in-service training of the Government's own personnel include the National Police Academy, the Command and General Staff School, the National War College, the National Industrial War College, the Air War College, and the Air University. Totals authorized for this group of institutions in 1950 are not available.

Finally, in this category of special aids for special purposes (other than the grants to land-grant colleges and programs such as vocational education which are discussed below in connection with the Office of Education) is the Government's interest in the higher education of certain national and ethnic groups. Under the Philippine Rehabilitation Act, 124 Filipinos in the 1950 school year received free tuition and fees in American institutions of higher education. The Bureau of Indian Affairs provided $9,390 for tuition and other assistance to American Indians in institutions of higher education and vocational schools. Certain small amounts were also spent on correspondence courses at the higher educational level for inmates of Federal prisons.

EDUCATION ON FEDERAL RESERVATIONS AND IN "FEDERALLY IMPACTED" AREAS

The onset of defense preparations in the early 1940's, followed by World War II, brought to many communities sudden increases in population. The Lanham Act provided funds to assist such war-congested communities in providing needed facilities, including construction and operation of schools, where such facilities were considered essential to the national effort. With the surrender of Japan, the communities were notified that since the primary purpose of the program had been to aid in prosecuting the war, Federal aid to schools under the Lanham Act would not continue after June 30, 1946.

But Nation-wide housing shortages caused the emergency housing projects to continue at practically full occupancy: the children were still there. At the same time, in many of the affected communities, large amounts of property had been transferred to Government ownership, bringing a reduction in local tax income. In addition, costs of school services were rising. To meet this situation, the Lanham Act

was extended for an additional year (to June 30, 1947) providing Federal assistance for current expenditures. Similar emergency extensions of Federal aid to these impacted areas were found necessary in the fiscal years 1948 (the Landis Act) and 1949 (Public Law 839). In this last act, Congress also recognized that new communities were to be added to those previously aided, because of reactivation or expansion of existing defense installations or the operation of new defense establishments. Many a town or city justifiably felt that as a community it had the right to special consideration; and the Congress recognized that Federal action had created an obligation for Federal aid to the schools of these communities. The Eighty-first Congress in its first session continued the "emergency" program of aid to schools on Federal reservations and in areas disproportionately affected by Federal establishments, authorizing an appropriation of $7,500,000 to be administered by the General Services Administrator. Meantime, in its second session, the Eighty-first Congress was moving toward legislation which would put the program on a continuing basis. In the legislation which was under consideration during the 1950 fiscal year the Commissioner of Education would be charged with administrative responsibilities for a continuing and coordinated program of meeting these needs. The House Committee on Education and Labor in its report on H. R. 7940 said—

> The United States has become an industrialist, a landlord, or a businessman in many communities of the Nation without accepting the responsibility of the normal citizen in a community, because property under Federal ownership or control generally is not subject to local taxation.

Burdens resting on local communities and calling for relief through Federal support of schools grow out of Federal ownership of property which reduces local tax income, and out of Federal projects or activities that cause an influx of persons into a community.

SCHOOL LUNCHES

Under the National School Lunch Act of 1946, Federal funds, when matched by State funds, support a program of lunches for children in public and nonprofit private schools. In part a legacy of the effort to meet the depression of the thirties as well as to dispense surplus commodities held by the Government under its farm price stabilization program, the school-lunch program of 1950 grows out of more than a century of sporadic effort to provide satisfying noontime nourishment to school children. The Secretary of Agriculture administers the school-lunch program, apportioning appropriated Federal funds partly in accordance with population and partly in accordance with the relative fiscal abilities of the States. Matching by the States has, up to the present, been on a dollar-for-dollar basis; but beginning in

1951 the ratio increases until 1955, after which the States will be paying $3 for each Federal dollar—except that low-income States will reduce the matching requirement "by the percentage which the State per capita income is below the per capita income of the United States." Federal expenditures for school-lunch programs in 1950 were authorized in the amount of $83,500,000. The Office of Education, although without administrative responsibility for the federally aided program, was frequently called upon for advice to the States and schools in matters of nutrition education as related to school-lunch programs.

LOANS FOR HOUSING OF FACULTY MEMBERS AND STUDENTS

To help meet the critical need for student and faculty housing on the campuses of the Nation's colleges and universities, title IV of Public Law 475 (approved April 20, 1950) made loans available on favorable terms to institutions of higher education. Up to $300 million was made available for administration by the Federal Housing Administrator. Institutions were to use the funds exclusively for new construction or remodeling, "not . . . of elaborate or extravagant design or materials." The interest rate was to be set at one-fourth of 1 percent above the prevailing rate on long-term Government bonds, thus setting the rate currently at 2.75 percent. Amortization could be spread over 40 years. As the fiscal year ended plans which had been under way to expedite proceedings through this act, with the Office of Education serving in an advisory capacity and helping to screen applicants for loans, were being held in abeyance by reason of the Korean crisis.

INTERNATIONAL EDUCATIONAL RELATIONS

Probably few departments or agencies of the Federal Government were without some sort of international educational program for the exchange of persons in 1950. These programs were under the general supervision of the Department of State, but were administered in cooperation with many other agencies and departments, including the Federal Security Agency, in which the Office of Education and other constituent parts of the Agency were directly involved.

Under the Smith-Mundt Act and the Fulbright program there were approximately 3,000 persons participating, about 1,400 United States students, teachers, and professors going to other countries and about 1,600 foreign nationals coming to this country for study in cultural, scientific, and technical fields.

Under the Fulbright program approximately 500 grants were made to foreign nationals to come to the United States, the funds being provided from the sale of surplus United States properties in foreign

countries which include Australia, Austria, Belgium and Luxembourg, Burma, China, Egypt, France, Greece, India, Iran, Italy, the Netherlands, New Zealand, Norway, Pakistan, the Philippines, Turkey, and the United Kingdom. It may be anticipated that as the Point Four program develops, the international exchange of persons will also receive further impetus.

The report of the Commissioner of Education for 1949 contained observations on these programs, most of which remain relevant. Designed primarily to develop international understanding, the exchange of persons is one of the more imaginative and fruitful educative devices which Federal action has provided.

SUPREME COURT ACTION

The United States Supreme Court had before it during the year two cases brought by Negro citizens from Southern States involving racial segregation in higher education. In two unanimous opinions handed down on June 6, 1950, the Court decided (1) that Negroes must be admitted to the facilities of the State university professional and graduate schools established for white students in the absence of substantially equal facilities maintained within the State at public expense to which Negroes are admitted; and (2) that the status of Negro students when admitted to such public educational institutions maintained for white students must be precisely the same as that of students belonging to other racial groups. The public university maintained for white students, as an agency of the State, may not make and enforce rules requiring the rejection of a Negro applicant unless equally good facilities are simultaneously available to him within the State in the same field of study at public expense, nor can a student, once admitted to a publicly maintained university, graduate or professional school, be segregated on account of race by any restriction imposed by a State. In addition to many other factors of inequality in legal education, the Supreme Court found that, in the study of law, the exclusion of "the most substantial and significant segment of society" from the law school which admitted only Negroes precluded the legal education provided in such separate school from being substantially equal to the legal education available in the law school maintained for whites. The Court did not find it necessary, in disposing of these cases, to rule on the basic issue which had been argued before it, namely: does compulsory segregation in public institutions *in itself* constitute a violation of the Constitution of the United States?

These two cases, known popularly as the Sweatt and McLaurin cases, bring to a climax a series of decisions by the Supreme Court which began in 1938 with the Gaines case. The cumulative effect of the Supreme Court's decisions over the last 12 years is being felt in the

noticeable reductions of financial and other inequalities in educational opportunities provided in the States where segregation of the races is sanctioned by law. One State, Kentucky, anticipated the spirit of the recent Supreme Court opinions when its legislature, in March 1950, enabled the governing authorities of institutions of higher education to elect to permit the admission of Negroes to the institutions provided "an equal, complete, and accredited course" is not available at the Kentucky State College for Negroes.

THE OFFICE OF EDUCATION

With nearly one person in every five in the American population attending school or college full time, and other millions of persons attending part time, nearly 1½ million persons in the 1950 school year were employed as teachers, supervisors, principals, and administrators. The control and administration of this vast educational system has always been primarily a responsibility of the States and their communities. In support of State and local governmental efforts, the Federal Government has increasingly assumed its leadership responsibility by helping education at all levels to be less a national problem and more a part of the answers to problems.

Congress annually appropriates an estimated $3.5 billion for purposes which are directly and indirectly educational. Of this amount, $34 million, or less than 1 percent, is appropriated to the Office of Education, of which $32 million is administered for two programs of grants-in-aid.

First, for vocational education of less-than-college grade, $26,977,-882 in Federal grants went to the States through the Office of Education in 1950. In 1949, the latest year for which figures are available from all States, federally aided programs of trade and industrial education enrolled 800,000 persons, of whom about three out of four were in evening and part-time classes for employed workers. Enrollments of adults in homemaking education (and homemaking is a vocation) in federally aided classes grew from a little less than 300,000 in 1943–44 to more than 700,000 in 1948–49. The postwar increase was made up largely of wives of veterans who were getting help in their homemaking problems. Vocational agriculture reached enrollment levels exceeding prewar highs, operating through approximately 9,000 rural high schools. The all-day classes in vocational agriculture provided instruction to 335,000 farm boys, part-time classes enrolled 27,300 out-of-school farm youth, and adult classes enrolled 290,000 farmers. The distributive occupations program, the newest vocational education field, began to reach a degree of effectiveness in 1948–49 when some 300,000 adult full-time workers were served. The expansion of occupational information and guidance services may

be measured by the growth from only 1 State with an organized program of State supervision in 1938 to 41 States and Territories with such a program in 1950. During that period 1,300 schools with 2,300 counselors have grown to 5,000 schools with 9,000 counselors. Mid-century brought to focus an increasing need for emphasis on service occupational groups, such as practical nurses, city fire department personnel, school building custodians, and workers in cooperatives sponsored by the Rural Electrification Administration.

Secondly, for Federal support of colleges of agriculture and the mechanic arts $2,480,000 is appropriated annually through the Office of Education. An additional $2,550,000 is supplied in the permanent Morrill-Nelson appropriation for instructional purposes in the land-grant colleges. These Federal funds are less than one-thirtieth of the amount spent by the land-grant institutions for "resident instruction" alone, the rest of the funds coming from the States and the students. If the American ideal of equal educational opportunity for all is fully realized, the contribution of the land-grant colleges to the total effort will stand as one of the major monuments to Federal foresight and wisdom. The influence set in motion by land-grant college legislation has not merely strengthened education for "the industrial classes"; it has also given significant impetus to the democratizing of educational opportunity.

Both to cover the expenses of administering these $32 million in grants and to carry on all other operations of the Office of Education under its organic act, Congress appropriates approximately $2 million a year for the Office of Education. Approximately one-fourth of the total costs of operating the Office is used in administering the programs of grants-in-aid. The remaining three-fourths is concentrated in the following major areas: (1) educational organization and administration; (2) methods of instruction; (3) improvement of the teaching profession; (4) international educational relations; and (5) the collection, analysis, and publication of basic statistical information—together with (6) the over-all planning and administrative services essential to the work in all these areas.

The fiscal year 1949–50 saw the Office rendering significant service to the 48 State school systems on their problems of school finance, legislation, and administration. Improved school transportation was a major concern (approximately 45 percent of all passenger-carrying busses in the United States are school busses). The States received advice in solving their problems related to the reorganization of thousands of school districts, and to the remodeling, modernization, and construction of school buildings which the reorganization necessitated.

Under congressional authorization, property declared surplus by certain agencies of the Federal Government becomes available for use by educational institutions. In 1949–50, such property, with acquisition value of $141,506,074 was transferred to schools and colleges through administrative action of the Office of Education.

During the year Congress was considering legislation which would provide Federal aid to help correct some of the shortages in school buildings and facilities. The congressional committees at work on these problems frequently, and in some cases almost continuously, turned to the professional staff of the Office of Education for help in identifying the needs and in devising means for meeting those needs.

As part of its continuing effort to help the schools and colleges provide appropriate educational programs, the Office emphasized its consultative and research services having to do with the gamut of administrative and instructional problems of American education at all levels. The drop-out problem and the place of subject matter in the curriculum received special attention. The plight and progress of exceptional children and youth were brought more nearly into the focus of attention of American educators. School, college, and public libraries were aided and encouraged in self-examination with a view to rendering educational services more effectively. Fresh emphasis was placed on the natural and social sciences. Education programs in the fine and industrial arts were reviewed, particularly in their relationship to the rest of the curriculum. Running through the whole program of instructional improvement was the continuing emphasis on the meaning of democracy in operation.

The serious shortage of qualified teachers for the Nation's schools is a subject requiring extensive research. The broad, general facts are known, but the underlying reasons for the teacher shortage are not agreed upon. How can an adequate number of qualified teachers be recruited? Why does 1 in every 10 teachers leave the profession each year, as compared to 1 in 20 a decade ago? What can be done to provide better in-service training for teachers now on the job? Is the program of teacher education adequately staffed, financed, and administered? Without answers to those questions, education cannot keep abreast of its problems. The Office of Education is using its facilities in cooperation with National, State, local, and institutional organizations of education in the effort to discover answers.

In addition to administering the programs of exchange of educational personnel, the Office of Education evaluated nearly 3,400 credentials of foreign students for more than 300 colleges and universities in 47 States and the District of Columbia.

No other agency or organization, either public or private, is in the position which the Office of Education enjoys with reference to the

collecting, analyzing, and disseminating of basic statistical information regarding American education. It is unfortunate that understaffing of the Office and in particular of its Research and Statistical Services causes some of the major work to be done on a schedule so protracted that data are not always made available while still current. Despite its limited resources, the Office takes modest pride in the quality and quantity of basic information made available to the educational world.

The Office of Education is participating in the President's management and improvement program set forth by the Bureau of the Budget. During the fiscal year important steps were taken to consolidate operations and improve management within the Office. For example, better correlation and increased efficiency were achieved by reducing the number of Divisions from eight to six. As the fiscal year closed, the Public Administration Service was engaged in a study of the Office, and a small group of leading educators of the Nation had been appointed to serve as the Commissioner's Advisory Council.

Such is the work of the Office of Education, in broad and general terms. The details—important, and in many instances fascinating—are recorded in a mimeographed report available on request; for reasons of economy, the report was not printed this year. Even a superficial examination of the services provided by the Office of Education indicates, however, that these services are in the main directed toward helping to meet the fundamental and pressing educational needs of America.

In the extended period of preparation for defense into which the Nation is entering, it is not "education as usual" that we need. We need much more and much better education than ever before if the people of the United States are to achieve the strength for defense which is essential to the long pull ahead, and if at the same time they are to avoid the development of a Garrison State. A democratic free people can maintain a garrison to defend its liberties; but in a Garrison State the people cannot be free nor can democracy flourish. The long period of strengthening our defenses therefore makes essential a similar strengthening of the basic institutions and processes of education, both to assure that each person functions at his own best capacity and to ensure that our children and our children's children will know the blessings of liberty.

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A Survey of Cooperative Engineering Education. Bulletin 1949, No. 15.
State Certification Requirements for Secondary School Teachers of Health Education and Physical Education and for Athletic Coaches. Bulletin 1949, No. 16.
World Understanding Begins With Children. Bulletin 1949, No. 17.
102 Motion Pictures on Democracy. Bulletin 1950, No. 1.
Curriculum Adjustments for the Mentally Retarded. Bulletin 1950, No. 2.
Extraclass Activities for *All* Pupils. Bulletin 1950, No. 4.
Core Curriculum in Public High Schools. Bulletin 1950, No. 5.
Education for a Long and Useful Life. Bulletin 1950, No. 6.
Where Children Live Affects Curriculum. Bulletin 1950, No. 7.
Orientation of English Instruction for Students from Other Lands. Bulletin 1950, No. 8.
The Teaching of Science in Public High Schools. Bulletin 1950, No. 9.
Teachers Abroad. Bulletin 1950, No. 10.
Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1949. Bulletin 1950, No. 11.
State Boards of Education and Chief State School Officers, Their Status and Legal Powers. Bulletin 1950, No. 12.
Toward Better College Teaching. Bulletin 1950, No. 13.
Physical Education in the School Child's Day. Bulletin 1950, No. 14.
Better Living Through Wise Use of Resources. Bulletin 1950, No. 15.
Selected Approaches to Adult Education. Bulletin 1950, No. 16.
School Buildings—Remodeling, Rehabilitation, Modernization, Repair. Bulletin 1950, No. 17.
Know Your Capital City. Bulletin 1950, No. 18.
Movie Projectors in Public High Schools. Pamphlet No. 109.
Digest of Annual Reports of State Boards for Vocational Education, Fiscal Year Ended June 30, 1949.
Summaries of Studies in Agricultural Education. Supplement No. 3. Vocational Division Bulletin No. 242.
Practical Nursing Curriculum. Misc. No. 11.
The Functions of State Departments of Education. Misc. No. 12.
Why Do Boys and Girls Drop Out of School and What Can We Do About It? Circular No. 269.
The Public School Finance Programs of the 48 States. Circular No. 274.
Motion Pictures on the Other American Republics. Circular No. 275.
What Teachers Say About Class Size. Circular No. 311.
High-School Staff and Size of School. Circular No. 317.
The One-Teacher School—Its Midcentury Status. Circular No. 318.

Biennial Survey of Education in the United States

Statistics of Higher Education, 1945–46. Chapter IV.
Statistics of State School Systems, 1947–48. Chapter 2.

Statistics of Special Schools and Classes for Exceptional Children, 1947–48. Chapter 5.
Statistics of Libraries in Institutions of Higher Education, 1946–47. Chapter 6.

Education Directory

Federal Government and States, 1949–50. Part 1.
Counties and Cities, 1949–50. Part 2.
Higher Education, 1949–50. Part 3.
Education Associations, 1949–50. Part 4.

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Index, SCHOOL LIFE, Vol. XXX, October 1947–July 1948.
Index, SCHOOL LIFE, Vol. XXXI, October 1948–June 1949.
Index, Biennial Survey of Education in the United States, 1944–46.
Radio Script Catalog. Sixth Edition.

Periodicals

School Life (9 issues—October 1949–June 1950, inclusive).
Higher Education (18 issues—September 1949–May 1950, inclusive).

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