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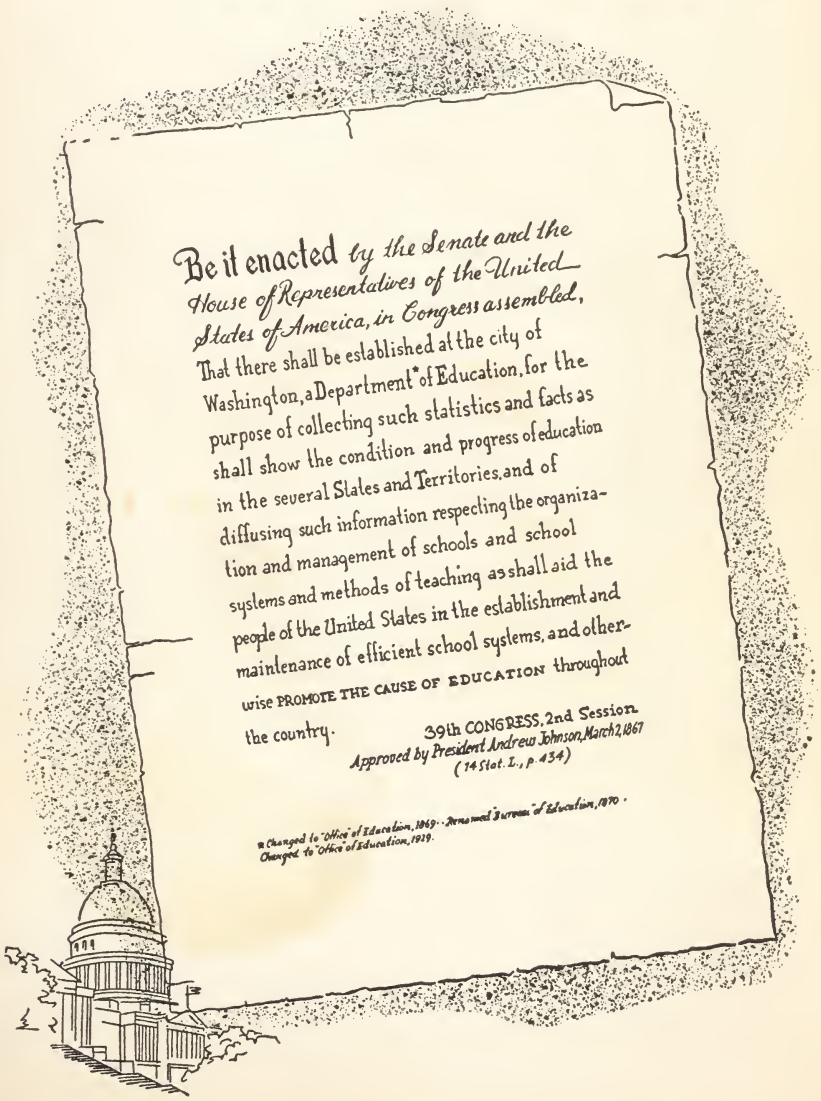
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Annual Report of the UNITED STATES COMMISSIONER OF EDUCATION



Annual Report of the

UNITED STATES COMMISSIONER OF EDUCATION

For the Fiscal Year Ended June 30

1940

JOHN W. STUDEBAKER, *Commissioner*

FEDERAL SECURITY AGENCY • Paul V. McNutt, *Administrator*

U. S. OFFICE OF EDUCATION • John W. Studebaker, *Commissioner*

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AS SET FORTH IN THE LAW ESTABLISHING
THE OFFICE OF EDUCATION

its Purpose is to

PROMOTE THE CAUSE OF EDUCATION

The various methods used by the Office in promoting education are shown on the following pages

Foreword

THE SECURITY of a democratic State rests upon a soundly educated, liberty-loving people. Since the founding of our free public school system the realization has steadily grown that citizens who are to participate in a republican form of government must be enlightened. During that period there has been a remarkable development in public and private educational facilities, enrollments and other quantitative aspects of education. More recently the qualitative improvement of education in terms of curriculum and teaching personnel has been a marked feature of educational progress.

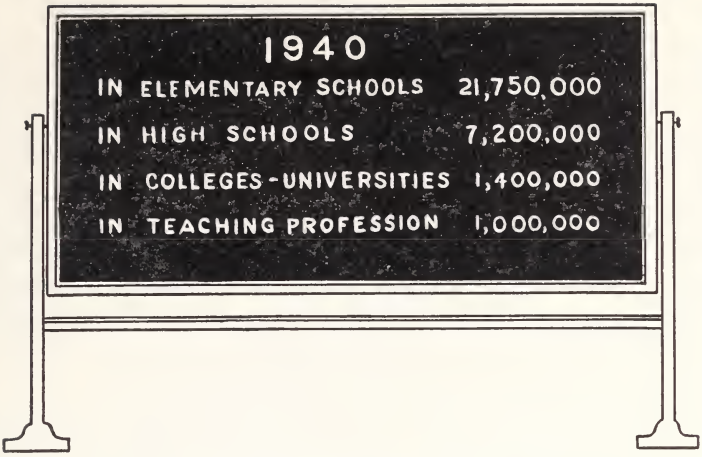
The United States Office of Education was established 73 years ago. Its broad and basic function is to promote the cause of education in the country. In seeking to achieve this purpose, the Office necessarily works regularly and officially with and through State departments of education, institutions of higher learning, and local school systems. In general, its methods involve (1) cooperative relationships with State educational systems and agencies, especially through grants in aid of various forms of vocational education and for the operation of land-grant colleges and universities, (2) research and the dissemination of its findings, (3) leadership and clearing-house functions concerning education in general performed through National and State conferences, educational planning, publications and public addresses, and (4) experimentation and demonstrations to discover more effective educational policies and practices.

This report for the year ending June 30, 1940, summarizes many activities of the Office of Education and reflects progress made in studying educational problems and meeting educational needs. The various chapters presented herewith are based upon reports prepared by appropriate administrative officials covering the activities of their respective divisions and services.

Prior to 1933 the annual reports of the United States Commissioners of Education were published as separate bulletins; from 1933 to 1939 they are available only as a part of the annual report of the Secretary of the Interior. This report covers the first complete year that the Office has functioned as a part of the Federal Security Agency to which it was transferred July 1, 1939. It is hoped that the resumption of separate publication of the report will serve to make it more conveniently available and of greater usefulness to all persons interested in education.

John W. Studebaker

Commissioner.



Chapter I

General Education

American School Systems
Higher Education
Special Problems
Comparative Education
Library Service
Statistics
Library
Health Education
Industrial Arts
Tests and Measurements

The Study Program for the Year

AMONG THE major activities of the U. S. Office of Education is its program of studies of the current educational situation and problems. These studies of educational organization and administration, finance, legislation, curriculum, buildings and equipment, statistics, and numerous other problems result in the publications which the Office issues to "aid the people of the United States in the establishment and maintenance of efficient school systems." This responsibility is specifically stated in the Organic Act establishing the Office of Education. Such studies provide the information and experience necessary for a variety of service activities in which staff members regularly engage. Usually totaling between 60 and 80 studies at any given time, they vary greatly—from brief postal-card inquiries to major surveys lasting several years and resulting in a number of volumes; from studies requiring only part of one person's time to those to which a number of staff members devote most or all of their time. They

include bibliographies, statistical reports, summaries of legislation and other documentary materials, reports of field surveys, descriptive accounts of progressive practice, and now and then—but infrequently —reports of experiments.

The major responsibility for studies in a given field lies with the specialist who represents that area of education. He keeps in touch with the professional organizations in the field through attendance and participation in meetings; he reads the professional journals and keeps up to date generally on the problems and activities along the line of his interest. He is, therefore, in the best position to know what the special needs for study are in his field.

However, in the final selection of problems for study from among those which seem important to members of the staff, it is necessary to keep in mind certain other factors which must affect the decision. Such questions as the following need to be answered in the affirmative: Is the study an appropriate one for a Federal office to undertake? Is the study one which will carry out the intent of Congress in establishing the Office "to promote education?" Is it one which will be of service to the greatest number of people in the light of existing conditions? For example, at the present time two of the commonest questions asked which are a direct outgrowth of existing conditions are those dealing with the teaching of citizenship and democracy in the schools, and the education of children of Government workers living on defense projects. Studies in both of these fields will soon be undertaken.

The year's program of studies in detail as of January 15, 1940, follows:

Studies in progress, January 15, 1940 [1]

Field	Public elementary and secondary schools	Colleges and universities	Special groups	Libraries	Other studies not classified according to level
1	2	3	4	5	6
Organization and Administration.	City School Administration. State Standardization and Accrediting of Schools. Biennial Survey of Elementary Education. How Interpret Elementary Education. Biennial Survey of Secondary Education.	Biennial Survey of Higher Education. Accreditation of Institutions of Higher Education by State Agencies. Authority of State Executive Agencies Over Financial Affairs of State Higher Institutions. National Survey of Higher Education for Negroes.		Internal Organization and Functions of State Agencies for Library Service. Organization of State Agencies for Library Service. Library Service in 1940.	Federal Activities in Education. Functions of State Departments in Organization and Administration of Education Program. Organization of State Departments. Uniform Records and Reports. Reports to Parents. Know What Your State Education System Includes.
Supervision	State Supervisory and Instructional Programs for Art, Music, Radio, and Visual Education. State Supervision of Health, Physical Activities, and Safety Education.		State Supervision of Schools for Negroes. State Supervision of Adult and Youth Activities. State Supervisory Programs for Exceptional Children.		State Supervisory and Instructional Programs.

Studies in progress, January 15, 1940—Continued

Field	Public elementary and secondary schools	Colleges and universities	Special groups	Libraries	Other studies not classified according to level
1	2	3	4	5	6
Supervision	State Supervision of Elementary Education. State Supervision of Secondary Education.		State Supervisory Programs in Parent Education.		
Legislation	Legislation on Administration of Public Schools.			Legislation on School Libraries. Contracts for Public Library Service.	Powers and Functions of State Boards. Powers and Functions of Chief State School Officers.
Finance		Financial Aid to College Students, 1937–38.			Functions of State Departments with Regard to School Finance.
Buildings	School Plant Surveys. Trends in School Building Planning and Construction.				Functions of State Departments with Regard to School Buildings.
Teachers		State Programs for the Pre-Service Education of Teachers.			
Curriculum, Materials and Methods.	Biennial Survey of School Health Work. State Programs for		Adjusting School Program to Needs of Gifted Children.	Good Library Practices in 50 Selected Second-	Expressions on Education by American Statesmen.

	Curriculum Construction. Curriculum Offerings of Rural High Schools.		Industrial Arts for Low-Average Pupils.	ary School Libraries.	Warp and Woof of Health Instruction.
Comparative Education.		Education of Teachers in Scandinavia, Holland, and Finland.			Education in Italy.
Measurement and Adjustment.	Pupil Personnel Services in State Departments.				Newer Methods of Appraisal. Biennial Survey of Educational Research.
Statistics	State School Systems, 1937–38. City School Systems, 1937–38. Public High Schools, 1937–38.	Higher Education, 1937–38. Manual of Instruction in Higher Education Statistics.		Public Libraries, 1938.	
Bibliographies	Improving Instruction in Rural Schools. School Museums and Journeys. Lantern Slides, Film Strips. Elementary School Supervisor. Retardation and Progress. Nursery School-Kindergarten Education.	Selection of Students. Training for the Professions. Student Aid. Student Self-Government.	Adult Education. Education for Marriage and Parenthood.	School Library Administration.	Annual Bibliography of Research Studies in Education. Safety Education. Character Education.

[1] Studies in all stages of completion, from those which have just been approved to and including those which are in the hands of the editor in chief. This does not include studies in Vocational Education.

Major Staff Projects

Two major projects have occupied much of the time and attention of members of the staff during the fiscal year: (1) a coordinated study of the programs of State departments of education; and (2) visits to residential schools.

The comprehensive study of the organization and functioning of State programs of education was begun during the fiscal year 1938–39 and has continued during this past year. The study was undertaken in order that the Office would be in a position to answer the frequent requests which it receives for information as to practices in which the various State departments of education are engaged. Thirty State departments were visited during the first year by committees of from two to five members of the staff; during the year just ended visits were made to the remaining 18 States. Interviews were held with State officials, information was collected on a series of interview sheets prepared for the purpose, and printed material and documents were gathered.

It is planned that this comprehensive study will result in a series of approximately 20 printed publications. About half of them will cover the various aspects of administrative services; the others will deal with the supervision or improvement of instruction at the different levels and in special fields. One manuscript is completed and has been sent to the printer. Work is going forward on the others and should be completed during the coming year.

At the request of the National Association of Training Schools, an organization devoted to the reeducation of juvenile delinquents, the Office has undertaken to visit those training schools desiring assistance in the improvement of their educational programs. Twenty-eight schools have asked for such help, and during the spring of 1940, eight members of the Office staff participated in the program of visitation, each serving several schools in relation to his particular field of activity. Eight of the 28 schools were visited. The office has two main objectives in this program of visitation: (1) to promote a closer relationship between the training schools for delinquents and the State departments of education in the respective States, and (2) to be in position to advise with those institutions concerning their educational programs. During the next year staff members will visit others of the schools requesting this attention.

The Staff

The staff engaged on the program described in this section of the Report, includes 49 professional workers and 49 clerical workers. During the year 1939–40 two new positions were added to the professional staff, both of which are in the Division of Higher Education:

(1) the position of senior specialist in the education of school administrators, and (2) the position of senior specialist in higher education assigned to problems of Latin American educational relations.

Classified according to personnel, the work of the Office divides itself into four major types—that of chiefs of divisions and consultants, of specialists, of librarians, and of the secretarial and clerical staff.

Each chief has under his supervision from two to nine specialists who consult him on matters of policy and come to him with problems on which they need advice. In addition to directive and consultative responsibilities, each division chief is himself a specialist in some phase of education and therefore has his own research projects on which he works as time permits.

The work of the specialists is not confined to research in their particular fields, but involves many other duties. The following account by a specialist illustrates "a typical day in the Office."

> A specialist comes to his desk in the morning with a plan of work that may or may not be realized, for he must always take into consideration unexpected events and urgent calls for action. His first attention is likely to be given to the day's mail, and so dictation ensues for an hour or more in order to give promptly to the educational and lay public the service which it desires. Parents, students, teachers, supervisors, administrators, and other interested citizens are all among our correspondents and write from every part of the country and even from abroad. There may be letters from Members of Congress, relating to matters of interest to their constituents. Perhaps there are Office projects under way which demand correspondence with workers in the field. The time goes rapidly and secretarial help is limited; hence every effort is made to "streamline" correspondence and yet to give the requested service satisfactorily.
>
> The correspondence having been taken care of, the specialist may be free to turn to his research and writing, in preparation for the publication of an Office of Education bulletin; or he may be called to attend a committee meeting on Office policies or projects; or he has a conference scheduled with educators coming in from out of town, or with a parent who seeks special help for the school placement of his child; or with a representative of a foreign government who has come to study our ways of work. Unexpected visitors are welcomed, too—persons passing through the city, or local students and citizens seeking a bit of advice. And the telephone serves throughout the day as another medium for answering questions and meeting requests for service.
>
> In the midst of a day filled with immediate duties such as these, the specialist must always keep in mind the long-time

program mapped out, for he has probably under way one or two or three projects requiring intensive study which are to eventuate in publications on educational problems. Cooperation with persons in the field in the preparation of some of these is a most worth-while but time-consuming procedure, for it involves conferences, critical appraisal of manuscripts in and out of the Office, and revisions in the light of the criticism received. To find the opportunity for uninterrupted work on such projects is frequently difficult. But the specialist in the Office of Education is a servant of the people, and he gives gladly of his time to serve the people. Whether by research, by writing, by correspondence, or by conference, his aim is always to "promote the cause of education" throughout the United States.

American School Systems

The American School Systems Division is concerned chiefly with the various phases of preschool, elementary, and secondary education. It makes studies, furnishes information and consultative services regarding State and local school administration; the financing of public elementary and secondary education; the organization of elementary and secondary schools; elementary and secondary school curriculums; supervision and instruction at the elementary and secondary school levels; school building problems; parent education; and the legal provisions relating to the administration, financing, and numerous other phases of the public-school system.

School Administration

In the field of administration the Division complied with many requests for consultative service in studies and programs for improvements in the organization and management of State school systems, through: Individual and group conferences with chief State school officers or their representatives; reviews of articles and studies on various phases of administration submitted by persons outside the Office; and participation in national, regional, and local meetings.

The following are a few examples of the consultative services rendered in the field of school administration:

The Florida State Department of Education and the University of Florida jointly sponsored the Southern States Work Conference at which the United States Office of Education representative acted in an advisory capacity in reviewing the agenda of the conference and rendered consultative service on problems of State and local administration, instructional personnel, maintenance and operation of school plant; and transportation of pupils.

An official of the Office attended, in a consultative capacity, a conference called by the State Commissioner of Education of Connecticut

to consider and develop plans for a State-wide study program for the purpose of improving the local school unit structure in Connecticut.

A 4-day conference was held with the National Advisory Committee on School Records and Reports relative to the future activities of the Office in connection with the cooperative program on records and reports. A staff member prepared the context for the report on State school statistics.

Among studies in the field of administration in progress and nearing completion are: The organization of State departments of education; the State board of education; the chief State school officer; functions of State departments of education in organizing and administering the educational program, and a review of the practices in city school administration.

School Finance

In the field of school finance a survey of the functions, duties, and services of agencies of State governments in the financing of public education was practically completed. A series of articles for School Life was prepared and is being published, giving a comprehensive digest of plans for financing public education in the following States: Florida, Minnesota, Rhode Island, Texas, Washington, and West Virginia. The text for Statistics of City School Systems was also completed.

Elementary and Secondary Fields

In the field of secondary education the major efforts of the Office have been directed toward preparing manuscripts for publication, rendering field and consultative service, participating in conferences, and otherwise cooperating with educational organizations. Prepared were a report on State supervision of secondary education, a number of articles on subjects in the secondary school field which were published in School Life and other educational magazines, and the text for the report on Statistics of Public High Schools, 1937–38. Among the various agencies with which significant cooperation was carried on in elementary and secondary school fields during the year are the Boy Scouts of America, Allied Youth, State departments of education, National Youth Administration, Bureau of Vital Statistics, United States Public Health Service, Committee on Implementation of Studies in Secondary Education, and the National Committee on Coordination and Cooperative Study of Secondary School Standards.

In the field of elementary education the Office directed its major efforts along similar lines. Following a number of conferences with elementary school supervisors throughout the country, a bulletin entitled "Elementary Education, What Is It?" based upon the conference discussions, was completed. A number of articles relating to

elementary education were published in School Life and in other educational journals. Among these were "Industrial arts in elementary education," "A modern English program for modern schools," "A technique for school visiting," and "Effects of school organization upon children's progress." One study which includes both elementary and secondary schools is in progress, namely, "The release of public-school pupils during school hours for religious instruction." This study will report the number of school systems that release pupils for religious instruction, the number of weeks and number of days during the week that pupils are released, the teaching technique, and conditions upon which credit toward graduation is granted to high-school pupils for attendance at week-day classes for religious education. As a means of bringing more light to problems of elementary education, the two specialists in this field in cooperation with the Assistant Commissioner invited a group of public-school supervisors to join them in a 2-day school-visiting program following the February 1940 meeting of the American Association of School Administrators in St. Louis. The observations and the discussions which followed were focused upon evidences of democracy in education and continuity from age level to age level in pupil guidance and in English and social studies as they contribute to children's development.

School Law

Research on laws affecting various phases of State administration of education has been an important phase of investigation this year. The major project included a digest and analysis of State laws governing the distribution of power and control over education in State offices and agencies. The purpose of this survey was to ascertain in what State offices certain powers relating to education have been vested. Other school law studies have also been conducted and designed to furnish information and guidance in current educational legislation in the States, on educational measures introduced in the Congress of the United States, and on important court decisions affecting education.

School Building Progress

Statistical studies in school building progress, articles and reports, conferences, cooperative studies with the P. W. A. and W. P. A., and consultative services with organizations interested in school building problems have been among activities of the year. Two studies in progress deal with school building work in State departments of education and trends in school building construction. "A study of 1,965 completed school buildings erected with P. W. A. aid" was undertaken at the request of the Federal Works Agency and published in the volume on public buildings issued by the Federal Works Agency. Articles relating to school buildings were con-

tributed to School Life, the American Teacher, and the American School and University. The annual conference of the National Advisory Council on School Building Problems, which is an advisory group to the Office in the school building field, was organized and held in February. It was devoted to a discussion of the present situation in regard to school buildings and to the problem of adequately providing for needed school building construction.

Parent Education

The demand for services of various types, such as participation in institutes for parents at colleges and universities; for assistance on committees and programs of national organizations; for appropriate materials with which to enrich programs of parents' groups has given impetus to the parent education work in the Office. A study of parent education in State departments of education has been in progress as one aspect of the coordinated Office study of all services in State departments of education. Another study was made of parent education activities in parent-teacher programs. National conferences on problems in parents' cooperation with the school and in parent education were conducted at Milwaukee in cooperation with the Association for Childhood Education; and at Omaha, Nebr., with the National Congress of Parents and Teachers. Cooperation was also given to the Massachusetts State College in its farm and home week program and to the program of the Parent-Teacher Institute at the University of South Carolina, where the techniques of parent education and practical devices for implementing parent education were discussed. Cooperation was given to the Association for Childhood Education and with the National Congress of Parents and Teachers in conducting throughout the year a project with State chairmen of home education.

Some time ago the United States Office of Education, at the request of the American Association of University Women, began preparation of a series of study outlines for the use of the local branches of that organization. These outlines, published under the general heading "Know Your Schools," met with such good reception that other outlines have been added to the series, and a wide demand has developed for these leaflets. One such leaflet prepared during the past year was "Know Your State Educational Program."

In addition to taking part in conferences, working, on comprehensive studies, and preparing articles for School Life and for other educational journals, each of the specialists has rendered valuable services in replying to hundreds of letters from parents and others requesting information regarding certain aspects of the public school system, such as the organization of elementary and secondary schools,

the curriculum, methods of teaching, promotion of pupils, financing of the schools and programs for meetings of parent-teacher associations.

Higher Education

The Division of Higher Education serves the colleges, universities, and professional schools of the United States through studying problems of these institutions and making available the results of such investigations.

The principal activities carried on during the past year by this Division include the following: Educational relations with Latin-America, in cooperation with the Department of State; surveys and studies of national scope, studies that have a bearing on State problems of higher education; studies pertaining to organization of higher educational institutions; other miscellaneous or general services rendered.

Latin-American Educational Relations

The problem of bringing the Latin-American nations and the United States into closer understanding, friendship, and cooperation has been given increased attention by the Federal Government in recent years. This interest has borne fruit in the Convention for the Promotion of Inter-American Cultural Relations signed at Buenos Aires, December 23, 1936, by representatives of the United States and 20 other American republics at the Inter-American Conference for the Maintenance of Peace.

As a means of achieving these ends, a plan was developed for the exchange of graduate students, teachers, and professors among the Governments of the American republics. This plan provides for the biennial exchange of one professor and the annual exchange of two graduate students, or teachers, between the United States and each of the other republics that have ratified the convention.

The Department of State in conjunction with the United States Office of Education administers the program of exchanges. Within the Office the Division of Higher Education was assigned the responsibility relating to the selection of the nominees for the exchanges and the placing of those from other countries in the appropriate universities in this country.

To take charge of this work, another position of senior specialist in higher education was created. This specialist serves as an intermediary between the universities and colleges of the country and those desiring to participate in the plan of exchanges.

Activities of National Interest

Among major activities of the Higher Education Division, for the past year may be mentioned the following: The survey of higher

education of Negroes; the conferences and investigations concerning engineering schools, and their possible contributions to the defense program of the Federal Government; a series of articles descriptive of schools conducted by the several departments and agencies of the Federal Government; the inspection of Howard University; revision of the compilation of Federal laws relating to the land-grant colleges and universities; and participation in the work of the Commission on Teacher Education of the American Council on Education.

The Survey of Higher Education of Negroes.—The Survey of Higher Education of Negroes has entered its second year. Forty thousand dollars was authorized to be appropriated by Congress. Of this amount $15,000 was appropriated for the first year and $15,000 for the fiscal year 1941.

This survey grew out of the need for a more thorough and basic study of Negro higher education than had been made in the past. The rapid growth in the number of colleges, the growing attendance, the increased scope of their activities and services, and the lack of corresponding financial support, have made the present survey timely. It has aimed to extend investigation beyond the usual gathering of educational data that has been somewhat typical of surveys. In addition to data concerning students, faculty, curricula, income, expenditures, etc., of Negro colleges and universities, information is being gathered by counties for the entire South, including such items as population, wealth and income, predominant occupations, home ownership and tenancy, and cultural interests and facilities; and more specified data for selected counties including such items as migration, occupational opportunities, library services, economic status of high-school graduates, professional services, and professional education.

It is expected as a result of the findings, that Negro higher educational institutions will be in a better position for future administration of their programs and that more efficient educational services will be forthcoming.

Engineering schools and the national defense program.—The United States Office of Education has sought to ascertain the extent to which the schools of engineering may be of assistance in offering a variety of short or refresher courses that will fit a large number of men for active participation in industrial activities required in connection with the national defense.

This involved not only an appraisal of the services the engineering schools might render but also finding out the more pressing needs of industry in this connection. To advise concerning this program, a representative group of engineering educators, college presidents, and representatives of Government were called together. On the basis of the recommendations of this group, the President and the

Bureau of the Budget recommended an appropriation to cover the cost of this program in the engineering schools.

Schools under the Federal Government.—In view of the increasing interest in the subject of in-service and other forms of educational work and training carried on by the Federal Government, a series of articles describing the colleges and schools conducted directly by the Federal departments and agencies of the Government was published beginning with the December 1939 issue of School Life The schools of the following Departments have been described: State, Treasury, War, Justice, Navy, Post Office, Interior, and Agriculture. The series is being continued in the 1940–41 volume of School Life.

A number of departments have expressed a desire to give more study to their educational problems and are using these articles as aids to that purpose.

Inspection of Howard University.—The annual inspection of Howard University was made by the Office. During the year, the university was placed on the approved list of the Association of American Universities. Two large new buildings reached completion, namely, the library and a men's dormitory. Both buildings represent the highest type of design and structure for their respective services.

(The complete annual report for Howard University is on file in the U. S. Office of Education. The report for the fiscal year ended June 30, 1940, is included in the Secretary of the Interior's Annual Report for 1940. However, on July 1, 1940, Howard University was transferred to the Federal Security Agency.)

Federal laws and rulings.—A revised edition of Federal Laws and Rulings Relating to Morrill and Supplementary Morrill Funds for Land-Grant Colleges and Universities was published (Pamphlet No. 91). These laws and rulings are administered by the Federal Security Agency through the United States Office of Education. The laws compiled include the first Morrill Act of July 2, 1862; second Morrill Act of August 30, 1890; Nelson amendment of March 4, 1907; and the Bankhead-Jones Act of June 29, 1935 (sec. 22).

The Commission on Teacher Education.—Not only because of the importance of teacher education as a field of investigation, but because of the procedure used, the work of the Commission on Teacher Education is noteworthy. Twenty teacher-training institutions and 15 school systems joined in a common experimental effort to study, each in its own way, the fundamental problems of teacher education. The Chief of the Division of Higher Education is serving on this Commission.

Activities of Interest to States

A number of problems relating to the administration of higher educational institutions in the several States have been studied. One of these concerns certain tendencies of States to reorganize their

governments so as to increase the authority of the Governor and budget officers. This increased authority has often encroached upon the former duties of the boards that are administering State institutions of higher education.

Studies have been made of the practices of Governors and State budget officers as they affect the administration of State institutions of higher education.

Another major problem with which the States are confronted is that relating to the accrediting of post-secondary institutions. This involves the whole question of the States' responsibility in connection with the establishment and approval of all types of higher educational institutions. It is generally recognized that many States have failed to give adequate attention to the chartering of colleges and to the character of their subsequent services. This has given rise to the organization of a large number of accrediting organizations administered under private auspices. The Division of Higher Education on request of the National Council of Chief State School Officers made an investigation of the accrediting situation and has published a comprehensive bulletin based on practices in 30 selected States. Difficulties arising from the complexity of accrediting agencies were analyzed and recommendations for their improvement have been made.

Relation of State education departments to teacher education.—In recent years the State departments of education have been faced with an increasing number of problems relating to the organization and administration of their rapidly growing functions. With the cooperation of the State departments concerned, the United States Office of Education has undertaken a series of studies dealing with these problems.

The Division of Higher Education was assigned that part which relates to the administration of State teachers colleges and other institutions engaged in training teachers for the schools. There apparently is a need for a closer relation between the State departments of education and the institutions that train teachers in order that the standards set up by the States may be more nearly met. The contribution of the Division to this project has now been brought to completion in the manuscript entitled Education of Teachers as a Function of State Departments of Education."

Education of school administrators.—Public-school systems have become increasingly complex in their organization and functions and a considerable need has been felt for an adequate training program for school administration officers throughout the country.

In view of this a new position of senior specialist in the education of school administrators was created in the Division. A program was begun during the year of stimulating the study of the preparation of leaders in education throughout the country and emphasizing in this

connection the place of vocational education in the curricula for training school administrators

Graduate schools.—Within the past 5 years the Association of American Universities has been giving increased attention to the improvement of standards in graduate schools. The Division of Higher Education has cooperated with the association by bringing together in a series of conferences some of the outstanding leaders in graduate study and research. This led to preparation of a bulletin by President Isaiah Bowman of the Johns Hopkins University entitled "The Graduate School in American Democracy." This basic and general study serves as the beginning phase of a more complete analysis of the questions that graduate schools are facing. It is now necessary to discover where the more important problems lie and how they may be attacked. For this purpose, a small committee of leaders in graduate study and research was called early in the year to map out the next steps. Members of the Office staff also cooperated with the Association of American Universities in its preparation for a study of the selection of students by graduate schools that are members of the association.

College placement services.—Recent unemployment has affected a large number of college students and college graduates. A study was made of the organization and activities of college placement services with the object of indicating not only how these services aided in the placement of college graduates, but also how the contacts of these services with employers reacted upon the college or university to accomplish the better adaptation of college curricula to employment needs.

Special Problems

The Division of Special Problems is organized to serve the educational interests of children in rural and sparsely settled areas; Negroes; all types of exceptional children; and children of native and minority groups in continental United States and in its outlying parts.

Education for each of these groups requires adjustments and involves problems which vary in fundamental ways from those of the average pupil groups in schools in the United States. While the major objectives of education are common to all groups special adaptations in school organization, in method, in content of educational materials, are essential for the achievement of those objectives. The conduct of research and of advisory services, the collection and dissemination of information, and the promotion of the educational interests generally of all those groups are responsibilities of the Division.

In addition to these major responsibilities problems in two special fields—visual education and conservation education—were recently

assigned to this Division. These are comparatively new fields for which the Office seeks to provide assistance to school officials.

Four Major Projects

Among major projects undertaken during the year were: (1) The preparation of a study of the organization and functions of State departments of education in the improvement of instruction at all levels and in all subjects; (2) a similar study of State supervision of the education of exceptional children; (3) a study concerned with the education of Negroes in 17 States in which there are separate schools for Negroes, and (4) a study concerned with State supervision of the education of adults and out-of-school youth, including those in rural communities.

The first study was primarily a rounding up of a number of separate studies concerned with the supervision of instruction in the special fields and subjects and on the elementary and secondary levels. The information collected through visits and conferences by the Office staff in each of the 48 States was compiled and supplemented and several chapters of the proposed report prepared.

Procedures in connection with the other three studies were similar. The latter were concerned, two directly and one indirectly, with the major fields of effort of the Division. A bulletin is expected to result from each of the four studies.

Education in Rural Communities

Approximately half the children of the United States live and attend school in rural communities. While in most of the States centralization of school units is under way on an increasingly efficient scale, small isolated schools of the one- and two-teacher type still prevail in large numbers in rural sections throughout the country. Efficiency in the administration and support of these school systems, large and small, as well as in group organization, content and method of instruction in the individual schools, all bring continuing problems in which teachers, supervisors and administrators need practical help which the Office seeks to provide.

The major research project carried on during the year was the Office study of the supervision of adult education and that of out-of-school youth by the respective State departments of education to which reference has already been made. The study, now nearing completion, should offer much needed information on the education of these two groups, especially those living in rural communities. Since many inquiries come by letter, mimeographed or typed circulars containing statistical and other information have been prepared during the year to answer general and special types of inquiries. Five annotated bibliographies on special problems such as the rural high school curriculum, community-centered schools, have been prepared, and

one Good Reference Bibliography, including recent books and significant articles concerned with innovating practices in rural schools, is now in press.

In connection with the informational and field services, two articles concerned with correspondence study, now increasingly used to enrich the curriculum in high schools, were prepared, one for School Life and one for another educational journal of national circulation. Contacts with two organizations especially interested in rural schools were maintained through participation in national meetings. A representative of the Division served as a member of a committee of the Department of Rural Education which formulated a leaflet issued by the Department as its statement of a Nation-wide policy for rural education in the United States. A number of conferences were participated in by staff members in the interests of the work of the Office in rural education. A member of the Division represented the Office at the International Conference on Public Education at Geneva, Switzerland, at which a report on education in the United States was presented.

Education of Negroes

In the education of Negroes research activities included a study recently published by the Office of the relation of the occupational status of Negro high school graduates and nongraduates to certain school experiences. This was a follow-up study of the National Survey of Vocational Education and Guidance of Negroes conducted by the Office during 1936 and 1937. Other research activities were concerned with preparation of a list of references on the life and education of Negroes; and completion of the study of the supervision of the education of Negroes as a function of State departments of education. The last-named involved visits to 15 of the 17 States included in the study.

In cooperation with the Division of Higher Education a study of the higher education of Negroes, requested by the Association of Colleges and Secondary Schools for Negroes and the Conference of Presidents of Land Grant Colleges, has been under way. The year's work in connection with the study included planning and organizing the study as a whole; setting up specific sections and projects to be included; securing the cooperation of educational institutions and other agencies and similar activities necessary in the organization and administration of a study of the character indicated.

Exceptional Children

Major activities concerned with the education of children who are physically, mentally, and emotionally exceptional have been of two types: Those initiated within the Office in the interests of the general service in this field, and those requested by agencies or groups outside

the Office. Previous reference has been made to an example of the former type, i. e., a study of the organization within State education departments for supervision of the education of exceptional children. The manuscript incorporating the findings of this study was sent to press at the close of the year. Another, a report of the type periodically made, giving statistical data for the year 1938 on special schools and classes for exceptional children, was made in cooperation with the Office's Division of Statistics.

In cooperation with educators in the field three conferences were held, concerned respectively with the education of gifted children, of mentally deficient children in residential schools, and with problems of State directors and supervisors of special education in the development of their programs. As a result of the first conference a publication concerned with gifted children prepared on a cooperative basis is under way. The conference on education of mentally deficient children in residential schools resulted in the revision of one of the statistical blanks used by the Office in gathering data from these schools. The conference of State supervisors and directors of special education initiated plans for another cooperative publication designed to be of help in further developing State programs.

Other cooperative activities designed to further the work with exceptional children include the following: Assistance in rendering bibliographical service, in preparing book reviews, and in presiding at the education section of the National Society for Crippled Children; carrying on a study of children in certain types of residential schools in connection with the American Association on Mental Deficiency and membership on the editorial board of the journal of this society; and participation in meetings and activities of various groups in this field.

At the request of the National Association of Training Schools for Juvenile Delinquents a plan for assisting these schools with their educational programs was initiated during the year. Of the 28 schools which have asked the Office for assistance of one type or another, 8 were visited in the spring of 1940 by 2 members of the Division, the remainder being scheduled for future service. One of the major objectives in this cooperative service is that of bringing into closer relationship the State education departments and State training schools in the several States.

Native and Minority Groups

One phase of the work of the Special Problems Division of the Office is concerned with the educational problems of native and minority groups in continental United States, its Territories, and island possessions. During the year two types of studies were undertaken; one, involving the gathering and dissemination of information about school

practices and facilities in outlying parts of the United States; another, dealing with the special instructional problems of bilingual children.

A series of bulletins describing educational facilities in each of the outlying parts of the United States has been published, the final number devoted to the Panama Canal Zone, early in the year. These bulletins have been especially designed to promote better understanding of education in our Territories and insular possessions by persons living in the United States.

A number of bibliographies concerning the teaching of English to bilingual children have been prepared; and suggestions for curricular changes and class reorganization to improve the teaching of English to these children have been made in answer to numerous requests.

Conservation and Visual Aids to Instruction

Completed were two bulletins concerned with newer problems in curriculum adjustment: One, Curriculum Content in Conservation for Elementary Schools; the other, Conservation Excursions. In order to answer inquiries concerning teacher preparation, a pamphlet was also prepared listing the higher institutions in the United States which offer courses for teachers in conservation education and giving names of courses and additional information concerning them.

Two pamphlets are in preparation dealing with visual education: One listing institutions and courses available for teachers who wish to specialize in this field, and another listing sources of visual materials and equipment suitable for school use. The latter will replace a former Office publication having a similar purpose.

Comparative Education

The work of the Division was considerably changed from that of former years by the wars in Europe and Asia. More and more refugees were coming to the United States from the European countries that were involved. These refugees included many young people who wished to continue in this country the studies they had been pursuing abroad, and large numbers of professional men and women desirous of joining the ranks of our active physicians, dentists, attorneys, engineers, teachers, and scientific workers. This increased and gave added importance to the work of credential evaluation that has been carried on for the past 15 years to aid college and university admissions officers and State boards of licensure for the professions. In 1924–25 credentials of 93 students were evaluated; in 1939–40 the number mounted to 1,161.

The 1,161 cases handled in 1939–40 brought to the Division papers from 74 different political areas: Afghanistan, 1; Argentina, 4; Australia, 3; Austria, 114; Belgium, 12; Bermuda, 1; Bolivia, 1; Brazil, 7; British Guiana, 3; British West Africa, 2; British West

Indies, 10; Bulgaria, 6; Canada, 95; Chile, 5; China, 32; Chosen, 5; Colombia, 2; Costa Rica, 4; Cuba, 10; Czechoslovakia, 57; Danzig, 4; Denmark, 4; Dutch East Indies, 1; Dutch West Indies, 2; Egypt, 6; El Salvador, 1; England, 63; Estonia, 2; Federated Malay States, 1; Finland, 1; France, 49; Germany, 160; Greece, 22; Guatemala, 2; Haiti, 2; Holland, 19; Hungary, 30; India, 9; Iraq, 1; Irish Free State, 31; Italy, 66; Japan, 12; Latvia, 12; Lithuania, 9; Malta, 1; Mexico, 15; Nicaragua, 1; Nigeria, 4; New Zealand, 4; Norway, 5; Palestine, 26; Panama, 4; Paraguay, 2; Persia, 1; Peru, 3; Philippine Islands, 13; Poland, 42; Portugal, 2; Puerto Rico, 5; Rumania, 18; Russia, 18; Scotland, 16; Siam, 5; Spain, 4; Sweden, 14; Switzerland, 27; Syria, 3; Tunisia, 1; Turkey, 18; Union of South Africa, 4; Venezuela, 10; Virgin Islands, 2; Wales, 2; Yugoslavia, 7; and undertermined, 1. For one reason or another, 131 cases previously handled were reviewed.

Credentials from the British Commonwealth of Nations rose from 17½ percent of the total in 1938–39 to 22½ percent in 1939–40; cases from Latin America fell off slightly.

This work was done for 190 colleges and universities in 39 States and the District of Columbia, 1 in Canada, and 1 in the Philippine Islands; the Departments of Education of Colorado, Connecticut, District of Columbia, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island, Virginia, West Virginia, Cook County, Ill., and New York City; State medical boards in California, Colorado, and Georgia; divisions of the National Government, including the Civil Service Commission, C. C. C. Education, Examining Board for Air Corps Flying Cadets, United States Navy Yard at Brooklyn, and the Navy Department; and such private organizations as the Bell Telephone Co., Institute for International Education, and the International Student Service.

Studies in Comparative Education

One hundred and fifty-four requests for information came from persons in the United States who wished to know about education abroad. Twelve of these were from teachers and superintendents who hoped to find in other countries suggestions for improving their own schools. Seventeen were calls for assistance from graduate students, 2 of whom were writing doctoral dissertations, 12 were preparing theses for the master's degree, and 3 were in graduate research work. Aid in arranging term papers and reports for courses in comparative education was asked by 66 young people. In other requests to the number of 53 the purpose of the writer was not stated, but in most of these cases it seemed probable that they also were college and university students.

The inquirers wished to know about education in a total of 37 different countries. The Soviet Union was a special center of interest; more letters came about it than any other political division. Next in

order of frequency were France, Denmark, India, Germany, Canada, Finland, Italy, China, England, Sweden, and Switzerland. While most of the students wished to know about all education in some one or two countries, a fair percentage were working with special phases such as teacher education, art education, vocational education, the education of women, school broadcasting, college entrance examinations, educational philosophies, physical education, education of nurses and the history of nursing, requirements for rural school teachers, adult, commercial, and agricultural education, history of education among the Slavs during the reformation, and the development of secondary education.

Travel and Study

Members of the Division could not travel during the year advantageously, if at all, in Europe so their efforts in this direction were confined to the Western Continent. The specialist in comparative education gave about 6 weeks to a study of the education system of Cuba and approximately 2 weeks to inquiries into certain phases of the French schools in the Province of Quebec, Canada. The specialist in western European education visited various institutions in Ohio, Indiana, Illinois, and Wisconsin in connection with the work of the Division.

Other travelers also were deterred by the war and fewer than the usual number of letters of introduction were written to school officers abroad. The record shows only seven for 1939–40. Visitors from other countries who called at the Office included educators from Haiti, Siam, Australia, Egypt, and Palestine.

Conferences and Other Activities

International congresses practically disappeared from the world scene. The Fifth International Congress of Linguists was to have been held at Brussels, August 28 to September 2, 1939, and the Division recommended three delegates for it. No other duties in connection with international meetings were called for during the year.

A manuscript on selected references to Education in the Union of Soviet Socialist Republics and in Imperial Russia was revised and printed as Leaflet No. 28. A list of references on foreign education was prepared and was published by The Elementary School Journal in its June 1940 issue. Articles on education in Italy, Turkey, and Finland were arranged for School Life. The manuscript on the education of teachers in the Scandinavian countries, Holland and Finland was completed and considerable progress was made on a study of education in Italy.

The regular work of securing from other countries their publications on education and as much unpublished data as possible was

carried on with considerable difficulty since lines of communication were so often interrupted or even entirely closed.

Languages Used

In carrying on its work of credential evaluation and obtaining information about education abroad, the Division translated or secured translations of 312,238 words of material from 36 languages as follows: Afghan, 150; Bulgarian, 2,485; Carpatho-Russian, 2,700; Chinese, 925; Croatian, 2,700; Czech, 23,145; Danish, 60; Dutch, 3,050; Estonian, 1,725; Finnish, 610; Flemish, 1,050; French, 18,900; German, 103,555; Greek, 6,675; Hebrew, 3,715; Italian, 15,025; Japanese, 970; Korean, 325; Latin, 6,713; Latvian, 4,500; Lithuanian, 4,520; Magyar, 17,070; Norwegian, 975; Polish, 25,750; Persian, 155; Portuguese, 1,350; Rumanian, 9,120; Russian, 17,455; Serbian, 2,150; Siamese, 250; Slovakian, 5,920; Slovenian, 950; Spanish, 20,180; Swedish, 2,454; Turkish, 3,145; Ukranian, 1,625. This does not take into account the large amount of reading done in foreign languages and not translated into English.

Formal translations amounting to about 2,575 words were made for the Department of State, Social Security Board, and Civil Service Commission.

Library Service

The Library Service Division was established to further library development in the United States. At the present time, the total number of libraries in the Nation is slightly in excess of 16,000, which includes 6,400 school libraries with collections of 1,000 volumes or more, 1,600 university and college libraries, 6,500 public libraries, 1,500 special libraries, and 260 classified as Federal and State libraries.

Although in the aggregate this number looms large, nevertheless the development has been uneven, services and facilities vary greatly from region to region, and from locality to locality. Libraries have been established largely through individual local efforts and until recently, little attention has been paid to the coordination of their resources and services. Librarianship has not had at its disposal an adequate body of data and findings which could be applied to the problems confronting it.

One of the primary functions of the Library Service Division is to gather facts and to undertake practical research in the field of librarianship. Then, on the basis of the findings thus obtained, its next task is to assist by publications and consultative services in extending and improving library service.

Studies and Surveys

Important among its fact-gathering activities during 1939–40 have been the statistical survey of public libraries and a similar survey cov-

ering the libraries at the institutions of higher education. When completed, these respective surveys will make available the first comprehensive compilation of statistical data for these types of libraries since 1929. They will furnish numerical facts regarding the services, book holdings, personnel, financial support, and expenditures of our public, college, and university libraries.

Another major undertaking has been the study of State agencies for library service. This work has involved the collection of data on the legal basis, the internal organization, the functions, the personnel, and the resources of the agencies rendering library service at the State level. It has sought also to identify the relationships of each State library agency with other library and educational agencies within a given State.

An especial effort has been made in this study of library agencies to distinguish and to note the administrative organization of the various areas of service such as: General reference and loan rendered by the traditional State library, library extension work, State history and genealogical service, archival work, law and legislative reference, school library supervision and development, and the operation of a visual aid service. The finished study should yield much factual information on the present status of State activity in the library field.

At the request of the United States Housing Authority, a survey was started of the library facilities at the various public housing projects. On the basis of the information collected, it is hoped that a policy of library service at these projects can be formulated, and that arrangements for service can be made where none is existent at present. Data have been gathered regarding the means of financing these libraries, the amount of equipment possessed, the degree to which they have been aided by outside agencies, the scope of the service, and the extent of their use.

The digest of legislation expressly affecting school libraries was completed during the year. This digest, covering the 48 States and the District of Columbia, contains comparative tables and interpretations of such points as establishment, financial support, selection of personnel, administration of school libraries, as well as the relationships of school libraries with State libraries and State library extension agencies. The second part of the publication consists of digests of legislation relating to school libraries in each State and the District of Columbia.

For the benefit of parents, teachers, and civic groups, a leaflet, Know Your School Library, was prepared, setting forth the objectives, functions, and administration of adequate school libraries. Another contribution by a staff member appeared as a chapter entitled, "Use of the School Library" in the Twelfth Yearbook of the Department of Supervisors and Directors of Instruction.

Conferences

Group conferences afforded a medium for divisional staff members to participate in the consideration of special problems confronting librarianship. Early in the fall, one such conference was that on research in librarianship, attended by a small group of librarians who assembled at the United States Office of Education upon the invitation of the Commissioner. These conferees considered the areas of librarianship in most need of research, canvassed the studies now in progress, and discussed plans for coordinating research undertaken in the future.

Another conference, participated in by the specialist in school libraries, was the New England Library Association Conference on Guidance in the School Library, held at Simmons College. Other conferences in which staff members took part were: The White House Conference on Children in a Democracy; one on Inter-American Relations in the Field of Books and Libraries; another on the T. V. A. library program at Knoxville, Tenn.; the County and Regional Library Institute held in Cincinnati just preceding the June meeting of the American Library Association with the object of acquainting library workers with the changing rural scene; and the Institute for Demonstration School Librarians, likewise carried on just before the annual gathering of the national association.

Consultative Services

The Library Service Division continued to aid the library development through consultative services. A typical example was the request made by the governing body of the Norton Free Public Library in Norwich, Conn., for advice concerning library facilities for children made possible by a bequest of $200,000. In conjunction with the chief administrative officer of the Connecticut Public Library Committee, the specialist in school libraries studied the situation and made recommendations to the local authorities.

Still another instance was the aid rendered at the request of the Division of State and Local Planning of the Bureau of Agricultural Economics. In connection with the community program of the unit, statistical and other information was supplied regarding the library conditions in 50 different counties. This information consisted of data on available library facilities, financial support, administrative set-up, and librarians and other interested persons with whom contacts might profitably be made.

The Division of Territories and Island Possessions of the Department of the Interior consulted with the Library Service Division regarding library facilities for Alaska. Two States inaugurating State school library supervision turned to the specialist in school

libraries for advice in setting up their programs, and have since submitted statements and proposed plans for criticisms and suggestions.

Professional Organizations

Contacts with professional library organizations in the States were maintained by active participation in their annual meetings, 12 different States being thus covered. In addition, staff members took part in 2 national library meetings and in 3 national meetings of educational associations.

Further aid to the professional organizations was rendered by service on boards or committees. During 1939–40, one member of the Division was chairman of the American Library Association Board on library service to children and young people; another was chairman of the NEA–ALA joint committee on school libraries; a third was a member of the planning committee for the County and Regional Library Institute; and a fourth was a member of the American Library Association board on salaries, staff, and tenure, which among other things is undertaking to prepare a suggested classification scheme for college and university library personnel and also a model outline for the administration of library personnel, both in public and college libraries.

Fellows Assigned

During the year, the Graduate Library School of the University of Chicago augmented the staff of the division by assigning to it one of its research assistants. This professional librarian, a trained research worker, aided greatly in the study of State agencies for library service, a field in which he was working at the university. He concentrated especially on the legal basis and the functions of the State agencies which extend and improve library service. It is hoped that this cooperative arrangement will serve as an example for similar ones in the future. In fact, the American Library Association committee on fellowships notified the United States Office of Education in the spring of 1940 that it had assigned one of its fellows to work under the supervision of the Library Service Division on a project relating to school library costs.

Statistical Division

The Statistical Division has three major projects upon which it is constantly working, as follows: (1) Presentation to the Government, to those engaged in the profession of education, and to the public of a statistical picture of the status and trends of the American educational system, public and private, from nursery school through the graduate professional school; (2) improvement of the quality and quantity of educational statistics at their source; and (3) acting as

a clearing house for answering statistical questions and for advice and consultation in the field of educational statistics.

The first project is in fulfillment of one of the enumerated purposes for which the United States Office of Education was founded, "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories." Because of the size and scope of the educational enterprise in the United States, involving one out of every four persons in the entire population, it is necessary to spread the statistical program over a period of from 6 to 8 years.

During 1939–40, statistics were completed covering the following school systems or institutions:

Type	*Number of units*
States, District of Columbia, and outlying parts of the United States	57
City school systems	2, 900
County school systems administering schools in cities	181
Public high schools	25, 467
Institutions of higher education	1, 690
Total	30, 295

These 30,295 systems or institutions supplied data for schools, as follows:

Type	*Number of schools*
Public elementary	221, 660
Public secondary	25, 467
Public higher education	600
Private higher education	1, 090
Total	248, 817

To partially complete the picture, the data received for these 248,817 schools were supplemented by data collected in the past few years covering the following schools:

Type	*Number of schools*
Private elementary	9, 992
Private secondary	3, 327
Public residential schools for exceptional children	295
Private residential schools for exceptional children	123
Private commercial schools	2, 099
Public and private schools of nursing	1, 381
Total	17, 217

These 266,034 schools, for which data are gathered over a period of time, do not include all schools. The present program of the Office does not call for collecting data from schools of the following types:

Private vocational and trade schools.
Private art schools of less than college grade.

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Private music schools of less than college grade, including individual instruction.
Schools of dancing and drama.
Private Bible schools not granting theological degrees.
Private correspondence schools.
More or less organized adult education (lecture courses, forums, etc.).

The Biennial Survey of Education in the United States is the publication which regularly presents the statistical picture of education.

Improvement of Statistics at Source

The improvement of statistics at their source is brought about by constant efforts toward more uniform records and definitions. A National Committee on Uniform Records and Reports is appointed about every 10 years, works for 4 or more years, makes recommendations in a publication, which recommendations will be in process of being adopted for the next 10 years. During 1939–40 the publication, resulting from the Committee appointed in 1934, has been put into first draft, submitted to certain committee members for criticism, and is being revised. During the year, the work was discussed at the convention of the National Association of Public School Business Officials.

A similar movement is in progress in the field of accounting in institutions of higher education, in the interest of which a member of the staff attended the annual meetings of the Eastern Association of University and College Business Officials, the National Catholic Education Association, and the Association of Business Officers of Schools for Negroes. Considerable work was done on a manual of instructions applying to the statistical questionnaire sent out by this Office to institutions of higher education.

The second method by which statistics are improved at their source is through the field service of the three associate specialists in educational statistics who travel several months every year visiting State departments of education, city school systems, and colleges and universities that have problems in filling out the Office's questionnaires. The school year 1939–40 was the one in which these associate specialists remained in the Office making special studies and interpreting data collected after the close of the previous school year.

Clearing House Functions

The clearing house function involves many telephone requests to supply data for particular States, schools, etc., to other Government offices and individuals, the answering of letters on the location of schools of special types, on data over a period of years, or for certain States, cities, or educational institutions, on good record systems, on good school accounting systems, on recommended accounting classifi-

cations for specific difficult or peculiar items, etc. During the year 1939–40 interdepartmental conferences were held, for example, with the Bureau of the Census on the tabulation of the education question in the 1940 Census and the use of educational data in calculating population changes and with the United States Treasury Department regarding their use of our data for tax-free securities issued by public-school administrative units. The United States Office of Education also supplied data to the United States Department of Commerce for use in calculating the national income of school employees.

The Library

The expanding services of the United States Office of Education have necessitated a considerable expansion in the scope of the Library. It has heretofore been a collection devoted to the techniques of education, interpreted to mean teaching and learning. Such a general collection as the textbook museum has served as a source for research in the history of education rather than an addition to the factual material in the Library. The reference collection of encyclopedias, directories, and handbooks has been limited to the areas of education rather than attempting to include subjects of general information. Requests for the more general material were infrequent and readers were referred to libraries in the vicinity that could supply it. But this condition has changed in the past 3 years.

The expansion of the Vocational Division, guidance, radio, film service, and forum projects brought a greatly increased demand for books of general interest. Many books on trades, industries, and other technical subjects were added to the collection, while books and periodicals on broadcasting and radio, especially in relation to school work, have been used to a large extent both by readers in the library and by the staff in answering inquiries by telephone and letter. The demand for material on the more general subjects so far exceeded the limits of the collection that 1,122 books were borrowed from other libraries to meet this situation.

Reading Room

The use of the Reading Room has had a marked increase in the years since the Library moved into the new building. During the year 1939–40 readers totaling 13,377 used 30,646 books in the Reading Room, an increase of more than 8,000 volumes over the previous year. This does not include many bound magazines used, as no account is kept of these, the readers having access to them in the Mezzanine Reading Room.

Books borrowed for use outside the Library numbered 8,145, while 1,214 books and theses were sent out on interlibrary loan to university and public libraries in various parts of the country.

The continuing projects of the Library have been carried on with considerable progress. Efforts to complete and bind files of periodicals, board of education reports, and college catalogs have continued, and these collections are now in fairly good condition. Many volumes in the general collection that could not be rebound have been repaired and are once more usable.

The collection of old textbooks has grown during the year by small purchases made from time to time when the books have turned up in some second-hand catalog.

The library has obtained by exchange many issues of periodicals and college catalogs that have helped to complete files and has sent many copies of duplicates of United States Office of Education publications to colleges whose files were incomplete. This latter service has been given more fequently this year owing to the fact that a number of colleges have been trying to build up and develop their education collections.

Theses and Courses of Study

The collections of theses and courses of study have flourished during the past year. Many schools have been able to borrow courses of study from the duplicate collection and several curriculum committees from other States have spent days in the Library studying the courses on file here.

The theses collection now numbers 3,886 volumes which have been deposited by 72 institutions. From this collection 629 volumes were sent out on interlibrary loan.

School Hygiene

The work of State departments of education in the fields of health and physical education was studied during the year. Supervision in these fields, which began in 1914, has been developing until at the present time, one or more persons are employed in half of our States. In most instances the supervisory staff is inadequate and one person must promote work in more than one special field. However, in one State, New York, physical education, health instruction, medical, dental and nursing services, and recreation are each represented and there is a total personnel of 18 persons. These and other data resulting from the study, with comments and recommendations, will be published as a section of the coordinated Office study of State departments of education.

The status of medical, dental, and nursing services throughout the country which has not been reviewed for 10 years, and an investigation of such activities in cities of 10,000 population and over, is in progress. Data have been collected upon the frequency and thoroughness of periodic medical examinations. It is evident that both frequency and thoroughness in such examinations depend on the

number of examiners employed in relation to the school population. A look at the data shows every conceivable practice from examinations every year to examinations only twice in the school life of the pupil. This subject was embodied in a paper published under the title, "Frequency of Periodic Examinations" in the Journal of School Health for January 1940. Health instruction in elementary schools has been studied during the past year and a paper on "Incentives and Methods" in such work was also published in the Journal of School Health for March 1939.

Since a general review of research in school hygiene had not been made by this Office nor by any other agency for a number of years, the biennial survey of important work in this field was completed during the year. A brief sketch of the progress of physical education in the United States during the past hundred years was published in School Life for December 1939, under the title, "Physical Education, 1839–1939."

The United States Office of Education cooperated during the year with other national agencies, notably the National Tuberculosis Association and the American Public Health Association. The growing demand for information concerning hygiene continues. In fact, three-fourths of the requests coming to the consultant's office are on school sanitation, medical, dental, and nursing services, instruction in health and safety, physical education and recreation.

Industrial Arts

A changing emphasis in the curriculum has for a score of years attached increasing importance to experiences representative of fundamental human activities as found in present-day society. The result has been that today the industrial arts area of the school curriculum assumes greater significance than ever before.

The great increase in the number and variety of materials of construction, the increasing number of industrial arts products and services coming into common use, and the effect these are having upon our social patterns of life, raise to a high level of importance the contribution that industrial arts can make to the realization of general education objectives. Questions concerning the changes taking place in the objectives and content of industrial arts instruction, and whether or not such changes reflect what is happening in out-of-school life, have been asked frequently by both educators and laymen. To provide answers to such questions, a study was made of the present practices and aims of industrial arts work in a large number of representative public schools. The findings of the study were summarized and printed as a publication of the Office.

The increase in high school enrollment to the point where it now represents almost a complete cross section of our population, has

resulted in a serious curriculum problem, one demanding modifications in the courses that were in existence when high school enrollment represented a selected group of college-going students. As a part of this total situation school administrators are faced with the specific problem of providing for the educational needs of a large percentage of pupils for whom neither a college preparatory course nor a course in a skilled or technical trade seems advisable or feasible. School administrators are looking to industrial arts for an important contribution to the solution of this problem. In order to approach the problem from a national viewpoint, this Office called a conference to consider the organization and content of industrial arts work so that it may contribute to the educational needs in a way that is commensurate with its potential values. Following the conference, individual members are studying various phases of the problems involved, preparatory to submitting a report for publication by the Office.

There was also prepared an account of the services rendered by the consultant in the field of educational planning. This account was included as a part of the publication of the National Resources Committee on Federal Relations in Local Planning. An article on the industrial arts teacher and the school-community interest was published in School Life.

Services were rendered, as a member of the committee of the American Vocational Association on Standards in Industrial Arts, in the preparation of materials for the upgrading of instruction; as secretary of the division on supervision of the National Vocational Guidance Association, in the promotion of guidance in the public schools; and as adviser to the committee of teacher training of the American Vocational Association, in the study of existing facilities for the training of industrial arts teachers.

Tests and Measurements

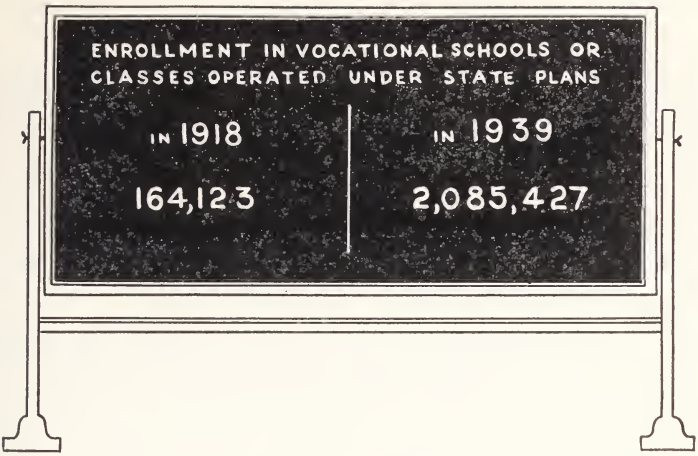
The work of the consultant in the field of tests and measurements has been largely occupied with (1) the coordinated Office study of State departments of education, (2) the biennial report of significant national research studies, and (3) the cumulative record study. For the first, data were gathered in the field for the pupil personnel substudy and for other parts of the State study. Data gathered on field trips connected with the State study, were classified and annotated and submitted to other Office specialists making the different parts of the study. For the study on pupil personnel services, the laws of the different States dealing with school census, attendance, and child labor were examined and added to the data obtained on this subject in the field visits. The summary of these data was begun.

The biennial report on significant national education research

projects was partly developed during this period. A large number of researches were examined and summaries of significant points prepared.

In the cumulative record study, information concerning cumulative pupil records was obtained by questionnaires from some 500 school systems. Considerable work has been done in developing a code by which the material for each cumulative record system can be reduced to a brief record on a single card. This coding plan is expected to be completed in the near future, and other phases of the study should then go forward toward completion for publication.

A conference of population and census leaders of the Government on the general plan for making the cumulative record study was held. Considerable consultative work with Army officials, public health officials, and others was done relative to the construction and use of tests for personnel work. A section on aptitude testing was written for the Elementary Principal's Yearbook. A field trip was made to investigate the methods of evaluation used by the Radio Institute at Ohio State University.



Chapter II

Vocational Education

Planning for National Defense Training
Some New Developments and Trends
Agriculture
Trade and Industry
Home Economics
Business Education
Occupational Information and Guidance
Research and Statistics
Public Service Training
Curriculum Problems
Employee-Employer Relationships

Planning for National Defense Training

THE PRESIDENT of the United States, on June 27, 1940, signed a bill which, in part, permitted the United States Office of Education to authorize payments to the States for the cost of courses of less than college grade which provide training for occupations essential to the national defense. The portion of the act which provided for this work reads as follows:

> For payment to States, subdivisions thereof, or other public authorities, through certification from time to time made by the United States Commissioner of Education to the Secretary of the Treasury of the name of such agency and the amount to be paid, such payment to be made prior to audit and settlement by the General Accounting Office, for the cost of courses of less than college grade, provided by such agencies in vocational schools pursuant to plans submitted by such agencies and approved by the United States Commissioner of Education, which plans shall include courses supplementary to employment in occupations essential to the national defense and

> preemployment refresher courses for workers preparing for such occupations selected from the public employment office registers; and (not exceeding 2 per centum of this appropriation) for administration expenses in carrying out the purposes hereof, including printing and binding and personal services in the District of Columbia and elsewhere, $15,000,000. The duties of such Commissioner, in carrying out the purposes of this appropriation, shall be performed under the supervision and direction of the Federal Security Administrator, and such Administrator is hereby authorized to transfer not more than $10,000 of the sum herein appropriated, to the Office of the Administrator for use in carrying out the purposes hereof.

Based on the provisions of this act, the United States Office of Education formulated administrative regulations to guide the States in setting up and operating the training program. The regulations indicated that each State was to initiate its own plan for training, which must be submitted by the State board for vocational education to the United States Office of Education for review and approval. The State plans set forth the cooperative relationship between the State boards and the United States Office of Education; indicate the types of courses to be offered and the methods and standards of operation; and present budgets showing the training courses which are to be operated and estimates of their cost.

The Office followed the policy that Federal aid would be granted only for training courses which contribute to the program of national defense. In organizing such courses, the States were urged to consult industry and labor on matters such as: Jobs in the essential industries for which training shall be given; the number of persons to be trained for each job; and the content of the training courses to be given.

The occupations which are considered as essential to the national defense program are determined by the Advisory Commission to the Council of National Defense.

The act under which the initial funds for defense training programs were appropriated provided for courses of two types: (1) Those which offer training supplementary to employment, and (2) preemployment refresher courses.

The supplementary courses were planned for workers employed in occupations considered essential to national defense or in closely allied occupations and enrolled upon the recommendation of employers and representatives of the labor unions. The purpose of these courses is to provide training which will extend the knowledge or skill of employed workers.

The preemployment refresher courses are intended to prepare for entrance into national defense occupations. Persons admitted to these courses are to be selected by the school authorities from the registers of public employment agencies.

The $15,000,000 provided in this act was appropriated by Congress on representation by the United States Office of Education that the

vocational schools have buildings and equipment available for carrying on this program. It was further assumed that the existence of a going system of Federal-State cooperation in the field of vocational education would make it possible to start the defense training program immediately.

The ability of the vocational schools to provide the necessary training was determined by the Office on the basis of its annual reports from the States and upon facts developed in a special study of available equipment made in cooperation with the various States. Through this study an inventory of trade and industrial shop facilities in the vocational schools and departments of the United States was obtained. It was found that many of the occupations essential to the defense program were those for which the schools were already providing training and for which they were equipped. The vocational schools, with an investment of more than a billion dollars in buildings and equipment, had a trained staff of more than 35,000 teachers and supervisors; 75,000 training stations were available for the instruction of workers in essential occupations. Accordingly, plans were formulated under which by utilizing these training stations at times when the schools are not in session and without interfering with their usual activities thousands of new workers could be trained in the occupations for which there were greatest needs.

Before the President had signed the bill, but after Congress had passed it, the United States Commissioner of Education called conferences which brought together many chief State school officers, State directors for vocational education, and State supervisors of trade and industrial education from all sections of the Nation. Many of the procedures officially adopted by the Commissioner to guide the defense-training program were based upon recommendations made by these conferences. State plans were immediately submitted to the Office of Education and approved, making it possible for defense-training classes in several States to start without delay.

The defense-training program differs in several particulars from the regular program of vocational education carried on under provisions of the Smith-Hughes and George-Deen Acts. Under the defense-training program, the Federal Government defrays the entire cost of instruction. This is in contrast to the regular program in which funds are allocated to the States only for salaries of teachers on a matching basis. In contrast to the policy followed in regular vocational education programs, State, county, and other public-school boundaries are disregarded in enrolling persons for defense training, provided other essential requirements are fulfilled. Enrollees in the preemployment refresher courses offered in defense training are confined to those who are registered with the public employment offices. Increased emphasis has been placed in the

defense-training program on the formation of local advisory committees on which employers and employees have equal representation.

Some New Developments and Trends

Definite trends and developments in the regular programs of vocational education are discernible in the reports from the States for the year.

A noticeable trend in the field of trade and industrial education is shown in the fact that older students, and consequently those with higher scholastic standing, now enroll in preemployment trade courses as compared with former years. In some sections of the country such courses are offered in junior colleges. The courses given in these institutions are organized as terminal training from which pupils go directly into employment, and they are not intended as preparation for universities or engineering schools. In other places, especially where separate vocational schools are maintained, a large percentage of the pupils—in some instances as high as 75 percent—who enter the trade courses, are high-school graduates. This tendency is evidently the result of higher age requirements now set for entrance into many industries, as well as an increased recognition of the need for a general education as the basis of preparation for a skilled trade.

Continued emphasis has been placed on the matter of making more adequate provision for trade training in areas which do not include large cities. In the smaller communities where only a few new workers in any of the skilled trades are needed each year, it is difficult to provide proper training facilities. The need for training on the part of prospective workers in such communities is just as pressing as in the more populous centers and this need is being met in many instances by the establishment of county, sectional, or State trade schools.

Some interesting changes have been noted during the past few years in enrollments in part-time trade and industrial classes. In 1930 almost 60 percent of the enrollment in all federally aided trade and industrial classes was in part-time general continuation schools. Ten years later the general continuation enrollment was less than 10 percent of the total. The pupils enrolled in these classes in 1930 were largely in the 14- to 16-year-old group of young people who were employed and who were returning to school for a few hours per week. Changes in school attendance laws and in age requirements of industry have resulted in a large decrease in the continuation-school group. Most of the young people who in former years would have been enrolled in part-time classes are now enrolled in full-time schools. During the past decade, however, there has been a steady increase in the enrollment in part-time trade classes. In 1930 part-

time pupils constituted only about 8 percent of the total enrollment in federally aided trade and industrial classes. Ten years later, however, they represented more than 30 percent of the total enrollment. The persons in attendance at these classes are older employed workers—apprentices, helpers, and journeymen—who return to school to secure instruction which supplements their employment.

Special Buildings

In the past few years considerable attention has been given to the construction of special buildings for vocational schools. This is an advance over the too common practice followed for many years of using obsolete or abandoned buildings for trade classes. In almost every State special buildings, planned to meet the needs of trade training, have been erected and provided with modern equipment. In planning these buildings, in deciding on the training to be given, and in selecting the equipment, the assistance and advice of representative advisory committees have been secured.

Greater emphasis than formerly has been laid during the past year on providing valuable out-of-class experience for prospective home economics teachers enrolled in college courses in homemaking education. In order that they may secure such experience, these prospective teachers are given training in working with families having different economic and social backgrounds, in supervising home projects of homemaking pupils in student-teaching centers, and in working with different agencies in a given community such as the welfare board, the parent-teacher association, the nursery school and club groups.

An increased effort has been made during the year by the United States Office of Education in cooperation with State supervisors of home economics education to make a practical approach to housing problems faced by the average family. Recent studies on housing are being used as a basis for housing courses. Housing studies by Government agencies were reviewed at regional conferences and their place in the teaching program studied.

Many States are giving greater emphasis than in the past to research in home economics education, a project to which the United States Office of Education has given continuous encouragement. Several States have employed research specialists on either a full-time or a part-time basis. Some of the studies now being made by the States have to do with student selection, guidance, evaluation of the teacher education program, student teaching facilities, and other problems related to curriculum building.

The Business Education Service has encouraged the efforts made by the States during the year to extend the distributive education program to the smaller cities and in rural areas. To this end the

United States Office of Education has urged the States to employ itinerant instructors whose function shall be to conduct classes in two or more smaller cities and towns. Notable progress has been made in this respect.

The Office has emphasized the need of reaching in the distributive education program employees of small stores as well as those in the large stores. During the first year in which the federally aided program was in operation, much of the emphasis was upon training for employees of large department stores. During the past year, however, a large part of the training has been given to trainees and employees in small stores.

There has been noted an increasing tendency for national trade associations to cooperate with the Business Education Service in the promotion of training programs. During the year several trade association committees were appointed to meet with members of the staff and with State officials concerned with training in the distributive occupations for the purpose of assisting in mapping out training courses and in promoting the establishment of such courses.

As a result of efforts and encouragement on the part of the States and the United States Office of Education, training courses for executives in the distributive occupations are becoming more common.

Two interesting developments have taken place in connection with the part-time cooperative training program in distributive education. In States having coordinate supervision, the program has been promoted in the high schools. This is probably due to the larger number of girls enrolled in these high schools and to the excellent cross section of the life of the community represented by these girls, a factor the better type of stores watch with care. There is a trend, also, toward a more homogeneous grouping of students in cooperative classes. For example, in some cities department store employees may be enrolled in one program and grocery employees in another. The teacher in each case is occupationally competent in the field in which he teaches. In smaller centers a greater diversity of occupations is represented in the training courses than in larger centers.

Agricultural Education

Enrollments Reach New Peak

Vocational agriculture departments in rural high schools reported a total annual enrollment in excess of a half million for the year. This is the highest enrollment ever reached. The work of the current year, for which complete reports are not yet available, was influenced by the stimulating fact that in 1939, 538,586 individuals were enrolled in vocational agriculture, or almost 78,000 more than in any previous year. All-day classes reported an enrollment of 291,653; day-unit classes, 13,378; part-time classes, 51,593; and evening classes, 181,962.

Not only are enrollments increasing, but the number of local public schools participating in the vocational agriculture program has likewise increased from 7,665 in 1939 to approximately 8,300 in 1940. There has been a large increase in the number of schools organizing programs of instruction for out-of-school young farmers in part-time classes and, in addition, carrying programs for adult farmers in evening classes. An increasing number of local schools are providing complete programs of vocational education in agriculture which offer instruction for high-school students, out-of-school young men, and adult farmers.

Research Aid to States

In addition to carrying on such research activities as the preparation of statistical tables, providing advisory research service to the States, and conducting studies in agricultural education, the Service embarked during the year upon a project to stimulate and assist the States in developing their own long-term programs of research. Fifteen States have developed such plans. Under the procedure followed, representatives of the Agricultural Education Service, of the United States Office of Education, met in conferences in each State visited with representatives of the State department of education, of the State teacher-training institution, and of local departments of vocational agriculture. The procedure by which the research plan was formulated is as follows:

1. The problem areas of the State in vocational agriculture are identified; for example, such areas as organizing vocational programs in small high schools, and discovering opportunities in farming in the community.
2. A few studies are selected from the list for immediate research and some attention is given to the research techniques to be followed and to the implementing of these studies.
3. A small steering committee with power to act and carry through the research plan is appointed.
4. Detailed plans for implementing studies are drawn up which include specifications concerning such matters as who is to make the studies, and how financial requirements are to be met.
5. Plans are made for the publication of studies and their utilization in improving the program in the State.

The United States Office of Education has cooperated in a historical research on agricultural education. This project, which has been carried on for almost 2 years through the cooperation of vocational education leaders in the States, with funds provided by the General Education Board, is expected to be completed at an early date.

Teacher Training Goes Forward

Through the Agricultural Education Service the United States Office of Education, during the year, cooperated with State boards of vocational education in the 12 States of the North Central region in conducting at the University of Minnesota, a special training school for those who serve as supervising teachers in vocational agriculture

departments used to provide practical training for student teachers. Teachers from 22 centers used for practice teaching in 9 States participated in this training school. A report was prepared and has been issued as Miscellaneous 2235 of the United States Office of Education. This report contains suggestions made by the teachers who participated in the school, concerning the directed observation and participation experiences essential for students preparing to teach vocational agriculture.

As a follow-up of this training, practice-teaching centers in Illinois, Indiana, Kansas, Kentucky, Michigan, Missouri, North Dakota, South Dakota, and Wisconsin were visited by members of the Agricultural Education Service staff in company with members of the State supervisory and teacher-training staffs of these States. Practice-teaching centers of States not participating in the special teacher-training conference were inspected and evaluated on the basis of the facts and information developed in the training school.

During the year also, members of the Agricultural Education Service staff met with representatives of the staffs of 13 teacher-training institutions to discuss the technical training of teachers of vocational agriculture. These conferences were held for the purpose of formulating a balanced training program which would include courses in animal husbandry, crops and soils, agricultural economics and farm management, horticulture, and vegetable gardening, and agricultural engineering and farm shop work.

One of the objectives of the agricultural education program carried on in rural high schools is to develop leadership in farming communities and in the States as a whole. Toward this objective the Agricultural Education Service conducted leadership training schools for members and officers of the Future Farmers of America and for teachers serving as advisers of local F. F. A. chapters. In addition, staff members assisted States in meeting the leadership problem by holding State and district conferences and summer schools for F. F. A. members and officers.

Providing Subject Matter

With a view to assisting States in providing subject matter the Office conducted State conferences in 9 States. Office staff members also participated in a conference for subject matter specialists held in connection with the annual regional conference of the Southern States.

Out-of-School Farm Youth

Attention was given to the necessity of finding openings in farming for out-of-school farm youth. As a result of requests for help in solving this problem, the Agricultural Education Service assisted the States and sponsored district, State, and regional conferences called for the purpose of developing plans for placing out-of-school youth, as well

as developing instruction programs on this subject. State and district conferences for teacher trainers, supervisors, and teachers of vocational agriculture were held in many States. A total of 1,546 teachers of vocational agriculture and 85 local school administrators were enrolled in conferences and training schools held during the year.

Future Farmers of America

The United States Office of Education has sponsored the Future Farmers of America, national organization of boys studying vocational agriculture in public secondary schools, since this organization was founded in 1928. Designed to supplement the instruction being given its members in vocational agriculture departments, the F. F. A. has had a steady, healthy growth. For the year ending June 30, 1939, reports from the States show the organization had a membership of approximately 227,500. Local chapters are now operating in approximately 6,500 high schools in 47 States, Hawaii, and Puerto Rico. Among the objectives of this organization are: (1) Character building, (2) training for leadership, (3) development of habits of thrift, (4) development of citizenship qualities, and (5) development of patriotism.

The F. F. A. organization holds its annual convention each year at Kansas City, Mo., in connection with the American Royal livestock show. At this convention F. F. A. members compete in the national public-speaking contest staged by the organization and in judging and other contests. Winners of the American Farmer and Star Farmer degrees for the year are announced, as well as winners in the national F. F. A. chapter contest.

The New Farmers of America, national organization of Negro boys enrolled in vocational agriculture courses, is patterned after the Future Farmers of America organization with respect to form, activities, and objectives. There are now 25,380 members of this organization in 806 local chapters.

Cooperation Cited

The Agricultural Education Service cooperated during the year with the Farm Credit Administration in preparing a series of 20 circulars dealing with problems of agricultural cooperation and farm credit, and designed primarily for the use of vocational agriculture teachers. Also in cooperation with that agency the Service planned and conducted a workshop on instruction in agricultural cooperation, held in connection with the annual meeting of the American Institute of Cooperation.

The Service cooperated with members of the National Livestock Loss Prevention Board in the preparation of teaching materials on livestock loss prevention for use by vocational agriculture teachers;

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with a representative of the General Education Board in a study on rural life; and with representatives of the Soil Conservation Service of the Department of Agriculture, in planning programs of education on soil conservation for departments of vocational agriculture.

Trade and Industrial Education

In trade and industrial classes throughout the United States, the enrollments for the year 1939 were 715,239, an increase of 29,435 over the previous year, and indications were that 1940, when statistics are available, will continue to show a large increase.

The day trade classes now enroll more than one-fourth of the total in all federally aided trade and industrial classes. This continuing increase is due to at least two causes: (1) The elimination of many young people of high-school age from regular employment, with the result that they enter day trade classes to secure practical shop experience; and (2) the recognition on the part of school administrators that secondary school offerings must be made much broader if the needs of young people are to be adequately met.

Study of Training Facilities

In line with anticipated defense-training needs, a comprehensive study of the training facilities of the trade schools of the United States was made during the year. Information was secured through State boards for vocational education regarding the equipment for different phases of trade work, the floor space available for such work, and the number of pupils that could be trained in each course. The plans for this study were made in cooperation with representatives of the Department of War. The results of the study were analyzed and used as the basis for estimates upon which to base the program of training for national defense.

In cooperation with the State supervisors of trade and industrial education in the North Atlantic region, the Trade and Industrial Education Service of the United States Office of Education has for several years carried on a study of the placement of trade-school graduates. This study shows that, for the region as a whole, at least 80 percent of the pupils were employed in the occupations for which they were trained, and that in some States the placement was 100 percent. The study has proved helpful to school officials in deciding whether the training provided is accomplishing satisfactory results and in modifying the program to make it more effective.

Cooperative Activities

Cooperative activities were carried on by the Trade and Industrial Education Service with six different Government agencies during the year.

In conjunction with the National Youth Administration, the Service established 11 experimental centers in 4 States in which programs of work and instruction were provided. The Service worked with the Wage and Hour Division of the Department of Labor in securing special wage provisions for student-learners in specific types of trade and industrial training. Working with the Federal Apprenticeship Committee, the Service encouraged State boards for vocational education to set up training in related subjects for those indentured under the Federal Apprenticeship Committee's standards.

Cooperative arrangements encouraged by the United States Office of Education led to joint educational projects between State and local boards of vocational education and representatives of the Work Projects Administration for those on W. P. A. rolls.

In addition to cooperating with the National Youth Administration experimental centers, many vocational schools throughout the country, encouraged by the United States Office of Education, made provision for training young workers in both the regular vocational programs and in special classes organized for their benefit.

Special provision was made during the year for extending opportunities for trade and industrial education to young men enrolled in C. C. C. camps. In some instances the shop and classrooms of vocational schools were made available to groups of C. C. C. enrollees in the afternoons, in the evenings, or on Saturdays. The instruction offered under this plan was, to a great extent, intended to supplement that given to youth in connection with their employment; in other instances, however, it was intended to prepare them for new occupations.

Passage of the wage-hour law brought vocational schools face to face with some new problems. Under the cooperative diversified occupations training program which has been developed in many places, especially in smaller communities where specialized courses in single occupations are seldom justified, pupils known as student-learners are employed half time in various local occupations and spend the other half of their time in school, getting training related to their employment. This plan of training is similar to that of apprenticeship training except that it usually covers a period of 1 or 2 years only.

The training opportunities offered in the diversified occupations courses were called to the attention of the Wage and Hour Division of the United States Department of Labor to ascertain how the wage provisions of the wage-hour law would affect students enrolled in these courses. After an investigation had been made of the needs for this type of training, an order was issued by the Wage and Hour Division permitting special wage provisions for student-learners. Under the provisions of this order, the interests of workers are protected and there has been no curtailment of opportunities for young persons

to secure employment in connection with the cooperative training program.

In the past few years the need of providing teacher training for tradesmen, who are or who expect to be teachers, has seemed to be more clearly recognized than formerly. In its effort to assist the States in this type of teacher-training work, the United States Office of Education has encouraged them to organize extension courses for teachers and prospective teachers given by teacher-training institutions or by State or local boards for vocational education at such places and times as are most convenient for those who need the training. Industrial concerns themselves, recognizing the need of training foremen to teach workers assigned to them, have in the past few years been conducting foremen teacher-training courses.

Record Cards

With the increase in the number of trade-training programs—both preemployment and extension—a demand arose for a uniform plan by which school authorities might issue certificates showing the type and extent of training received by graduates from these programs. The Office in cooperation with the United States Army, prepared and distributed a vocational training record card which is presented to the student when he finishes a training course. This card indicates the units of training the holder has successfully completed. It is intended to serve two purposes: (1) Provide evidence to the prospective employer that the card holder has had training of a specific kind; and (2) help the holder, in case he enters military service, to secure assignment to an organization or to activities in which this training and ability will be of most value.

Training for Aircraft Industries

The increased interest in aviation both from a commercial and military standpoint in the past few years has quickened the interest in training for occupations in the field of aviation.

During the year the United States Office of Education made surveys for the purpose of securing information on the aviation industry, in general, and on training courses for occupations found in this industry. These surveys showed that slightly over 2 years ago, 34,000 persons were reported as employed in the manufacturing phases of the aircraft industry. This number has increased until approximately 150,000 persons were employed at the close of the year.

During the year, regular trade school courses in aviation mechanics continued to provide training for those already employed in the aircraft industries and for those anticipating employment. Persons trained on an extension basis, United States Office of Education studies showed, outnumbered those in preparatory classes. Though reports are not yet in from the States for 1939–40, it is assumed that

approximately 25,000 persons will be reported as having been enrolled in federally aided aviation classes. The year's report, it is expected, will show that courses have been conducted in more than 75 schools in over 60 cities.

Subject Matter and Building Plan Activities

For several years a representative of the Trade and Industrial Education Service has cooperated with State and regional committees in the North Atlantic region in work on outlines and lesson plans covering such subjects as machine shop practice, automobile mechanics, tool and die making, bricklaying, refrigeration, and similar fields. This lesson material has been issued by States of the North Atlantic region in mimeographed form for distribution to schools at nominal cost. Another North Atlantic region committee appointed during the year and sponsored by the United States Office of Education has been working on standards to be followed in planning, laying out, and equipping vocational schools. As a result of the services rendered by this committee, which is composed of architects, engineers, draftsmen, and material dealers, new vocational school buildings are being constructed with a view to providing maximum service.

Public Service Occupations

Although training had previously been offered in some public-service occupations which were clearly in the field of trade and industry, recent legislation and the encouragement of expanded programs of training in these occupations by the United States Office of Education, made it possible during the year to extend such opportunities to workers in many other public-service occupations. New training courses were organized for prison officers, waterworks employees, tax assessors, sewage disposal workers, highway construction men, park maintenance workers, and many other public-service employee groups. The content offered in such courses, is, in all instances, based on the needs of the workers in the particular occupations.

Cooperation With Apprenticeship Committee

The United States Office of Education continued during the year to cooperate with the Federal Committee on Apprenticeship in an effort to encourage apprenticeship training in the States. Much attention has been given to ways in which training in subjects related to the various trades may be given, especially in places where only a few apprentices are employed.

Home Economics Education

Total enrollments in federally aided home economics departments in the high schools of the country in 1939 reached 741,503, an increase of

114,109 over the previous year, according to statistical reports filed with the United States Office of Education. This represents an increase of 81,862 in day classes, 11,381 in part-time classes, and 20,866 in evening classes.

The number of centers reporting home economics departments in the same period totaled 11,396, or 1,578 more than in the previous year. Despite this 30 percent increase in enrollments in high schools and 39 percent increase in the number of centers served, 28 percent of the high schools in the country are still without home economics departments.

A statistical study of home economics instruction in public high schools was completed and a bulletin incorporating the results of the study will soon be available. This study has provided information from homemaking departments in 10,197 junior and senior high schools on total enrollments and enrollments in home economics courses; course content in vocational and nonvocational departments; practices in relation to requiring home economics or making it elective in different grades, in visiting homes and supervising home projects, and in offering home economics for adults.

Regional conferences were held during the year in the Central, Pacific, North Atlantic, and Southern regions, dealing with problems and plans of major interest in the respective regions. Assistance was given throughout the year in the development of research programs in individual States and in studies of curriculum in several higher institutions.

Varied types of assistance of the Home Economics Service to State boards for vocational education and their representatives included: Development of research programs in home economics education; evaluation of State programs in teaching, supervision, administration, and teacher training; and guidance of home economics curriculum programs through committee work and through planning and participating in summer sessions and teachers' conferences. The Service continued its program of assistance to State and local workers responsible for developing the community programs in home and family living in the four experimental centers started 2 years ago with the cooperation and assistance of the United States Office of Education. Special conferences conducted by members of the Home Economics Education staff included: Annual regional conferences in all regions for white and Negro home economics education leaders; and two conferences for city supervisors to consider special problems of supervision and administration of home economics in urban centers which were carried on in cooperation with selected teacher-training institutions.

State Planning

During the year the Home Economics Education staff assisted State supervisors of home economics in bringing together groups of

home economics education workers to plan total State programs of homemaking education. This is resulting in an increased understanding on the part of State leaders, in their more effective participation in the making of long-time plans, and in a clearer determination of the part that different workers would play in achieving common goals in State programs. As a result of this planning together, a number of States have developed committees to cooperate in planning State programs of work including procedures for developing day, part-time, and evening classes, preparing home economics teachers to teach these various types of classes, and for cooperating with State school curriculum committees and with other agencies concerned with improving home and family life.

In three of the 1940 annual regional conferences consideration was given to community programs of education for home and family living. In the Pacific and North Atlantic regions emphasis was also given to objectives and methods of instruction in housing as a part of homemaking education. In the Southern region a group of home economics education leaders met with representatives of agricultural education services to consider basic social and economic problems of the region and the part which homemaking and agricultural education services should play in helping the people of the region meet their farm and home problems. In the Central region also a preliminary conference was held to discuss social and economic problems of the region as a basis for future planning of work in home economics education in the region.

In the regional conference for home economics supervisors and teacher trainers in Negro education discussions centered principally around farm family living, the training of homemaking teachers, and consumer education.

Programs for Youth

Although the homemaking education program for young people who have left full-time school has been developing gradually for several years, there was an unusually rapid expansion during the past year. Reports from 41 States showed that there had been a 51 percent increase during the year in the number of centers offering home economics instruction for persons who have left full-time school. These programs have been developing as a part of the joint programs of agriculture and home economics and also as a part of the program being carried on in cooperation with the National Youth Administration.

Family Life Education

The four community programs in family life education which were initiated in the fall of 1938 have developed significantly during the past year. These programs are located in Box Elder County, Utah; Obion County, Tenn.; Toledo, Ohio; and Wichita, Kans.

Notable progress has been reported in each of the centers toward the objectives set up at the beginning of the experiment by their local sponsoring committees. An important contribution from Box Elder County is a pattern of organization which facilitates widespread participation in the program through committees appointed to plan and direct special projects and small subcommunity councils.

In Obion County an unusual degree of cooperation has been brought about among all county agencies on projects intended to emphasize family unity and enrich family life throughout the county. These projects include a county library, supported by popular subscription through a membership fee and administered through the office of the county superintendent of schools; outdoor family recreation parties on school grounds which have become a regular part of the county recreation program; and a new clinic which is now part of the county health service.

Toledo, Ohio, has worked out a cooperative arrangement with the Work Projects Administration whereby two of the nursery schools established by this agency have been made available to the family life education program for use as observation centers for adult and high-school classes studying child development. This center has worked intensively during the past year on a program of public information. Special reading lists dealing with many phases of family life have been prepared and circulated through the public library. A number of public meetings on subjects relating to home and family living have been sponsored jointly by the family life education program and other community agencies such as the Toledo Council of Parent-Teacher Associations, The Toledo Council of Social Hygiene, and The Metropolitan Housing Authority.

Developments in the Wichita program include the establishment of two self-help centers in districts where there are many needy families; an experiment in the building of a low-cost house financed with private capital; the organization of a city-wide program for summer recreation carried out with the cooperation of parents by teachers of adult classes in parent education; and a home beautification project which involved the planting of more than 3,000 trees in family yards and gardens.

All of the centers report studies completed or in progress through which community needs and ways of meeting them are being discovered. They also report significant changes in the school program at all levels. There is closer cooperation between the home and the school not only on specific problems of child guidance but in actual curriculum planning. Teachers are making more home visits. High-school home economics teaching is being more closely related to the home experiences and the needs of individual students. The increase in attendance at homemaking classes for adults has reached 25 percent

in one center. There have been many all-school faculty meetings to determine how all school departments can contribute to a comprehensive program of family-life education.

One of the most gratifying results to date of these four experimental programs is the interest which they seem to have aroused in other communities. Members of the staff of the United States Office of Education have been asked to assist with the organization of similar community programs in many places. To an even greater extent than was thought possible when the programs were started, methods and materials developed in these four experimental programs are proving useful elsewhere.

The Home Economics Education Service and the Agricultural Education Service continued their cooperation during the year in the further development of joint programs of education in farm-family living. These cooperative programs are carried on in day, part-time, and adult classes in which boys and girls and men and women plan and work cooperatively for improved farm-family living.

Teacher-Training Activities

Cooperative studies of home economics teacher education were made by staff members of the Home Economics Education Service in seven white and two Negro teacher-training institutions. These studies were made at the request of the respective colleges or universities and served as a basis for significant curriculum improvements.

Through the cooperation of the Home Economics Education Service and of one State department of education a leadership conference for Negro home economics teachers was held at the State teacher-training institution. This institution is participating in a national study of teacher education and is expanding the teacher-education program to include more centers for student teaching.

The cooperative studies and curriculum laboratory, as well as the regular work of the regional agents of the Home Economics Service in assisting with the teacher-training program, both preservice and in-service, have placed emphasis upon the importance of preparing prospective teachers to assume leadership in community programs of education for home and family living and to develop a classroom program of teaching based on needs of students.

Cooperation With Other Agencies

The Home Economics Education Service conferred during the year with home economics representatives of other Federal Government agencies—the Bureau of Home Economics, the Extension Service, Farm Credit Administration, and the Farm Security Administration of the United States Department of Agriculture, the Work Projects Administration, and the National Youth Administration—to plan how they could supplement each other's services in working with

State and local groups. The Service cooperated with many national professional organizations.

Business Education

At the end of the fiscal year, the distributive education plans of 47 States, the District of Columbia, Hawaii, Puerto Rico, and Alaska had been approved by the United States Office of Education. Also 10 States submitted revised plans to replace the temporary type of plan under which a number of the States started their distributive education activities.

Sixteen States now employ full-time supervisors who are coordinate in authority with the supervisors of other vocational education services; 12 States have appointed full-time supervisors who are subordinate to the supervisors of some other vocational education service; and in 14 States distributive education programs are being carried on under the direction of supervisors of other services. Six States have not yet set up programs.

Enrollments in distributive education classes for the fiscal year were considerably less than enrollments in other fields of vocational education. This was expected as the federally aided program in this field has been in operation only 2 years. Enrollments for the year ended June 30, 1939, totaled 90,099, an increase of 54,091 over the previous year. Estimates indicate that the total enrollment in all types of distributive education classes for the year ended June 30, 1940, will be between 125,000 and 150,000.

Among activities in which the Business Education Service engaged during the year were the following: Activities in the field of teacher training; research activities; activities looking toward the utilization of State and local advisory committees in connection with programs of distributive education; cooperating with governmental and other agencies in programs concerned with distributive training; holding conferences and special discussion meetings; preparing instructional material for distributive education teachers; and preparing publications covering various phases of business education.

The Service devoted considerable time and effort to the encouragement of the use of advisory committees, State and local, in connection with the organization and operation of distributive education programs. These committees are composed of both workers and employers in distributive businesses. The advisory committee plan has received special consideration by State distributive education workers, and the services of advisory committees have been utilized in many of the States.

Conferences and Teacher Training

Outstanding among the teacher-training activities of the Business Education Service was the national training conference for distributive

education in Minneapolis sponsored by the Service. This conference resulted in a series of reports on various phases of teaching methods, teacher training, and instructional materials in distributive education.

That encouragement of teacher-training programs on the part of the Office has resulted in an increase in the teacher-training activities in the States, is attested by the fact that training was carried on during the year at 27 institutions, an increase of 12 over the previous year. A number of private colleges conducted courses designed to prepare students for entrance into the distributive occupations, as well as to train teachers in the field.

As an outcome of cooperative efforts, a committee composed of representatives of the National Association of Retail Meat Dealers, the Institute of American Meat Packers, the National Livestock and Meat Board, and the Amalgamated Meat Cutters and Butchers' Workmen of America was formed to promote training for workers in the meat business. Plans were made whereby representatives of the Business Education Service and of State distributive education staffs will meet with this committee to formulate a comprehensive training program.

Cooperation With Other Agencies

A similar program is being planned in the retail drug field in cooperation with the National Association of Boards of Pharmacy, the National Association of Retail Druggists, the National Association of Colleges of Pharmacy, and the American Pharmaceutical Association; and in the retail store field, in cooperation with the American Retail Federation. Each year representatives of the United States Office of Education attend the annual meeting of the National Retail Dry Goods Association at which store training directors, personnel managers, and teacher trainers and teachers of distributive education from the States meet to discuss training problems. The Service cooperated with many professional groups.

Research

Although the Business Education Service has not had a research agent during the past year, considerable work of a research nature has been carried on by the staff. At the regional conferences on distributive education, the appointment of a national research committee was approved. This committee will correlate research projects to avoid duplication of effort and to insure that the most pertinent problems have primary consideration. The Business Education Service will act as a clearing house and advisory agency on research undertakings in the States relating to the field of distributive education.

Research committees have been appointed in the Western and Southern regions to conduct studies of a regional nature and to advise with the Business Education Service regarding studies and investiga-

tions that should be made on a national basis. In addition to the above activities, members of this service made studies of instructional material for selected distributive occupations and of standards for cooperative part-time classes.

In cooperation with Government agencies, consumer groups, trade associations, and other organizations and individuals, a comprehensive study was made covering the training needs of workers employed in the retail furniture business. This study resulted in the preparation of instructional material to be used in extension classes composed of salespersons in the retail furniture trade. The material includes the following phases of retailing of home furnishings, each of which will be incorporated in a separate publication: Salesmen as business builders; salesmanship applied to the selling of furniture; style as a selling factor; selling sleep equipment; accessories; the art of interior decoration; period furniture; the furniture woods, their selection and use; floor coverings and fabrics; furnishing the hall, living room, and dining room; furnishing the bedroom and sun parlor; and furnishing the kitchen.

In cooperation with State supervisors and teacher-trainers of distributive education in the Central region, a regional study was made covering the standards of cooperative part-time classes. A similar study is being undertaken in the Southern region.

Occupational Information and Guidance

The year's record shows that Massachusetts, Missouri, Puerto Rico, and Vermont set up State programs of occupational information and guidance reimbursable in part by Federal vocational funds. Kansas also initiated a program for which no Federal funds are used, and Wyoming requested that it be listed as carrying on the activities of State supervision through personnel having other responsibilities. These States are in addition to Maine, Georgia, Maryland, Michigan, New York, and Pennsylvania which had previously set up occupational information and guidance services. The service in New York does not employ Federal funds and antedates all others.

An important development in State supervision of occupational information and guidance is the tendency on the part of different States to use unmatched funds in part for carrying on their guidance services. Since the purpose of Federal funds is essentially the stimulation of State and local initiative, this aspect of development in the States is welcomed. The States which use unmatched funds in part are also enabled to develop broad programs with due regard for the proper use of money provided under the Federal vocational education acts.

A sampling of activities for the year revealed that under the stimulation of a State supervisor of occupational information and guidance,

one State has already made available to all school units a uniform State-wide individual guidance inventory system; another has set up a State advisory committee for guidance purposes which may well serve as a model in this respect; and a third has organized guidance projects on a county basis to serve as experiments and demonstrations. In every State the principle of cooperation with other established vocational and general services in the State department of education underlies all activities.

The Occupational Information and Guidance Service continued to supplement its activities through funds made available by the National Occupational Conference. With these funds additional services and certain publications, including an extensive guidance bibliography and a study of the use by counselors of the individual inventory in guidance work were made possible.

Clearing House Activities

As a clearing house, this Service endeavors to collate, make available, and disseminate material and information useful to professional workers in the guidance field and to laymen throughout the country.

Two different types of bibliographies were prepared during the year—bibliographies of periodicals and books covering subjects related to guidance, and brief bibliographies and lists of references for use as enclosures in answering correspondence. A comprehensive bibliography for the years 1937–38, containing more than 4,000 annotated items, was completed during the year.

Studies were completed on the following subjects: Number of guidance counselors in secondary schools; courses offered by federally aided vocational schools and classes in the State of Maryland; methods of filing source material on vocational guidance for the use of schools and libraries; methods by which young people may work their way through college; and courses of guidance offered by summer schools. Initiated during the year were studies on how to make local occupational surveys and on how tests, records, and other items of individual inventory may be used by counselors in secondary schools.

Conferences and Field Services

Two important guidance conferences were held during the year in Washington, under the auspices of the United States Office of Education. The first conference brought together a group selected by the president of the National Vocational Guidance Association for the purpose of exchanging views with the staff of the Occupational Information and Guidance Service and of integrating the professional undertakings of the service and the guidance association. The second conference brought together, in their first national meeting, State supervisors of occupational information and guidance. At this meeting a representative from each State described what his State

was attempting to do in the guidance field and plans were laid for the carrying on of cooperative programs by the States and the United States Office of Education in the future.

Field services rendered by members of the staff reached 39 of the 48 States.

Plans for the Future

Plans have been made to conduct studies in the field of guidance in rural areas; on methods and uses of follow-up studies of school leavers; on methods of making available to local guidance authorities significant material concerning national trends in employment; on methods of selecting students for vocational schools and classes; and on guidance services which will be of all possible assistance in the emergency defense program.

Cooperation With Other Groups

Members of the staff have served on committees of the American Vocational Association, the National Vocational Guidance Association, the United States Employment Service, and the National Association of Secondary School Principals. Other organizations with which contact has been maintained for various purposes include the Civilian Conservation Corps, the National Youth Administration, the Work Projects Administration, the Bureau of the Census, the Bureau of Labor Statistics, the Bureau of Employment Security, the American Youth Commission, the National Education Association, national civic and service clubs, and professional women's organizations.

Consulting Services

The consulting services of the Vocational Division of the United States Office of Education form an important part of the administrative set-up in the field of vocational education.

There are at the present time four of these services: The consultant in vocational education, the consultant in public-service training, the consultant in curriculum problems, and the consultant in employee-employer relations. The activities carried on by these four consultants are here discussed under separate headings.

Vocational Education

The services of the consultant in vocational education during the past year were divided into two categories: (1) Services rendered in connection with the national defense-training program, and (2) services rendered in connection with the regular vocational education program.

Among the various services rendered were the following:

Conducting conferences for representatives of the petroleum industry at Houston, Tex., and Tulsa, Okla., arranged through the State board for vocational education in cooperation with the American Petroleum Institute.

Conducted a series of conferences for the Council of Personnel Administration in the Federal Government, one or more of which were attended by practically all of the Directors of Personnel from the executive departments and independent agencies of the Government.

Conducted a 1-week program for supervisors of the accounting department of the Home Owners' Loan Corporation.

Conducted a 2 weeks' training course for conference leaders for the technical services of the United States Department of the Interior who are concerned with work projects in the Civilian Conservation Corps camps.

Services under the national defense-training program included:

Conducting conferences for: Foremen and supervisors in aircraft industries; officers and instructing staff at the Army Ordnance School at Aberdeen, Md.; and for the officers and instructing staff of the Quartermaster School at Schuylkill Arsenal, Philadelphia, Pa.

Conferences were also held with the Commandant at the Charleston, S. C., Navy Yard and with members of his staff. These resulted in part in a comprehensive training program which has since been developed at this navy yard.

Conferences for the United States Department of the Navy and for Naval Reserve officers from the Eastern part of the United States who will be assigned to vocational duty in an emergency, and for district civilian personnel officers from all of the naval districts, were conducted at which consideration was given to the problem of training civilian personnel of the Navy Department.

Public-Service Training

During the year the consultant in public-service training made official visits to 24 different States. These visits were primarily for purposes of advising with representatives of State boards for vocational education concerning the standards to be observed and the methods to be followed in organizing training courses; consulting with individuals who have a direct interest in some special field of public service regarding possibilities for training programs in this field; and discussing in conferences of groups interested in public-service training, the problems involved in planning, organizing, and operating such training.

In addition to field work, efforts were devoted toward the preparation of material on different phases of public-service training, and cooperation with other Federal agencies interested in public-service training in planning in-service training for Federal employees.

Curriculum Problems

In general, the duties of the consultant in curriculum problems have been: To render consulting service to the staff of the United States Office of Education on problems of curriculum organization and development in the field of vocational education; to cooperate with State

boards for vocational education on plans and procedures for developing vocational programs at various educational levels; and to initiate and conduct research in curriculum problems in the field of vocational education.

In this field of service there have been collected, cataloged, and collated more than 600 items of courses of study and other curriculum materials in or related to the program of vocational education.

Employee-Employer Relations

Inasmuch as the consultant in employee-employer relations resigned in the late fall of 1939 and the vacancy thus created was not filled until after the close of the fiscal year, no detailed report is available on service in this field for the year.

Reports reviewed by the United States Office of Education show that there is a growing realization on the part of State boards for vocational education of the need for increased emphasis in vocational education upon employee-employer relations and upon the social and economic problems involved in these relations.

Enrollments Increase

Along with the availability of increased Federal funds for vocational education, statistics show that there came an unusual expansion during the year in the federally aided programs of vocational education carried on in the 48 States, the District of Columbia, and the Territories of Hawaii and Puerto Rico.

Reports from the States for the year ended June 30, 1939, the latest period for which complete data are available, showed that 2,085,427 persons were enrolled in vocational education schools and classes in all fields of vocational education. This represents an increase over the previous year of 275,345, or 15.2 percent. This increase was distributed as follows: 77,710 in vocational agriculture schools, 29,435 in trade and industrial schools, 114,109 in home economics schools, and 54,091 in distributive education schools. Present reports indicate that the complete enrollment figures for the fiscal year ended June 30, 1940, will exceed by at least several hundred thousand the enrollment for 1939.

Appropriations for allotment to the States and Territories for vocational education are shown in table 1, and allotments to the States and Territories in table 2.

The acts authorizing appropriations for allotment to the States for vocational education provide that unexpended balances remaining in the States at the close of a fiscal year shall be deducted from the allotments to those States for the ensuing year. Appropriations made in consideration of the unexpended balances provide that the allotments

to the States shall be made on the basis of the total amounts authorized in the acts.

TABLE 1.—*Appropriations for allotment to the States and Territories for vocational education, 1940 and 1941*

Act	Appropriation	
	Fiscal year ended June 30, 1940	Fiscal year ending June 30, 1941
SMITH-HUGHES ACT		
Total	[1] $7,167,000	[1] $7,167,000
Vocational agriculture	3,027,000	3,027,000
Vocational trade, industry, and home economics	3,050,000	3,050,000
Vocational teacher training	1,090,000	1,090,000
GEORGE-DEEN ACT		
Total	[2] 13,750,000	[2] 12,750,000
Vocational agriculture	3,920,000	3,700,000
Vocational trade and industry	3,990,000	3,800,000
Vocational home economics	3,920,000	3,800,000
Distributive occupations	940,000	610,000
Vocational teacher training	980,000	840,000
AN ACT MAKING APPROPRIATIONS FOR THE TERRITORY OF HAWAII		
Total	30,000	30,000
Vocational agriculture	10,000	10,000
Vocational trade, industry, and home economics	10,000	10,000
Vocational teacher training	10,000	10,000
AN ACT MAKING APPROPRIATIONS FOR THE ISLAND OF PUERTO RICO		
Total	105,000	105,000
Vocational agriculture	30,000	30,000
Vocational trade and industry	30,000	30,000
Vocational home economics	30,000	30,000
Vocational teacher training	15,000	15,000
Total	21,052,000	20,052,000

[1] Permanent and continuing appropriation. Estimated expenditure $7,000,000.
[2] Allotments to States made on basis of $14,483,000 as authorized in the act.

TABLE 2.—*Allotments of Federal money to the States and Territories for vocational education for each fiscal year, 1938 to 1941, inclusive.*[1] (*Allotments are the same for each of these fiscal years*)

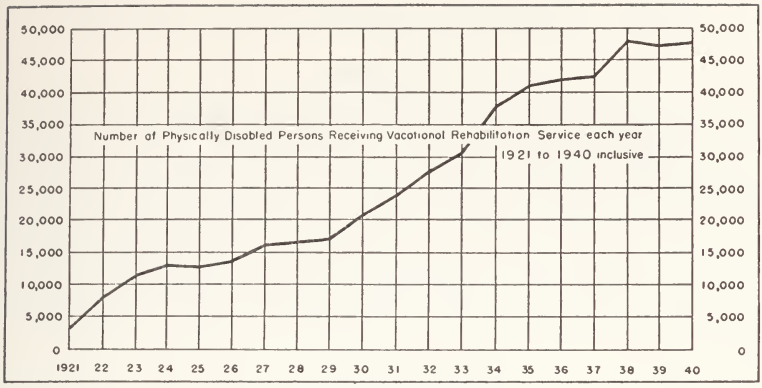
State or territory	Smith-Hughes funds (appropriated)				George-Deen funds (authorized to be appropriated)					
	Total	Agriculture: For salaries of teachers, supervisors, and directors	Trade, industry, and home economics: For salaries of teachers	Teacher training: For salaries of teachers and maintenance of teacher training	Total	Agricultural education	Trade and industrial education	Home economics education	Distributive occupations	Teacher training
1	2	3	4	5	6	7	8	9	10	11
Total	[2]$7,157,977.62	[2]$3,018,853.83	[2]$3,049,265.27	[2]$1,089,858.52	[3]$14,483,000.00	$4,067,200.00	$4,058,975.00	$4,048,825.00	$1,254,000.00	$1,054,000.00
Alabama	160,268.82	106,018.23	32,611.15	21,639.44	401,144.05	165,947.24	55,072.91	135,856.98	24,429.46	19,837.46
Arizona	35,926.19	15,926.19	10,000.00	10,000.00	80,408.60	20,000.00	20,000.00	20,408.60	10,000.00	10,000.00
Arkansas	113,969.95	82,028.87	16,776.23	15,164.85	305,740.84	138,607.14	30,995.77	105,115.82	17,120.09	13,902.02
California	313,266.41	84,540.06	182,301.17	46,425.18	493,375.58	76,828.34	213,243.37	108,333.79	52,410.87	42,559.21
Colorado	61,536.56	28,757.35	22,779.21	10,000.00	123,622.04	35,018.40	31,752.56	36,851.08	10,000.00	10,000.00
Connecticut	89,214.52	26,484.45	49,589.77	13,140.30	144,923.17	20,000.00	64,104.14	33,938.47	14,834.50	12,046.06
Delaware	30,000.00	10,000.00	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Florida	84,785.54	39,488.86	33,290.52	12,006.16	159,855.59	34,542.21	50,149.93	50,602.96	13,554.13	11,006.36
Georgia	175,228.68	112,207.67	39,236.98	23,784.03	430,909.73	175,634.20	62,833.09	143,788.43	26,850.55	21,803.46
Idaho	37,587.72	17,587.72	10,000.00	10,000.00	85,860.29	23,322.53	20,000.00	22,537.76	10,000.00	10,000.00
Illinois	420,534.11	111,199.48	246,935.68	62,398.95	673,513.00	123,722.64	279,646.92	142,496.48	70,444.17	57,202.79
Indiana	185,584.34	80,412.77	78,689.02	26,482.55	360,165.48	100,662.97	102,283.38	103,044.87	29,897.00	24,277.26
Iowa	146,260.73	83,146.09	42,908.77	20,205.87	331,923.17	121,080.05	62,961.33	106,547.48	22,811.05	18,523.26
Kansas	111,527.42	64,167.24	31,978.49	15,381.69	250,754.04	87,561.92	49,499.38	82,227.05	17,364.88	14,100.81
Kentucky	157,592.30	101,201.53	35,010.22	21,380.55	379,737.33	145,672.06	60,643.33	129,684.62	24,137.19	19,600.13
Louisiana	124,390.87	70,683.15	36,522.14	17,185.58	282,172.30	102,842.00	53,597.61	90,576.86	19,401.35	15,754.48
Maine	50,615.30	26,528.15	14,087.15	10,000.00	101,582.84	21,171.85	26,416.52	33,994.47	10,000.00	10,000.00
Maryland	92,659.43	36,602.80	42,714.98	13,341.65	162,385.90	29,400.76	58,788.05	46,904.63	15,061.81	12,230.65
Massachusetts	225,939.31	23,310.27	167,878.22	34,750.82	294,968.15	20,000.00	174,008.92	29,870.92	39,231.31	31,857.00
Michigan	270,137.03	85,855.27	144,684.11	39,597.65	459,102.70	96,872.60	171,207.64	110,019.17	44,703.06	36,300.23
Minnesota	148,887.03	72,816.70	55,103.85	20,966.48	317,424.54	110,858.20	70,365.18	93,310.90	23,669.73	19,220.53
Mississippi	124,424.02	93,141.81	14,847.09	16,435.12	349,001.51	168,741.26	27,283.12	119,356.49	18,554.13	15,066.51
Missouri	209,813.81	98,675.62	81,459.38	29,678.81	431,203.86	137,990.54	106,052.83	126,447.79	33,505.35	27,207.35
Montana	39,875.61	19,875.61	10,000.00	10,000.00	90,801.51	25,331.93	20,000.00	25,469.58	10,000.00	10,000.00
Nebraska	82,280.54	49,713.06	21,299.32	11,268.16	192,684.27	72,518.94	33,409.76	63,704.76	12,720.99	10,329.82
Nevada	30,000.00	10,000.00	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00

New Hampshire	32,679.49	10,714.23	11,965.26	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
New Jersey	218,495.63	39,135.29	146,312.71	33,047.63	302,649.11	20,000.00	164,895.07	50,149.88	37,308.52	30,295.64
New Mexico	37,642.12	17,642.12	10,000.00	10,000.00	82,607.48	20,000.00	20,000.00	22,607.48	10,000.00	10,000.00
New York	679,136.35	115,167.53	461,031.10	102,937.72	947,775.59	89,138.46	500,480.36	147,581.33	116,209.68	94,365.76
North Carolina	192,981.96	131,572.98	35,484.35	25,924.63	485,954.01	198,094.85	66,222.13	168,604.08	29,267.15	23,765.80
North Dakota	51,635.26	31,635.26	10,000.00	10,000.00	129,730.19	49,191.21	20,000.00	40,538.98	10,000.00	10,000.00
Ohio	371,096.69	119,248.45	197,495.50	54,352.74	627,015.40	125,453.59	237,563.83	152,810.82	61,360.55	49,826.61
Oklahoma	143,352.81	87,756.55	36,002.87	19,593.39	337,188.90	126,795.87	57,856.10	112,455.55	22,119.60	17,961.78
Oregon	57,324.88	25,866.11	21,458.77	10,000.00	111,628.76	27,693.47	30,789.18	33,146.11	10,000.00	10,000.00
Pennsylvania	537,709.58	172,677.04	286,273.09	78,759.45	858,491.92	106,072.11	370,028.00	221,276.85	88,914.06	72,200.90
Rhode Island	47,842.03	10,000.00	27,842.03	10,000.00	88,296.97	20,000.00	28,296.97	20,000.00	10,000.00	10,000.00
South Carolina	106,714.19	76,236.31	16,259.29	14,218.59	274,928.97	113,473.43	34,676.21	97,692.95	16,051.82	13,034.56
South Dakota	51,323.28	31,323.28	10,000.00	10,000.00	128,452.67	48,313.48	20,000.00	40,139.19	10,000.00	10,000.00
Tennessee	156,555.22	95,875.76	39,282.82	21,396.64	376,206.74	150,491.95	59,084.68	122,859.89	24,155.35	19,614.87
Texas	343,814.26	191,491.24	104,691.96	47,631.06	780,504.42	291,248.04	146,433.22	245,386.28	53,772.22	43,664.66
Utah	35,132.76	13,466.11	11,666.65	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Vermont	33,424.97	13,424.97	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Virginia	145,433.63	91,209.99	34,419.18	19,804.46	337,148.87	117,718.58	62,036.16	116,880.97	22,357.89	18,155.27
Washington	89,381.85	37,840.26	38,757.07	12,784.52	165,452.09	37,731.20	53,077.76	48,490.36	14,432.86	11,719.91
West Virginia	104,667.06	68,990.85	21,535.80	14,140.41	226,923.60	55,607.33	53,981.55	88,408.27	15,963.56	12,962.89
Wisconsin	169,327.36	77,210.55	68,083.37	24,033.44	343,977.87	109,088.25	86,784.01	98,941.39	27,132.12	22,032.10
Wyoming	30,000.00	10,000.00	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Alaska					80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Hawaii [3]	30,000.00	10,000.00	10,000.00	10,000.00	80,020.99	20,020.99	20,000.00	20,000.00	10,000.00	10,000.00
Puerto Rico [3]	105,000.00	30,000.00	60,000.00	15,000.00	254,271.99	126,739.41	21,941.06	79,764.66	14,253.00	11,573.86
District of Columbia					80,512.97	20,000.00	20,512.97	20,000.00	10,000.00	10,000.00

[1] Allotments based on United States census returns of 1940 for the years 1940–41.

[2] The allotments to Hawaii and Puerto Rico are not included in the totals under the Smith-Hughes Act.

[3] The sum of $12,750,000 was appropriated for the fiscal year 1940 with the provision that allotments to the States and Territories be made on the basis of $14,483,000, the full amount authorized.



Chapter III

Vocational Rehabilitation

THE TRANSFER at the beginning of the fiscal year, of the United States Office of Education to the Federal Security Agency brought the Vocational Rehabilitation Division in closer contact with most of the governmental agencies with which the work of rehabilitation is most closely related. The transfer has also made it possible to accomplish more effective cooperation between Vocational Rehabilitation and such services as those of the United States Public Health Service, the Social Security Board (Bureaus of Employment Security and Public Assistance), the National Youth Administration, and the Civilian Conservation Corps.

Another factor which influenced the work of the Division during the year was the amendment to title V, part 4, of the Social Security Act approved by the President on August 10, 1939. Congress increased the authorization for allotments to the States from $1,938,000 to $3,500,000. In addition, provision was made for expansion of the scope of the rehabilitation service to groups of physically disabled persons who under the basic act were not eligible for the service. In view of the new responsibilities for expanding the program, the organization of the administration of rehabilitation as a separate Division has in many ways increased the efficiency of this branch of the work.

The program of rehabilitation now includes two broad groups: (1) Persons who, becoming disabled by accident or disease, need physical restoration or retraining in order to return to or remain in productive employment; and (2) physically handicapped young persons of employable age, who upon leaving high school or college, would enter the occupational world under the handicap of a physical disability.

New Policies

When additional funds became available for allotment to the States, thus providing more adequate financial support for the program and enabling the States to provide for the vocational adjustment of the disabled persons not served under previous policies governing the expenditures of the funds, the Federal office undertook a study of the problems involved and, in cooperation with representatives of State rehabilitation services, brought about the expansion provided for by Congress.

In the fall of 1939, the United States Commissioner of Education called to Washington a group of State rehabilitation workers to assist in drawing up new policies for approval. It was the consensus of this group that the needed changes in policy were of two types: (1) Changes to permit service to groups not previously served; and (2) changes to permit more effective service to groups already being served. The proposed policies for permitting services to additional groups of handicapped persons included the use of Federal funds for the maintenance of clients while in training and for financing programs to assist those persons who are too seriously handicapped to be placed in "normal competitive employment." In order to facilitate the rendering of service to groups already being rehabilitated, certain amendments were made to the Federal policies governing the procedure in the purchase of artificial appliances; the rendering of services to retain handicapped persons in employment; the use of Federal funds for purchase of placement equipment, and the use of private funds to match Federal appropriations.

The proposed changes in policy were discussed at regional conferences called by the Office during the fiscal year and rehabilitation workers throughout the country were given an opportunity to express their opinion on the desirability of the proposed changes. Some of the State supervisors felt that because of limited State funds they would be unable to expand their programs along the lines being laid down. However, since the proposed changes were in the nature of liberalization and were permissive rather than mandatory, it was agreed that no State service would be handicapped by inability to expand its program during the fiscal year.

After regional conferences had been held, another advisory group of State rehabilitation officials was called to Washington in January 1940 to assist in drawing up the amended policies. On the conclusion of the work of this group, the new policies were submitted to the Solicitor of the Federal Security Agency for his opinion and after final approval by the United States Commissioner of Education, became effective on April 1, 1940.

The change of policy having the greatest significance was that permitting the States to use Federal funds on a matching basis for

maintenance of rehabilitation trainees. It had been the experience of State workers that many handicapped persons in small towns and rural sections had been denied service because no training facilities existed in the locality and funds were not available for paying the maintenance of the client in a city where training and placement facilities were available.

In the past the problem of maintenance had been partially met by donations from service clubs, private individuals, and the cooperation of public welfare departments. It is anticipated that these sources will continue to be utilized since the new policy on maintenance states that payment shall be made (*a*) only on a basis of need and (*b*) only in such amount as is necessary considering the availability of funds from other sources.

The States are now permitted, if they desire, to engage in programs providing employment to the individuals so seriously handicapped as to be confined in their homes or in sheltered workshops. However, because of the expense of programs of this type and the greater difficulty in justifying the expenditure of public funds, the States will undertake the work of this kind only under certain conditions. These conditions are (*a*) that they will submit to the Federal office the plan of the program proposed; (*b*) that the program is to be operated separately from the regular rehabilitation service; and (*c*) that the program is not to be undertaken unless a State is matching its full allotment of Federal funds and is maintaining a reasonably adequate rehabilitation program for those capable, after special training and assistance, of engaging in "normal competitive employment."

One of the changes in policy designed to facilitate service to groups now being served is that permitting the use of Federal funds for placement equipment for rehabilitation clients. For many clients, particularly those more seriously handicapped, the best and sometimes the only available employment is that in which the individual markets his skill rather than goods. The use of Federal funds has therefore been authorized for the purchase of equipment needed by a client in order to offer his services to the public. Typical types of this form of employment, for which equipment may be needed are the following: Radio repair, watch repair, barbering, and shoe repair.

Another change in policy affecting services to existing groups is that which permits a service for the purpose of retaining clients in employment. The policies effective in the past had required that vocational rehabilitation service should be rendered only for the purpose of establishing clients in employment or returning them to employment.

The immediate effect of these amendments to policies was the bringing into training of many persons from whom service had been

withheld because of inability of the State to pay maintenance in a locality where training was available. With respect to service to the seriously handicapped through operation of a program for the "homebound," two States are already operating such services and a third is in process of initiating the program.

Uniform Case-Work Records

Research in the problems of vocational rehabilitation has been handicapped by the lack of uniform records in the States. The rehabilitation staff during the past year held numerous meetings with State officials and worked out a uniform system of basic records. These were submitted to the States and adopted by the majority of them for use during the fiscal year beginning July 1, 1940, and continuously thereafter.

It is believed that the adoption of this uniform record system will tend to improve decidedly the quality of the case work in the States. Naturally in the preparation of these forms only the basic records were made uniform and leeway was left to the States to adapt the forms to their own particular needs and to add such additional records as might be needed.

An important feature of the uniform record system is a series of medical report forms prepared by the Federal office for the use of the States. Included in the series are forms for orthopedic cases, and separate report forms for cardiac, hearing, vision, and tuberculous cases.

Special Activities

In addition to the recurring duties of the Rehabilitation staff, a considerable portion of the year's work was devoted to assisting the States in putting into effect the new policies, a uniform system of case-work records, and new techniques of case-load control. Research and development of new methods and techniques for the most part have been done in the Washington office by the research staff; and the recurring administrative service to the States, together with the task of introducing new techniques into practice in the States, has been the function of the regional agents.

In keeping with the practice followed during recent years of making comprehensive surveys of State rehabilitation services, two State programs—California and Michigan—were surveyed during the year. The data obtained and the conditions observed were analyzed and presented in an extensive confidential report, distributed to all State officials connected with or responsible for the rehabilitation program in their States. Numerous suggestions were made for improvement of the programs.

During the first months of the year a report was written on a survey

of the rehabilitation program in Virginia, which had been made during the preceding year.

The Rehabilitation Division received during the year hundreds of letters relating to physically handicapped persons in need of service, letters from research workers seeking information relating to work for the handicapped, and from persons working in the field.

Research Projects

Work on two important research projects was continued. The first of these was the 3-year review of cases rehabilitated in 1936. During the fiscal year 1939, State rehabilitation workers contacted more than 3,000 clients who had been rehabilitated during the fiscal year 1936. Information was obtained relating to employment at the time of the review and employment and income during the 3-year period from rehabilitation to review. The sampling procedure had been determined and the schedules prepared by the Federal Office during the preceding year. During 1939–40, as the schedules were sent to Washington, tabulations were made and individual reports were sent to each participating State covering the results in that State. Inasmuch as the last State did not complete its field work until near the close of the fiscal year, the national report cannot be made until 1941.

The reports provided on the basis of the 3-year review of rehabilitated cases afford the States an excellent means for judging the economic value of the rehabilitation service. The employment and income of the client over a period of 3 years indicates rather reliably the permanence of the service rendered through rehabilitation. Such a study is useful also in that rehabilitation workers are furnished with criteria for measuring the comparative results of service to various types of handicapped individuals or of different types of rehabilitation services to the same types of clients.

The second study which was carried forward through the year was that of tuberculous patients discharged from sanatoriums. This study, being made jointly by the Vocational Rehabilitation Division and the National Tuberculosis Association, has involved a follow-up of 6,609 tuberculous patients, 16 years of age and over, who were discharged from tuberculosis sanatoriums in 1933. Most of the field contacts were made in 1938, affording a 5-year follow-up. Particular attention was paid to health conditions and employment experience during the years following discharge.

Tabulations of the data have been made and preliminary analysis indicates that much valuable contribution to the field of the rehabilitation of the tuberculous may be expected. It is hoped that the present study will indicate types of after-care and rehabilitation service which will increase the number of persons who may be returned

to employment and normal, useful life without danger of the need for readmission to the sanatorium and possibly death.

No reports on this study have been published as yet, though preliminary analyses of the data have been presented before the National Tuberculosis Association and other groups interested in the rehabilitation of the tuberculous.

New Technique

As a corollary to the new system of case-work records a new technique of case-load control has been prepared. After being taken to the States by the regional agents for preliminary use, they were revised in the light of experience obtained during the preliminary trial. The newer method of case-load control meets a real need of the States. During the past 8 years the personnel of the State services has doubled and the number of clients being served has proportionately increased. This has thrown onto the State supervisor greater responsibilities for supervision over this program. The new technique has represented an effort to help the State supervisor meet his increased responsibilities in guiding and controlling the services of his department.

Service in the Field

Field service during the first half of the fiscal year was for the most part devoted to the annual audit of the financial accounts and the statistical reports of the States, and the holding of four regional conferences. Auditing of the accounts is an annual responsibility, required by Congress under the National Rehabilitation Act, that takes the regional agents into every State.

Regional training conferences were held in each of the four Federal regions. These conferences are held every other year. They emphasize the technical aspects of rehabilitation work, the prime purpose being the professional improvement of State workers.

During the second half of the fiscal year the regional agents were especially occupied with explaining (*a*) the uniform system of case-work records to all the States and assisting them in introducing the system, (*b*) the new system of case-load control and assisting the States in becoming accustomed to its use, (*c*) the changes in policies and assisting in the revision of State plans made necessary by the change in policies.

In Kansas contacts were made to assist in working out arrangements whereby a rehabilitation program could be started in that State. These arrangements were finally consummated and by the end of the fiscal year a State program was in operation.

At the beginning of the fiscal year a State supervisor had been

appointed in Delaware and a State program got under way in that State for the first time.

In many States the Federal rehabilitation agents assisted in the handling of administrative and case-work problems. During the year new State directors were appointed in five States, including the two States where rehabilitation programs were started for the first time. Unusual calls are made on the Federal agent for field service in the event of appointment of a new State director. Under the State plans, qualifications of new appointees must be examined and approved by the Federal agent.

At the end of the fiscal year, rehabilitation programs were in operation in all 48 States, the District of Columbia, Puerto Rico, and Hawaii.

Service for the Blind

The Service for the Blind in the Vocational Rehabilitation Division was organized in 1937 to administer the Randolph-Sheppard Act.[1] The staff of this Service works with public and private agencies for the blind to improve the economic condition of blind people. The program is especially concerned with the operation of vending stands in Federal buildings as provided under the act. Although no Federal funds are available for this work the act authorizes and directs the United States Office of Education to serve State, local, and private agencies through research and assistance.

The work of the Division with the State agencies has been to develop systems of control and supervision which would result in vending stands becoming demonstrations of the abilities of blind persons to function in a normal capacity. Progress has been made in the establishment of what is known as the central control of stands, and the following statements illustrate the types of service rendered to the various States by the Federal staff members:

The Arkansas Employment Service for the Blind was incorporated as a private agency cooperating with the division for the blind, Department of Public Welfare for Arkansas and began operating, as the result of a field trip of one of the staff of this division. Following strictly the suggestions given, interested public-spirited citizens incorporated this agency, and 16 refreshment stands have been established in county, city, State, and Federal buildings. These stands are producing an average monthly income of $50 per blind person—this annual income of $600 per blind person is nearly three times the average per capita income of the general population in Arkansas. The total income of these 16 blind persons is about 15 percent of the amount received by over 700 blind persons in the State

[1] Public, No. 732, 74th Cong., H. R. 4688. The purpose of this act is to promote the economic welfare of the blind, particularly through the financing of blind persons to operate vending stands in Federal and other buildings.

from public assistance. Loans have been made to the Arkansas Employment Service for the Blind by such service clubs as Kiwanis, Rotary, and Lions in amounts up to $150 for the capitalization of the stands, and the Vocational Rehabilitation Service has assisted materially by the payment of training fees in the amount of $75 per stand operator. The Arkansas Employment Service is repaying these loans from the income of the stands, and any funds derived over and above these payments are being used in improving the established stands and also in establishing new ones. The same system of control is used as has been developed in the District of Columbia, and the results are proportionately good.

In cooperation with the American Foundation for the Blind, this Service has participated in surveys of agencies for the blind in Pittsburgh, Chicago, and Minneapolis. The problem in Pittsburgh is typical of the general condition in the country in that the agency has been spending up to $115,000 per year in the operation of a sheltered industry and service to approximately 150 persons with practically no service to the remaining group of an estimated 3,000 persons in Allegheny County. This agency has now employed a qualified sighted assistant supervisor, and the Community Chest has, at the recommendation of the Federal Office, advanced $6,000 to properly capitalize and establish some 11 stands in the Pittsburgh area.

The States of Kansas, Iowa, and Rhode Island have made special appropriations to employ placement agents for the blind, but unfortunately qualified candidates for these positions are not available, and we have a definite indication of the need for training facilities to provide this type of personnel. As this personnel is developed and takes its place in the field, the Federal Service will cooperate with these agencies in making surveys of industries and simultaneously placing blind persons on jobs thus discovered. It has long since been found impractical to arouse the enthusiasm of employers unless such enthusiasm can be followed through with definite placement, and the necessary after care, and these things are impossible without permanent and competent personnel in the respective areas.

On September 1, 1939, the Washington Society for the Blind began its definite functioning with the Vocational Rehabilitation Service for the District of Columbia in the administration of the financial affairs of the stands in Federal and other buildings in Washington. An increasing number of administrators are visiting the District of Columbia to observe this program. Because of the many inquiries, the Service for the Blind has prepared a document for distribution and copies are available to all interested organizations and persons.

At the present time, vending stand programs are being operated in 43 States, the District of Columbia, and Hawaii in cooperation with the Federal Office.

Approximately 281 stands are in operation in Federal buildings and about 700 stands in private buildings throughout these cooperating States.

During the fiscal year ended June 30, 1940, the Federal agents visited at the request of officials 32 States and rendered service therein.

District of Columbia Rehabilitation Service

The District service, under the Vocational Rehabilitation Division, operates local programs of both vocational rehabilitation and vending stands for the blind in the District of Columbia. Its staff consists of four professional workers and two clerical workers.

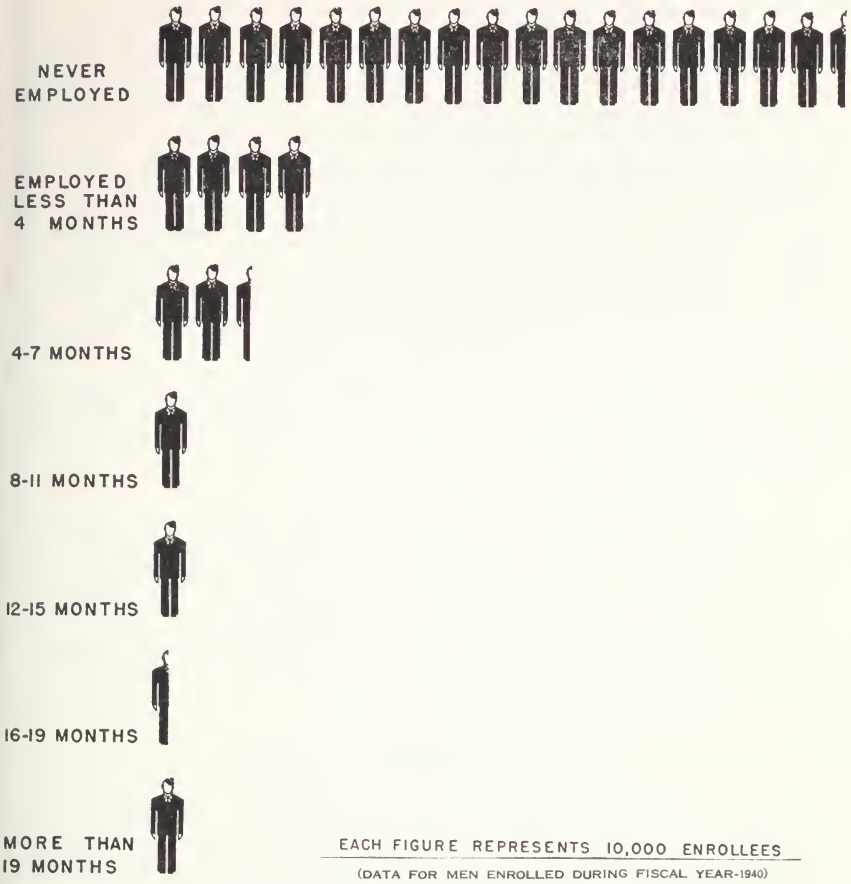
During the year plans of cooperation were maintained on the usual basis with the United States Public Health Service, the United States Employees' Compensation Commission, the District Public Employment Office, the District Work Projects Administration, and the Health Security Administration. On September 1, 1939, a new agreement was entered into with the Washington Society for the Blind which on that date succeeded the Welfare and Recreational Association as finance and business agent for the vending stand program for the blind. On June 25, 1940, a new agreement was also executed with the Crippled Children Section of the District Health Department.

A total of 1,100 cases were on the rolls of the District Service during the year. Of this number, 560 were new applicants and 540 were carried over from the preceding year. A total of 382 cases were closed during the year (163 as rehabilitated, 15 as nonrehabilitated, and 204 as not accepted for service), and 718, including 51 reported cases, were carried over into the next fiscal year.

The 163 rehabilitated cases had gross earnings of $255 per week at time of contact. After rehabilitation their gross earnings are $3,375.75 per week—an increase of $3,120.75 per week, or $162,279 per year.

The District Service spent approximately $50,000, its total appropriation for the year, or about $306.75 per rehabilitated case.

As of June 30, 1940, there were 22 vending stands in operation employing 23 licensed blind operators and 19 assistants. Nine stands were opened during the year. The gross business of the stands for the last 4-week period in June 1940 was $19,036.17 and the net income to operators $2,628.24—an average of $114.27 per operator per 4-week period.



Chapter IV

C. C. C. Camp Educational Activities

THE CIVILIAN Conservation Corps exists for the purpose of preparing men for employment and citizenship through training on actual work projects or through training related to these projects and through other necessary instruction. The basic law under which the Civilian Conservation Corps now operates states "that there is hereby established the Civilian Conservation Corps, * * * for the purpose of providing employment, as well as vocational training, for youthful citizens of the United States who are unemployed and in need of employment * * * through the performance of useful work in connection with the conservation and development of the natural resources of the country."

The educational program of the camps is carried on under the administrative supervision of The Adjutant General of the Army. The United States Commissioner of Education functions in an advisory capacity to The Adjutant General in presenting to the War Department professional plans and policies for the program. The Commissioner of Education is assisted in the formulation of such plans and policies by an Advisory Committee composed of a representative of the Director of the Civilian Conservation Corps and of each of the Departments of Agriculture, Interior, and War. Headed by a Director, the office of C. C. C. Camp Education functions as a Division of the United States Office of Education and it is in this Division that the technical details of the program are handled.

The professional phases of the program in the field are supervised by a Corps area educational adviser at each of the nine Army Corps area headquarters, and District educational advisers at each of the 44 district headquarters.

The professional phases of the program in the camps are carried on by a camp educational adviser in each of the 1,500 camps, while the general planning of the camp programs is the duty of the camp committee on education which is composed of the camp commander, the camp project superintendent, and the camp educational adviser with the camp commander as chairman since the actual administration of the program is his ultimate responsibility.

Guidance the Basis of Program

The educational program in the Civilian Conservation Corps is guidance centered, endeavor being made to provide a specific training program for the individual enrollee, based on his interests, needs, and abilities. The guidance problems faced by the camp committee on education during the year 1939–40 are illustrated by the following tables which show the previous schooling and the previous employment of the 284,454 junior enrollees who were in the Corps during the year.

The average age of C. C. C. enrollees is now approximately 18, with the greatest incidence of enrollment in the ages 17 and 18. It will thus be observed that the trend of enrollee characteristics is toward a lower age grouping, more formal education, and less and less work experience in formal employment.

The problem of the camp committees on education thus became during the year more pointedly one of providing initial occupational and vocational training and work experience for the enrollees of the Corps rather than one of retraining and replacement in employment.

TABLE I.—*Previous schooling of junior enrollees selected during year*

Selection period	Total number selected	No schooling	Elementary	High school	College
1	2	3	4	5	6
July 1939	63,386	295	27,803	34,776	512
October 1939	90,496	363	49,654	39,880	599
January 1940	64,218	377	33,252	30,274	315
April 1940	66,354	332	36,232	29,393	397
Total	284,454	1,367	146,941	134,323	1,823

TABLE II.—*Length of paid employment prior to joining C. C. C.*

Selection period	Total number selected	Never employed	Employed 4 months or less	Employed more than 4 months
1	2	3	4	5
July 1939	63,386	[1]41,455	[1] 8,811	[1] 13,120
October 1939	90,496	58,523	9,570	22,403
January 1940	64,218	40,766	11,919	11,533
April 1940	66,354	45,236	9,191	11,927
Total	284,454	185,980	39,491	58,983

[1] Estimated.

The counseling phase of the camp guidance program has been actively expanded during the year. In many instances testing programs have been carried out for the purpose of ascertaining more accurately the interests and aptitudes of enrollees. The following table indicates in comparison the number of counseling interviews held and the number of enrollees counseled during the years 1937–38, 1938–39, and 1939–40, respectively.

TABLE III.—*Counseling and guidance interviews*

	1937–38	1938–39	1939–40
Counseling interviews	1,462,502	1,530,673	1,647,444
Enrollees counseled	1,203,973	1,240,861	1,325,819

Although great care has been given to the assignment of enrollees to the proper work jobs periodic evaluation continued to be made by the camp committee of the progress of each individual enrollee, by

means of counseling interviews, supervisor's ratings, diagnostic tests, and the like. When it is found that an enrollee is not making satisfactory progress, he may be shifted to other duties, or even be recommended for transfer to another camp. Throughout the period of enrollment every effort is made to place the enrollee. This is done by registering him with public and private employment agencies, by placing him in direct contact with employers, and in other ways. Classes in "How to get a job" have been offered, and other efforts made to prepare the enrollee to make the most favorable approach to the task of securing employment.

The following table shows the number of enrollees discharged monthly during the year to accept employment as compared to the previous year:

TABLE IV.—*Discharges to accept employment*

Year	July	August	September	October	November	December
1	2	3	4	5	6	7
1939	3,017	3,510	4,368	3,949	3,728	2,633
1938	2,189	2,870	2,803	2,160	2,464	1,837
	January	February	March	April	May	June
	8	9	10	11	12	13
1940	2,329	2,413	3,190	3,164	4,359	4,844
1939	1,739	1,891	3,024	2,456	3,632	3,943

The Camp Training Program

In the planning of training for enrollees who have been assigned to respective camp tasks, committees on education may emphasize various areas of instruction. The first area, of course, is that of training on the job. During the year the effectiveness of instruction on the job has been improved and the number of those receiving such training has increased. Table V indicates attendance in training on the job for the year 1939–40 in comparison with the year 1938–39.

While on the work projects there are more than 50 jobs for which men may be trained, the average camp work project presents only from 8 to 11 of these jobs. These include such work as brush dam construction, forest control activities, road and bridge construction, tractor and truck operation, telephone and power line construction, rock masonry, surveying, etc. These camp jobs prepare the enrollee in some degree for more than 180 jobs in outside employment.

TABLE V.—*Participation in job training activities*

	July	August	September	October	November	December
1	2	3	4	5	6	7
1938						
Average monthly strength	267,465	283,255	260,973	283,818	285,751	267,202
Participation	162,187	169,791	163,392	169,654	177,326	169,559
1939						
Average monthly strength	280,670	280,124	247,547	280,303	282,621	257,182
Participation	187,837	188,015	173,962	188,151	192,772	180,548

	January	February	March	April	May	June
	8	9	10	11	12	13
1939						
Average monthly strength	287,406	288,334	251,175	277,585	277,456	252,443
Participation	186,820	190,803	182,804	192,338	201,264	181,076
1940						
Average monthly strength	285,135	287,535	256,766	264,032	261,479	231,579
Participation	196,947	202,883	201,479	190,598	187,339	172,007

Camp committees have made every effort to plan occupational and vocational training for those enrollees who require it. Such occupational and vocational training is planned to bridge the gap between the upper limits of training possible on the job and the minimum beginning qualifications demanded by outside employers. A recent survey of vocational offerings in the camps indicates that the most important subjects taught were:

1. Commercial:
   (*a*) Bookkeeping.
   (*b*) Business mathematics.
   (*c*) Business management.
   (*d*) Typing.
   (*e*) Office practice.
   (*f*) Shorthand.
2. Electrical:
   (*a*) Electricity.
   (*b*) Housewiring.
   (*c*) Radio service.
3. Building trades and construction:
   (*a*) Carpentry.
   (*b*) Masonry.
   (*c*) Cabinet making.
4. Natural resources:
   (*a*) Agriculture.
   (*b*) Soil conservation.
   (*c*) Forestry.
5. Mechanics:
   (*a*) Auto mechanics.
   (*b*) Blacksmithing.
   (*c*) Welding.
6. Distributive service:
   (*a*) Retail merchandising.
7. Professional:
   (*a*) Surveying.
   (*b*) Drafting.

Table VI presents comparative data concerning occupational and vocational training offered in the camps during the years 1939–40 and 1938–39, respectively.

TABLE VI.—*Participation in vocational activities*

	July	August	September	October	November	December
1	2	3	4	5	6	7
1938						
Individuals attending	109, 681	113, 346	111, 329	124, 144	128, 195	123, 827
Groups	11, 251	11, 625	11, 876	12, 468	13, 028	12, 936
Man-hours' instruction	737, 466	875, 582	788, 651	902, 321	978, 058	840, 046
1939						
Individuals attending	128, 285	129, 511	120, 119	136, 711	143, 494	136, 208
Groups	12, 567	12, 710	12, 635	13, 456	14, 216	14, 110
Man-hours' instruction	891, 507	1, 017, 317	888, 938	973, 525	1, 101, 864	914, 198
	January	February	March	April	May	June
	8	9	10	11	12	13
1939						
Individuals attending	135, 622	139, 388	131, 737	139, 321	141, 030	130, 980
Groups	13, 728	14, 031	13, 795	13, 542	14, 019	13, 282
Man-hours' instruction	1, 005, 902	1, 060, 056	1, 061, 818	968, 967	1, 124, 350	1, 014, 400
1940						
Individuals attending	148, 999	153, 332	148, 626	143, 761	141, 792	128, 369
Groups	14, 597	15, 263	15, 077	14, 716	14, 763	13, 789
Man-hours' instruction	1, 090, 042	1, 200, 567	1, 159, 125	1, 131, 363	1, 184, 206	1, 021, 035

While the objective of the vocational- and job-training program was to increase the employability of the enrollee through the imparting of trade and occupational skills, the objective of the academic training program was to provide him with a background of general knowledge which would enable him to appreciate more fully his citizenship and his community life. While the need and importance of vocational training was greatly evidenced, the need for an academic program designed to remove illiteracy, remove common-school deficiencies, and to give the enrollee on a higher educational level a wider cultural foundation was not overlooked.

In order to establish an effective academic training program, the first step was to analyze the educational level of enrollees to ascertain the range of subjects to be offered. Table VII indicates the percentage of men on each educational level in the average camp during 4 selected months of the year.

Thirty-seven percent of the enrolled men in the C. C. C. are studying academic subjects. The range of these subjects extends from reading and writing for the illiterate or near illiterate to the advanced subjects on college level. Table VIII illustrates the participation in academic training during an average month of the year.

TABLE VII.—*Educational level of enrollees expressed in percentages*

Educational level of enrollees	1939		1940	
	July	November	February	June
1	2	3	4	5
Illiterate	3.01	3.42	3.46	3.54
Elementary level	32.54	32.01	32.19	33.09
High-school level	50.22	50.00	50.28	49.91
College level	14.11	14.47	13.97	13.38
College graduates	.12	.10	.10	.08

TABLE VIII.—*Enrollee participation in academic training*

Total number studying academic subjects	102, 706
Number on illiteracy level	8, 685
Number attending literacy courses	8, 331
Number on elementary level	87, 689
Number attending elementary courses	45, 983
Number on high-school level	135, 974
Number attending high-school courses	49, 706
Number on college level	38, 738
Number attending college courses	1, 728

Approximately 35 percent of the enrollees in the Corps had not completed the work of the elementary grades. A program of remedial elementary work has been provided for this group, leading to the granting of eighth-grade diplomas to a large number of men. In order to meet the needs of a large percentage of those needing further elementary and related training there was evolved for use in the camps a functional elementary program. This program has been built around a series of six workbooks in language usage, the first three of which have been published and are now in general use in the camps, and a series of six workbooks in elementary arithmetic. The language usage program aims to integrate the teaching of reading, both oral and silent, penmanship, spelling, vocabulary, grammar, and through the use of graded supplemental readings, social studies. Grammar is not taught as such but is introduced in usage. Camp life is the integrating interest factor.

Informal activities round out the program in the camp. The enrollee, with his employability increased by participation in the vocational training program, his cultural background enlarged by the studying of academic subjects, turns to informal activities as a means of self-expression in arts and crafts, music, and dramatics.

Table IX indicates the participation in informal activities during 4 representative months of the year:

TABLE IX.—*Enrollee participation in informal activities*

	1939		1940	
	July	November	February	June
Average enrolled strength	280,670	282,621	287,535	231,579
Number participating in informal activities	38,505	44,002	46,070	34,918
Percentage participation	13.3	15.5	16.0	15.0
Number in—				
Arts and crafts	23,167	25,992	27,977	23,275
Music	12,598	16,114	15,553	11,870
Dramatics	3,684	2,857	3,736	2,388

The Instruction Program

In augmenting the program of training in the camp, nearby schools cooperated in giving instruction and training beyond the capacity of the camp personnel and facilities. During an average month 283 schools and colleges adjacent to camps offered classroom instruction to 7,889 enrollees. Attendance in nearby schools ranged from 1,897 in July 1939 to 11,639 enrollees in March of 1940. In July there were 73 schools offering such instruction and in March 1940, there were 406 schools adjacent to camps offering classroom instruction.

Table X indicates the number of schools cooperating and the number of students attending per month during the year.

TABLE X.—*Cooperating schools*

	July	August	September	October	November	December
1	2	3	4	5	6	7
1939						
Number of schools	73	79	132	263	320	351
Attendance	1,893	2,155	3,134	7,317	9,942	10,206
	January	February	March	April	May	June
	8	9	10	11	12	13
1940						
Number of schools	370	398	406	363	360	292
Attendance	10,339	11,543	11,639	9,709	9,408	7,314

When the limitations of the camp program and nearby schools preclude training in certain subjects particularly desired by enrollees, the use of correspondence extension has bridged this gap. During an average month of the year 15,979 enrollees were taking correspondence courses.

Table XI shows the number of enrollees taking correspondence courses during the year as compared to the previous year:

TABLE XI.—*Number of enrollees taking correspondence courses*

Year	July	August	September	October	November	December
1	2	3	4	5	6	7
1940	18,169	18,219	15,261	15,968	16,898	14,928
1939	15,996	16,726	16,890	17,316	19,214	17,537

Year	January	February	March	April	May	June
	8	9	10	11	12	13
1940	16,043	17,349	17,210	14,425	14,901	12,384
1939	18,460	17,595	17,609	18,078	18,854	18,094

To improve the quality of instructional materials and to provide camp instructors with materials particularly designed to utilize the facilities of the camp, a project for the improvement of instructional materials was carried on during the year in the Office of C. C. C. Camp Education. As an outgrowth of this effort the following publications were prepared during the year:

Language usage series, Books I, II, and III.
Vocational series outlines:
(*a*) Blacksmithing, Unit I, "Hand Forging."
(*b*) Masonry, Unit I, "Elementary Masonry."
(*c*) Bricklaying, Unit I, "Elementary Stonemasonry."
Curriculum series, No. 1, "A Plan for Extending the Carry-over Values From C. C. C. Training to Standard Outside Occupations."
Job Dictionary of C. C. C. Projects, Jobs and Related Occupations.

C. C. C. educational officials have been quick to realize the value of the motion picture and film strip as a teaching aid. A survey of visual equipment made in the fall of 1939 indicated that there were 1,053 16-mm. motion-picture projectors and 1,108 film-strip projectors in the camps.

Table XII indicates the projection equipment available in each Corps area in November 1939:

TABLE XII.—*Projection equipment available in corps areas*

Type of projector	Projectors by corps area									Total
	I	II	III	IV	V	VI	VII	VIII	IX	
1	2	3	4	5	6	7	8	9	10	11
Number of camps	66	80	128	236	109	141	202	216	322	1,500
16-mm.—silent and sound	68	31	104	107	135	65	198	186	159	1,053
35-mm.—silent and sound	1	2	0	0	0	4	3	3	34	47
Opaque	0	4	12	12	41	123	17	25	48	282
Film strip	63	80	128	199	109	119	174	66	170	1,108

A great number of films and strips have been added to Corps area and district libraries during the past year, and one Corps area has experimented in the assembling and distribution of sets of pictures which may be used in opaque projectors and integrated with specific courses. In a typical Corps area film library there are approximately 150 educational films which are circulated through the Corps on circuits of 10 or 15 camps.

The following film strips, prepared in the office of C. C. C. Camp Education, were distributed to the field during the year: Electrical Goods Industry, Shipping Industry, and Meat Packing Industry. Each film strip was accompanied by a Manual for Instructors.

During the year more than 73,000 films were shown to an attendance of more than 6,000,000 enrollees.

Personnel of the Program

The number of C. C. C. companies, and consequently the number of advisers, remained stable during the year. With the number of camps ranging around 1,500 for the entire year, the number of camp advisers on duty ranged from 1,496 in July of 1939 to a low of 1,435 in June 1940.

The teaching staff in the C. C. C. educational program is drawn largely from the personnel of each camp. For example, in January 1940 there were 26,898 persons teaching in the camps. Of this number 1,464 were educational advisers, 1,359 were the assistants to the educational advisers, 3,141 were Army personnel, 11,498 were technical service personnel, 3,884 were enrollees, 1,691 were W. P. A. teachers, 97 were N. Y. A. personnel, 1,456 were regular school teachers, and 824 were citizens from nearby communities who volunteered their services. The number of persons offering instruction in the camps at various intervals during the fiscal year is given in table XIII.

TABLE XIII.—*Number of persons offering instruction*

Personnel	1939		1940	
	July	November	February	June
1	2	3	4	5
Camp educational advisers	1,438	1,457	1,464	1,390
Assistant camp educational advisers	1,328	1,324	1,370	1,332
Military staff	2,840	2,997	3,177	3,023
Technical staff	10,653	11,061	11,498	11,041
Enrollees	5,462	5,884	5,937	5,519
W. P. A. teachers	1,452	1,463	1,671	1,454
N. Y. A. teachers	31	90	97	44
Regular teachers	292	1,545	1,456	562
Others	623	792	846	604
Total	24,119	26,613	27,516	24,969

Special Phases

In order to meet the needs of the enrollees who desire to return to school or wish to secure equivalency certificates either as a basis for further study or to meet the requirements for a beginning worker in business or industry, or who merely wish school credit for work done in camp, special arrangements have been made with State departments of education and with local schools. Forty-one States and the District of Columbia have worked out regulations concerning the granting of credit for class work done in the camps and for the granting of equivalency certificates. These regulations generally provide for the administration of the cooperative plan, prescribed minimum clock hours, subject-matter materials, and standards of teacher certification, and the like. During the year approximately 5,000 C. C. C. enrollees were granted eighth-grade certificates and approximately 1,000 high-school diplomas.

In order that the problems of the veteran enrollee be more fully appreciated and considered in the office of C. C. C. camp education, a staff officer charged with the responsibility of bettering the veteran program was added to the staff of the Director. During an average month there were 26,000 war veterans in the 136 camps for veterans. The problem of the veteran enrollee differs considerably from that of the junior enrollee.

Special Corps area and district conferences have been held in which veteran education has been the keynote. During the year over 40 conferences were held on the topic of veteran education. These conferences, attended by C. C. C. educational officials and representatives of the various veteran organizations, have done much to enhance the value of the veteran program. The cooperation of the veteran organizations has greatly assisted in the placing of many veterans in

private employment. During the year 3,287 veteran enrollees were discharged to accept employment.

Some Trends

In general, the C. C. C. educational program has tended to level off during the fiscal year 1940 with slight change over the preceding fiscal year. The activities in which participation increased were job training, vocational activities, and miscellaneous activities. Slight decreases in participation were noted in informal activities and general participation in all activities. The percentage of the aggregate total of participation in all activities was 88.3, as compared to 91.3 in the fiscal year 1939. No variations in these activities exceeded 3 percent.

Participation in academic training increased only 4 percent from 1937 to 1940. It is significant to note that only one-half of the enrollees below the eighth-grade level have been participating in academic training.

During an average month of the fiscal year 1940, 132,388 men of an enrolled strength of 271,045 were receiving vocational training. The percentage of participation in vocational training has shown a steady increase. During the fiscal year 1940 the percentage of men participating in job training was 68.2, as compared with 65.4 a year ago and 49.6 in 1937.

In a normal month during the fiscal year 1940, 36,324 enrollees were receiving foreman, teacher, and leader training. This figure represents 13.3 percent of the average monthly enrolled strength of 271,045. During the fiscal year 1939 the percentage participation was 13.2; in 1938 it was 12.8; and in 1937 it was 14.5, the high for the 4 fiscal years.

A favorable trend is indicated in counseling and guidance activities. In 1940 the number of personal interviews was 1,647,444, as compared to 1,530,673 in 1939, an increase of more than 100,000 interviews. The number of enrollees interviewed also showed a corresponding increase. In 1940 the figure was 1,325,819, and in 1939 it was 1,240,861. Discharges to accept employment increased from 31,008 in 1939 to 41,504 in 1940, an increase of 10,496.

The increase in film showings was slight. In 1940 a total of 79,942 films was shown, as compared with 74,435 in 1939. Attendance, however, was increased by 286,171.

The percentage of enrollees reading and the number of books read per month has consistently dropped since the fiscal year 1937. This is due to the fact that no new traveling libraries have been provided since 1937. The figures below indicate this trend:

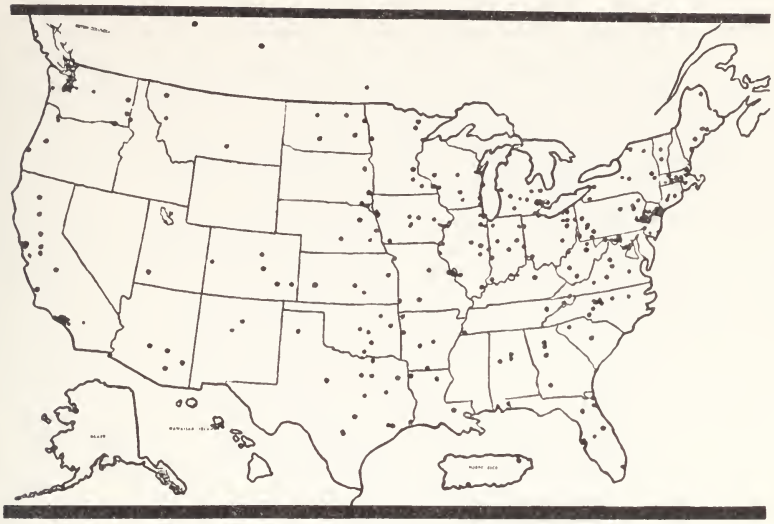
TABLE XIV.—*Reading by C. C. C. enrollees*

	1937	1938	1939	1940
1	2	3	4	5
Percentage of enrollees reading	45.8	42.3	39.5	36.5
Average number of books read per month	306,889	218,399	192,324	164,381

The number of enrollees attending nearby schools dropped from a monthly average of 6,664 in 1939 to 5,872 in 1940.

The number of enrollees taking correspondence courses dropped from a monthly average of 17,694 in 1939 to 15,979 in 1940.

STATIONS WHICH HAVE CARRIED EXCHANGE PROGRAMS



Chapter V

Educational Radio

THE YEAR marked a new record in the United States Office of Education's activities to promote wider uses of radio in the service of education. These activities may be grouped under three main headings: (1) Service to stimulate local efforts for education by radio; (2) cooperative efforts on the national level; and (3) representation of education's interests in radio before the Federal Communications Commission.

Service To Stimulate Local Efforts

Congress, in drafting the basic legislation for radio evidently envisioned local stations serving local needs and interests much after the fashion of local newspapers. This would include service to local educational needs. But local educational programming has been retarded, due mostly to difficulties of learning new techniques and high costs of radio production. To stimulate development of American radio in this area, the Educational Radio Script Exchange was organized by the Office of Education in 1936. Its purpose is to meet the need of schools, colleges, and radio stations for acceptable educational scripts. The Exchange has expanded to meet other related needs, including advice on production, a glossary of radio terms, a handbook of sound effects, references to source books on radio, and transcriptions. Within 4 years the Exchange has become a reservoir of outstanding educational script materials. The measure of the

service of the Script Exchange may be found in the fact that in 1936 there were less than 300 school and college groups reported to be producing over local stations. During the fiscal year 1939–40 more than 1,200 producing groups are known to have used the services of the Exchange, an increase of more than 400 percent. Scripts are available on loan for 3-week periods.

One of the new aids to learning which gives promise of great usefulness in our schools is the transcription. Music records have long been used, but the 16-inch 33⅓ r. p. m. transcription of more general educational programs is a newcomer to American education. To promote the wider use of this new tool and to preserve the values of important network and local programs, the Script Exchange has been expanded to include educational transcriptions. The first series to be added was Americans All—Immigrants All, 24 transcriptions of half-hour programs presented on the air with the cooperation of the Columbia Broadcasting System and the Service Bureau for Intercultural Education. These transcriptions, presenting the contributions of people of many nations and races to the building of America, have been made available together with a 120-page booklet and a teachers' manual suggesting methods of using the materials. At the close of the fiscal year, transcriptions for 1,576 programs had been sold. During the year several other transcriptions were added.

Copies of publications distributed by the Script Exchange totaled as follows:

	For the 1940 fiscal year	*Grand total (1936–40)*
Radio manuals	2, 875	15, 085
Radio glossaries	2, 540	13, 705
Handbook of sound effects	2, 425	6, 825
Radio bibliographies	1, 855	4, 125
College radio courses	1, 525	1, 925
Scripts circulated	34, 060	244, 487

Each year the exchange serves approximately 12,000 educational and civic organizations and radio stations. This year, follow-up reports from 4,557 organizations were analyzed. These reports indicated the following:

Of the 4,557 organizations reporting, approximately 28 percent ordered scripts for broadcasting on the air.

Two hundred and eighty-eight stations requested series of scripts and 209 of these stations ordered scripts for broadcasting on the air.

One hundred and fifty-seven groups which are equipped to make an intensive study of the various aspects of radio broadcasting are active users of the scripts.

One thousand three hundred and eighty-seven organizations reported the use of the scripts in mock broadcasts, 546 of them utilizing sound systems for their productions. The mock broadcast is the practice ground for hundreds of local groups which are being taught radio broadcasting techniques.

Of the 4,557 organizations reporting, 2,169 were high schools and academies. High schools are the largest users of the Script Exchange service.

The two following tables show the distribution by States of the reports from organizations which have been served by the Exchange, and an analysis of the uses of the Script Exchange materials.

State	Number of organizations reporting	State	Number of organizations reporting	State	Number of organizations reporting
New York	538	Oklahoma	65	South Dakota	32
California	400	North Carolina	61	Maine	30
Pennsylvania	315	Florida	57	Vermont	27
Illinois	260	Maryland	52	Idaho	26
Michigan	260	Nebraska	52	Rhode Island	26
Ohio	257	Alabama	49	Arizona	23
Texas	176	Oregon	49	Mississippi	22
Massachusetts	146	Kentucky	47	Utah	16
Wisconsin	136	Louisiana	43	New Hampshire	15
Minnesota	133	Montana	42	New Mexico	15
New Jersey	130	Tennessee	42	Wyoming	10
Indiana	118	North Dakota	39	Delaware	7
Missouri	115	District of Columbia	38	Nevada	5
Iowa	102	West Virginia	38	United States Territories	23
Washington	92	Georgia	37	Canada	44
Connecticut	79	Arkansas	34	Other foreign countries	15
Kansas	78	Colorado	34		
Virginia	73	South Carolina	34		

An analysis of 4,557 [1] reports from organizations which have received services of the Script Exchange

Organization	Number of organizations reporting	Uses of the Script Exchange materials as reported by organizations								
		Production on the air [3]	Production over sound systems	Mock broadcasts (not over sound systems)	Radio workshops [4]	Courses in radio techniques	Courses in "education by radio"	Miscellaneous educational uses [5]	General reference	No use indicated
1	2	3	4	5	6	7	8	9	10	11
Colleges and universities	540	218	37	39	31	61	22	67	64	100
High schools and academies	2,169	430	407	624	87	96	1	499	103	394
Elementary schools	300	24	44	73	9	5		84	12	71
Boards of education	294	87	28	32	7	9		35	21	99
Radio stations (educational)	38	30	2		4	2			1	2
Radio stations (commercial)	288	209	3		4			1	11	64
Private radio drama schools	36	20	5	4		9		3	2	3
Little theaters [2]	33	24	1	2	1	3				2
Youth groups	165	62	7	22	3	3		10	26	37
Other civic and educational groups	159	76	8	19	7	9	2	11	25	28
Public libraries	44	11		1					34	
Miscellaneous organizations and individuals	491	66	4	25	4	5	1	43	87	262
Total	4,557	1,257	546	841	157	202	26	753	386	1,062

[1] This list includes only those organizations which have received at least 1 complete series of scripts. Does not include thousands of additional groups which have received individual scripts, production aids, and general information.

[2] Also includes other amateur dramatic groups not affiliated with an educational institution or a radio station.

[3] Based on follow-up reports indicating programs have been broadcast and on reports of definite plans with broadcasters to produce programs.

[4] Radio workshops include radio guilds and radio clubs.

[5] Miscellaneous educational uses include all instructional uses not covered by the other headings, such as aids to teaching curricular subjects.

During the year a new Script Exchange catalog listing 513 scripts was issued, and 2,453 copies were purchased (10 cents per copy). Since the issuance of this catalog, more than 230 scripts have been edited and added to the Script Exchange.

Information and Idea Exchange

Letters received by the Radio Division asking all kinds of questions about education by radio averaged more than 1,000 per month. The United States Office of Education is, in fact, the major center of national information about this field. To answer the many inquiries, the Educational Radio Script Exchange has established an Information and Idea Section. Here important studies, pamphlets, bibliographies, articles, clippings, etc., are bound in folders and made available on loan. This has proved an economical and efficient way of supplying information in this field.

The Radio Division again prepared a catalog of courses in radio offered by colleges and universities. The number of institutions offering such courses rose from 310 to 348. This list was mimeographed and made available to hundreds of correspondents who sought information on centers of training in this field.

Aid to Local Centers

Under the terms of the grant of emergency funds, the United States Office of Education was permitted to allocate funds to school systems and college centers for demonstrations or studies for the promotion of education by radio. These "experiment stations" in radio have vastly contributed to advancement in this field of education. Numerous letters from these institutions declare that the allocations, while small, helped tremendously to insure the success of experiments or investigations. Scripts and research reports from these centers have been deposited with the Radio Division and are being made available for use nationally through the Script Exchange.

Cooperative Efforts on the National Level

Although entertainment program planners supported by advertising revenue have found practical methods and techniques of serving the public, successful use of radio for education has not increased so swiftly. Much experimentation and demonstration remain to be done. The National Broadcasting Co. and the Columbia Broadcasting System have both invited the cooperation of the Office of Education in finding solutions for this difficult problem. Many government agencies and national civic and educational organizations have also joined with the Office of Education in cooperative attacks on this problem. During the year, the Office continued in cooperation

with the Smithsonian Institution and the National Broadcasting Co. one of its most successful educational programs—The World Is Yours. This series brings to the whole nation a knowledge of the treasures of the Smithsonian Institution. During the year, a 16-page weekly magazine was launched to add the message of print to radio in this educational effort. This World Is Yours magazine, printed in cooperation with the Columbia University Press, was offered to listeners to help them know more about the subjects introduced on the air each week. Purchases by listeners totaled 109,553 copies. This is believed to be the first time that a listener aid of this type has been made available in connection with an educational radio program. It is an experiment which may have wide influence in the future.

The Radio Division continued the Democracy in Action series in cooperation with the Columbia Broadcasting System to give citizens impartial information about the work of our Government. Short units were presented on foreign trade, public health service, operations of social security, the census, and housing. Each program showed the cooperation of private, local, and national groups.

In cooperation with the National Broadcasting Co., the Office presented a unique series showing contributions of American women to various phases of American life. This series was called Gallant American Women. Two special programs were presented in cooperation with the National Broadcasting Co.: This New World of Peace, in association with the Pan American Union on the fiftieth anniversary of the founding of that institution; and Book Week. Thirteen half-hour programs on vocational guidance were produced and given a try-out on the University of Illinois station WILL. Scripts of all these programs have been added to the Educational Radio Script Exchange.

Awards

Demonstration programs created by the United States Office of Education received additional awards during the current year:

October 1939.—The American Legion Auxiliary gave its fourth annual radio award to Americans All—Immigrants All, calling it "A program which best inculcates the characteristics of the American way of life and Government."

January 1940.—The National Association of Regulars, an organization of Army veterans, voted The World Is Yours, the best educational radio program of 1939.

February 1940.—Leading national radio audience research service announced that The World Is Yours radio series received the highest rating of all sustaining programs on the air in a recent survey analysis.

April 1940.—The National Federation of Press Women, Inc., awarded a radio certificate of merit to the Gallant American Women radio series,

thus awarding this series first honors for producing a "Radio program of intrinsic excellence and real public service."

Representation of Education's Interests

Early in the year, the Federal Communications Commission announced that hearings would be held to consider the expansion of allocations for frequency modulation stations. This announcement had direct bearing on the operation of educational stations. In 1938, at the suggestion of the Commissioner of Education, the Federal Communications Commission set aside a band of the ultra-high frequencies, 41–42 megacycles, for the exclusive use of educational institutions. This band lies in the immediate vicinity of the part of the spectrum best adapted to frequency modulation. Hence the interests of education were bound to be affected by the hearings and subsequent action of the Federal Communications Commission. The Commissioner of Education, therefore, reported the situation to superintendents of schools and presidents of colleges and asked their advice on the position he should take at the hearings. About 50 percent of the educators responded and they were practically unanimous in urging the retention of the band for future use by educational institutions. The Commissioner then called a meeting of educational leaders in the Office of Education to consider the situation.

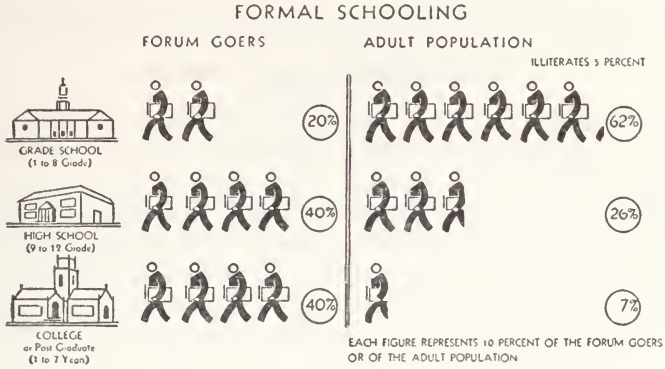
A 75-page brief was prepared and submitted to the Federal Communications Commission asking for the retention of the education band, but indicating that assignment of this band for frequency modulation by educational institutions would be acceptable.

Following the deliberations, the Commission announced the assignment of the band of 42–43 megacycles exclusively for educational use, using the frequency modulation method of transmission. The Commission also set aside the bands from 43–50 for commercial stations using frequency modulation. This decision promises a vigorous development of frequency modulation. The band immediately becomes much more useful to education than under previous conditions. Stations operated by New York City and Cleveland school systems have signified their intention of shifting to frequency modulation. The San Francisco School Board is establishing a frequency modulation station and there is every indication that many other school systems and colleges will swiftly follow suit in the development of this part of the radio spectrum assigned exclusively for educational service.

Conclusion

Many studies in the field of education by radio show the increasing influence of this new medium of communication in the lives of our citizens and our children. Impressions made by radio programs on the public mind are of great importance. Hence it seems vital that

this important new power in civilization, not yet 20 years old, should be harnessed for the widest possible application to education. But the efforts of the United States Office of Education to promote this development were curtailed at the close of the fiscal year, when a provision in the emergency relief bill limited the use of funds for radio broadcasting to $100,000. Requests to the Work Projects Administration for allocation of $60,000 from this sum for the continuation of the efforts of the Office in promoting education by radio were not granted. In consequence, many of the activities described above were suspended on June 30, 1940. It seems of vital importance to the development of American education that ways be found to give practical aid to the further promotion of education by radio.



Chapter VI

Federal Forum Project

THE FEDERAL forum project during the fiscal year operated in 13 States in cooperation with State universities or State departments of education and in 8 additional States in cooperation with local school authorities.

In the 13 States the program was carried out largely through the adult education staffs of a State department of education or of the extension division of a university with the assistance of a State forum counselor made available by the United States Office of Education. In the 8 States the leadership of the program was assumed by existing personnel and the assistance of W. P. A. workers made available through funds of the Federal forum project. The United States Office of Education functioned as a clearing house for the circulation of ideas and plans.

Several conferences of the forum counselors were held in Chicago and on the West coast. In these conferences the plans and problems were discussed and the experience of the Office of Education was made available.

The program was operated within a budget of approximately $215,000. Of this amount $165,000 was spent in giving employment to W. P. A. workers, largely in the clerical classifications.

The State counseling program was sponsored by the following State organizations in cooperation with the United States Office of Education: California State Department of Education, University of Georgia, University of Illinois, University of Indiana, University of Michigan, University of Minnesota, Missouri State Department of Education, New Jersey State Department of Education, New York State Council of School Superintendents, University of North Carolina, Ohio State Department of Education, Oregon State Department of Education, University of Wisconsin, and San Antonio, Tex., and vicinity.

Leadership Training Courses

Many States with forum counseling service inaugurated forum leadership training courses similar to the workshop course in forum leadership conducted in California during the summer of 1939. As an example, during the year 12 leadership training institutes were held in Wisconsin; a total of 52 meetings, with an approximate average attendance of 80, was reported. In addition, a course in adult education including units of work on leadership and discussion methods was approved by the course committee of the University of Wisconsin Faculty.

Adult Education Exhibit

Through the cooperation of the United States Office of Education three workers were assigned to the adult education booth of the State department of education exhibit at the Golden Gate Exposition. Twenty-four well-lighted panels showed graphically the various aspects of the adult education program in the California schools.

Half Million Attendance

During the past year, W. P. A. workers were made available by the United States Office of Education to 31 locally sponsored public forum programs operated with local leadership. Many of these communities participated in the forum demonstration programs originally sponsored by the United States Office of Education in cooperation with the local agency of public education. The forums continued with volunteer or paid leadership. However, staffs composed of stenographers, clerks, etc., selected from the local W. P. A. rolls, have been financed by the Federal forum project.

Other public-school systems, following the techniques outlined in the Forum Planning Handbook of the United States Office of Education, have established local forum programs and the same type of financial aid has been made by this Office.

The great numbers of people involved in these various programs offer testimony to the fact that Americans are evidently eager for programs of adult civic education. Many of the meetings were led by volunteers.

During the year the United States Office of Education distributed more than 30,000 pieces of literature dealing with the organization and operation of public forums. Additional thousands of pamphlets were purchased directly from the United States Government Printing Office. The war situation has resulted in concentrating particular attention on national-defense problems. Scores of educational administrators are calling upon the United States Office of Education for assistance and suggestions in gearing their educational facilities to the increased needs for programs in civic enlightenment.

Chapter VII

Film Service

ON JULY 1, 1939, by Reorganization Plan No. 2, the Film Service was transferred from the National Emergency Council to the Federal Security Agency as follows:

> SECTION 201 (a) *Radio Service and United States Film Service transferred.*—The functions of the Radio Division and the United States Film Service of the National Emergency Council are hereby transferred to the Federal Security Agency and shall be administered in the Office of Education under the direction and supervision of the Federal Security Administrator.

In the message from the President to the Congress recommending the reorganization plan occurs the following statement:

> I propose to transfer to the Federal Security Agency, for administration in the Office of Education, the film and radio functions of the National Emergency Council. These are clearly a part of the educational activities of the Government and should be consolidated with similar activities already carried on in the Office of Education. * * *

At the time of the transfer from the National Emergency Council to the United States Office of Education, the Film Service was operating on grants of emergency funds provided by various Government agencies that were interested in documentary pictures in process and had each contributed a certain portion towards the completion of such pictures. These working funds of necessity not only had to pay the actual cost of the production of the pictures, but carry the administrative and distribution staff of the Film Service as well.

At the time of the transfer on July 1, 1939, production was in process on two documentary films, one a medical maternity film entitled, "The Fight for Life," the other a film on technological unemployment.

Immediate steps were taken to secure additional funds with which to finance the production of these two pictures through to completion and to carry the staff through the fiscal year. Early in July a Federal project including these purposes and to be financed by emergency relief funds was submitted to the Work Projects Administration for approval. This project, however, was not approved.

Working funds were provided by several interested agencies to carry the production of the two unfinished pictures and eventually a special W. P. A. project was approved to take care of the administrative and distribution staff for the balance of the fiscal year. During the early fall months, in preparing the estimates for the regular permanent appropriations to the Office of Education, an increase in appropriations was requested to maintain an organization for the Film Service, covering every activity except production. A certain

portion of this request was approved by the Bureau of the Budget and transmitted to Congress. However, no specific funds for this purpose were appropriated by Congress.

The Emergency Relief Appropriation Act, as it was passed by Congress, contained a definite prohibition against the use of any emergency funds for "the exercise of the functions of the Radio Division or the United States Film Service transferred to the Office of Education of the Federal Security Agency" (sec. 12 (c)). The act also contained the following: "None of the funds made available by this joint resolution shall be used * * * for radio broadcasting in an amount exceeding $100,000 or for the acquisition, rental, or distribution of motion-picture films" (sec. 24).

As a result of this situation, it became necessary to terminate the services of all staff members in the Film Service Division as of June 30, 1940.

During the year the film, "The Fight for Life" was finished and a contract made with the Columbia Pictures Corporation for the commercial distribution of the film to theaters throughout the United States. After the showing of the film throughout the country in theaters, it will then be made available for nonprofit educational uses.

The film on technological unemployment remained unfinished at the close of the fiscal year.

At the present time the United States Office of Education has the functions of the Film Service, transferred to it under the Reorganization Act, but no funds with which to maintain a staff to discharge those functions.

Chapter VIII

Publications and Related Services

DURING the fiscal year 80 new publications of the United States Office of Education came from the press; 67 new manuscripts were completed and sent to the Government Printing Office for publication; 10 issues of the official journal, School Life, were published; and the annual Educational Directory was issued.

School Life

School Life, official journal of the United States Office of Education, was issued monthly from October to July, inclusive, and distributed to libraries, colleges and universities, school administrators, teachers, organizations, and citizens interested in education. There was a noted increase during the year in library subscriptions throughout the country, as the journal is widely used by research workers in all fields of education.

Material published in School Life during the year included: Editorials by the United States Commissioner of Education; reports on research and other activities conducted by the Office; reports on conferences and conventions; information regarding outstanding educational endeavors; vocational summaries; statistical information; forum discussions; C. C. C. education; announcements of new Government publications and aids for teachers; and other subjects.

Annual Directory

The annual Educational Directory was issued in four parts: Part I, State and County School Officers; part II, City School Officers; part III, Colleges and Universities; part IV, Educational Associations and Directories. This directory presents practically complete Nationwide listings in the respective fields covered by the four separate parts. Often the heavy demands for copies exhaust the sales stock of the Superintendent of Documents long before another issue comes from the press.

Master Mailing List

A completely revised master mailing list of lists of approximately 215,000 addresses was completed during the year. These lists cover fields including: Adult education, associations and foundations, C. C. C., comparative education and foreign addresses, elementary-secondary, forums, guidance, higher education, interested individuals, leaders in education, libraries, parent education, principals, special

education, vocational education, etc. Through requests of individuals and organizations, names are constantly being added to these lists.

Total of Requisitions

Indicative of the extent of manuscripts, forms, and other material produced in the Office of Education during the year is the fact that requisitions or orders for printing, multigraphing, mimeographing, and other reproductive processes totaled 2,262. For the previous year this total was 1,920 such requisitions. The manuscripts represented by the requisitions varied from one to several hundred pages each.

Exhibits and News Releases

Exhibits of publications of the Office were presented at practically all of the major educational conventions of national scope and at many regional, State, and local meetings throughout the country. These exhibits helped greatly in further acquainting the teaching profession with the Office's publications. News releases announcing activities of the Office as well as the availability of new bulletins and related information were distributed to the press and extensively used.

United States Office of Education Publications Which Came From the Press During the Fiscal Year 1940

General Education

Accredited Secondary Schools in the United States. (Bulletin, 1939, No. 2.) Margaret J. S. Carr. 179 p. 20 cents.

Prepared every 4 years by the United States Office of Education to assist admissions officers of institutions of higher learning and those who wish to know the names of schools which are on the lists of the several accredited agencies.

Are the One-Teacher Schools Passing? (Pamphlet No. 92.) W. H. Gaumnitz. 17 p. 5 cents.

Shows statistically the present status of the one-teacher schools in the various States and presents data showing the extent to which they have been eliminated and the rate at which such elimination has taken place in recent years.

Bibliography of Research Studies in Education, 1937–38. (Bulletin, 1939, No. 5.) Ruth A. Gray. 400 p. 35 cents.

Lists 3,890 theses and studies reported to the United States Office of Education by 159 institutions of higher learning, including 519 doctors' dissertations, 31,146 masters' theses, and 225 studies reported as faculty research.

Child Development: Infancy Through Adolescence. (Bibliography No. 45.) Mary D. Davis and Ellen C. Lombard. 14 p. Rev. Free.

Clinical Organization for Child Guidance Within the Schools. (Bulletin, 1939, No. 15.) Elise H. Martens. 78 p., illus. 20 cents.

Presents illustrative practices found in some of the States, counties, and cities in which child-guidance work is being carried on. Shows, first, certain organizations' plans, followed by a State-wide or a county-wide basis; then proceeds to the efforts being made in small communities; next, to programs in cities of moderate size; and finally, to a consideration of the opportunities of a large city.

Education in Yugoslavia. (Bulletin, 1939, No. 6.) Severin K. Turosienski. 146 p., illus. 25 cents.

To gather the data for this report the author spent 2 months in Yugoslavia visiting schools, conferring with the Ministry of Education and other official organizations, and acquainting himself generally with educational conditions in the Kingdom. The material should be of general interest to educators in this country as well as of specific help to school officials who deal with student transfers.

Educational Directory, 1940. (Bulletin, 1940, No. 1.) Issued in four parts:

I. State and County School Officers. 48 p. 10 cents.
II. City School Officers. 28 p. 5 cents.
III. Colleges and Universities, Including All Institutions of Higher Education. 86 p. 10 cents.
IV. Educational Associations and Directories. 72 p. 10 cents.

Elementary Education. (Bulletin, 1937, No. 2, vol. I, ch. I.) Bess Goodykoontz. 32 p., illus. 10 cents.

The author has divided this study into three major sections: First, a brief statement of some outstanding characteristics of elementary education today; next, an analysis of some of the major problems which elementary schools face; and last, answers to more than 60 often-asked questions of statistical fact about elementary education.

Elementary Education—What Is It? (Bulletin, 1940, No. 4, pt. I.) Helen K. Mackintosh. 31 p., illus. 10 cents.

The first of four publications planned to give a bird's-eye view of elementary education—its nature and importance, together with the relation to and contribution to the whole process of education.

500 Books for Children. (Bulletin, 1939, No. 11.) Nora E. Beust. 89 p., illus. 15 cents.

A bibliography, the purpose of which is to acquaint adults and children with the wide range of interesting subjects and readable styles of literature which are available for preschool and elementary school children of today.

Forum Planning Handbook. (Bulletin, 1939, No. 17.) J. W. Studebaker and Chester S. Williams. 71 p., illus. 10 cents.

Tells how to organize school-administered forums, and contains study and discussion questions for planning groups of educators and civic leaders.

The Graduate School in American Democracy. (Bulletin, 1939, No. 10.) Isaiah Bowman. 70 p., illus. 15 cents.

"The theme of this study," writes the author of this bulletin who is president of Johns Hopkins University, "is the growth of intellectual power through a combination of discipline and freedom in graduate work."

Handbook and Directory of the United States Office of Education, 1939. 26 p. Free.

Contains brief and concise statements regarding the purposes and services of the United States Office of Education as well as a convenient directory of the professional personnel of the Office.

Higher Educational Institutions in the Scheme of State Government. (Bulletin, 1939, No. 3.) John H. McNeely. 108 p. 15 cents.

One of a series of studies on the relation of the State to higher education to be prepared by the United States Office of Education. This study is concerned with the fundamental status of the governing boards.

Hospital Schools in the United States. (Bulletin, 1938, No. 17.) Clele Lee Matheison. 79 p., illus. 15 cents.

An analysis of data received from 162 hospital schools located in 33 States, Hawaii, and the Philippine Islands, as to their educational activities for children who must spend weeks or months or even years in a hospital or a sanatorium.

Index to School Life, volume 24, October 1938–July 1939. 7 p. Free.

School Life, the official journal of the United States Office of Education, is issued monthly from October through July. Annual subscription rate, $1; single copies, 10 cents.

Know Your Schools.

At the request of the American Association of University Women, the United States Office of Education began the preparation of a series of study outlines under the general heading Know Your Schools, for the use of local branches of that organization and other organizations interested in studying the public-school system. The following study outlines came off the press during the fiscal year:

Know Your Modern Elementary School. (Leaflet No. 52.) Helen K. Mackintosh. 22 p. 5 cents.

Know How Your Schools Are Financed. (Leaflet No. 53.) Timon Covert. 17 p. 5 cents.

Life and Education of Negroes. (Bibliography No. 68.) Ambrose Caliver and Ethel G. Greene. 13 p. Free.

Mental Hygiene at Home and at School. (Bibliography No. 69.) Ellen C. Lombard. 7 p. Free.

Negro High-School Graduates and Nongraduates. (Pamphlet No. 87.) Ambrose Caliver. 19 p. 5 cents.

A discussion of the relation of their occupational status to certain school experiences.

One Dollar or Less—Inexpensive Books for School Libraries. (Pamphlet No. 88.) Edith A. Lathrop. 16 p. 5 cents.

The number and variety of worth-while books selling for $1 or less—some as low as 10 or 15 cents—offer unusual opportunities for schools in which budgets for library books are low. Brief descriptions of examples of publishers' series which contain titles suitable for elementary and junior high school libraries are given.

Opportunities for the Preparation of Teachers in Conservation Education. (Pamphlet No. 90.) Katherine M. Cook and Florence E. Reynolds. 13 p. 5 cents.

Courses concerned with the conservation of our natural resources and designed for teachers in elementary and secondary schools are available in at least 138 institutions of higher learning located in 35 different States. Courses available and the institutions in which they are offered are listed in this pamphlet. Descriptive statements of the content of certain courses selected as representative of the types available are also included.

Opportunities for the Preparation of Teachers in the Use of Visual Aids in Instruction. (Pamphlet No. 89.) Katherine M. Cook and Florence E. Reynolds. 13 p. 5 cents.

Information given in this pamphlet includes the names of the institutions offering differentiated or specialized courses in visual instruction, classified according to States; the location of each within the respective States; the titles of the courses in the use of visual aids in instruction; the departments in which they are offered; data concerning prerequisites and credits earned through successful completion of the course; and brief descriptions of certain representative courses.

Parent-Education Programs in City School Systems. (Bulletin, 1937, No. 2, vol. I, ch. IX.) Ellen C. Lombard. 35 p. 10 cents.

Prepared to answer inquiries of school administrators and others as to what constitutes a parent-education program; how and for whom it functions; what it costs; what it accomplishes; and what superintendents of schools think of parent education as they observe its progress in their own school systems.

Per Pupil Costs in City Schools, 1937–38. (Pamphlet No. 86.) Lulu Mae Comstock. 21 p. 5 cents.

Based on reports from 319 cities. Current expenses of 319 city school systems during the school year 1937–38 have been analyzed in this study and the per pupil cost arrived at, with the average daily attendance in full-time day schools the standard unit of measurement.

Public Education in the Panama Canal Zone. (Bulletin, 1939, No. 8.) Katherine M. Cook. 63 p., illus. 15 cents.

Tells the story of the school system of an American community living in this territory in the Tropics and in the middle of a foreign country, yet maintaining itself as an American community with all its social standards, including education.

Residential Schools for Handicapped Children. (Bulletin, 1939, No. 9.) Elise H. Martens. 103 p., illus. 15 cents.

There are in the United States and its outlying parts some 450 residential schools for handicapped children—blind, deaf, socially maladjusted, and mentally deficient. Practices carried on in some of these schools are described in this bulletin.

Review of Educational Legislation, 1937 and 1938. (Bulletin, 1939, No. 16.) Ward W. Keesecker. 53 p. 10 cents.

Preparation of this bulletin involved a study of approximately 1,500 legislative enactments over a 2-year period, thus making available up-to-date information affecting the respective phases of education.

School Auditorium as a Theater. (Bulletin, 1939, No. 4.) Alice Barrows and Lee Simonson. 51 p., illus. 10 cents.

Deals with the evolution of the school auditorium, and presents recommendations for the planning of the auditorium with particular reference to the stage, so that the auditorium can be used as a theater, concert hall, for forums, for motion pictures, and for radio programs, thus providing facilities needed for both school and after-school activities.

Secondary Education: Principles, History, Development. (Bibliography No. 17.) Martha R. McCabe and Carl A. Jessen. 14 p. Rev. Free.

United States Government Publications on Health, Physical Education, and Recreation. (Bibliography No. 61.) Stella T. Sebern. 6 p. Rev. Free.

Visual Aids in Education: Research Studies. (Bibliography No. 35.) Charles F. Hoban and Martha R. McCabe. 19 p. Free.

Vocational Division

Agricultural Education—Organization and Administration. (Bulletin No. 13.) 50 p. Rev. 10 cents.

Gives information on the organization and administration of vocational education in agriculture under both the Smith-Hughes and George-Deen Acts.

Conference Topics on the Retail Grocery Business. (Bulletin No. 198.) Kenneth B. Haas and B. Frank Kyker. 138 p. Rev. 20 cents.

Prepared to aid leaders of conference groups of retail grocers in discussing methods of improving store service and efficiency and of increasing sales.

Cooperative Part-Time Retail Training Programs. (Bulletin No. 205.) Kenneth B. Haas. 96 p. 15 cents.

Suggests procedures which have proved to be successful for promoting, initiating, coordinating, supervising, and teaching the various types of retail-training courses in different communities. Emphasis is placed on the cooperative part-time type of instruction on the secondary level.

Credit Problems of Families. (Bulletin No. 206.) 69 p., illus. 20 cents.

A study of credit as a phase of family financial planning prepared to aid home economics teachers in guiding students in an understanding of the place of credit in family financial management and in the solution of their own credit problems.

Fire Alarm System. (Bulletin No. 207.) Frank Cushman and H. A. Friede. 77 p., illus. 15 cents.

An analysis of the work of fire alarm bureaus, or divisions, such as are found in the larger cities, with a discussion of the problems of training likely to be encountered.

Instruction in Poultry in Secondary Schools. (Leaflet No. 6.) 18 p., illus. 5 cents.

Largely pictorial in character and is presented in three parts to illustrate programs of vocational agriculture carried on for (1) high-school students in day classes, (2) out-of-school young men in part-time classes, and (3) adult farmers in evening classes.

Minimum Essentials of Individual Inventory in Guidance. (Bulletin No. 202.) Giles M. Ruch and David Segel. 83 p. 15 cents.

Outlines the general nature of the individual inventory, the significant types of entries thereon, and discusses the possibilities and limitations of scientific measurement of certain aspects of the individual.

Related Instruction for Plumber Apprentices. (Bulletin No. 200.) Robert W. Hambrook. 87 p., illus. 15 cents.

Designed to aid local advisory committees, teachers, and others who have to do with arranging training programs, this study discusses the teacher, the apprentice, and the course of study.

Teaching Control of Black Stem Rust of Small Grains in Vocational Agriculture classes. (Leaflet No. 1.) 12 p., illus. Rev. 5 cents.

Teaching the Grading of Feeder and Stocker Steers in Vocational Agriculture Classes. (Leaflet No. 4.) 20 p., illus. Rev. 5 cents.

Civilian Conservation Corps

Camp Life Reader and Workbook.

Language Usage Series No. 1 and No. 2 were prepared for the use of enrollees in the Civilian Conservation Corps camps. They are the first and second of a series of six to be used in the plan for training enrollees in language usage on the elementary level.

Individual Guidance in a C. C. C. Camp. (Bulletin, 1939, No. 7.) Kirkland Sloper. 43 p., illus. 10 cents.

Results of a study made by a C. C. C. camp adviser in Pittsfield, Mass., to measure the results of his guidance methods in order to ascertain their relative values.

Reprints

In addition to the foregoing publications and to meet a continuing public demand, the following Office publications were reprinted:

Developments in Educational Method, 1934–36. (Bulletin, 1937, No. 2, vol. I, ch. X.) Mary Dabney Davis, L. C. Everard, Cline M. Koon, Edith A. Lathrop, Maris M. Proffitt, and David Segel. 10 cents.

A Educaçào nos Estados Unidos da America. (Portuguese.) (Miscellany No. 5.) Olga A. Jones and Walter S. Deffenbaugh. 15 cents.

La Educación en los Estados Unidos de América. (Spanish.) (Miscellany No. 4.) Olga A. Jones and Walter S. Deffenbaugh. 15 cents.

Fiction Portraying Home Life and Family Relationships. (Bibliography No. 47.) Ellen C. Lombard. Free.

Industrial Arts—Its Interpretation in American Schools. (Bulletin, 1937, No. 34.) Maris M. Proffitt. 15 cents.

Know Your School Child. (Leaflet No. 51.) Mary Dabney Davis. 5 cents.

Know Your Teacher. (Leaflet No. 50.) Walter S. Deffenbaugh. 5 cents.

Nature and Use of the Cumulative Record. (Bulletin, 1938, No. 3.) David Segel. 10 cents.

Offerings and Registrations in High School Subjects, 1933–34. (Bulletin, 1938, No. 6.) Carl A. Jessen and Lester B. Herlihy. 15 cents.

Safety and Health of the School Child. (Pamphlet No. 75.) James F. Rogers, M. D. 10 cents.

Statistical Summary of Education, 1935–36. (Bulletin, 1937, No. 2, vol. II, ch. I.) Emery M. Foster. 10 cents.

Aviation in the Public Schools. (Vocational Division Bulletin No. 185.) Robert W. Hambrook. 15 cents.

Landscaping the Farmstead. (Vocational Division Bulletin No. 189.) W. A. Ross and L. L. Scranton. 15 cents.

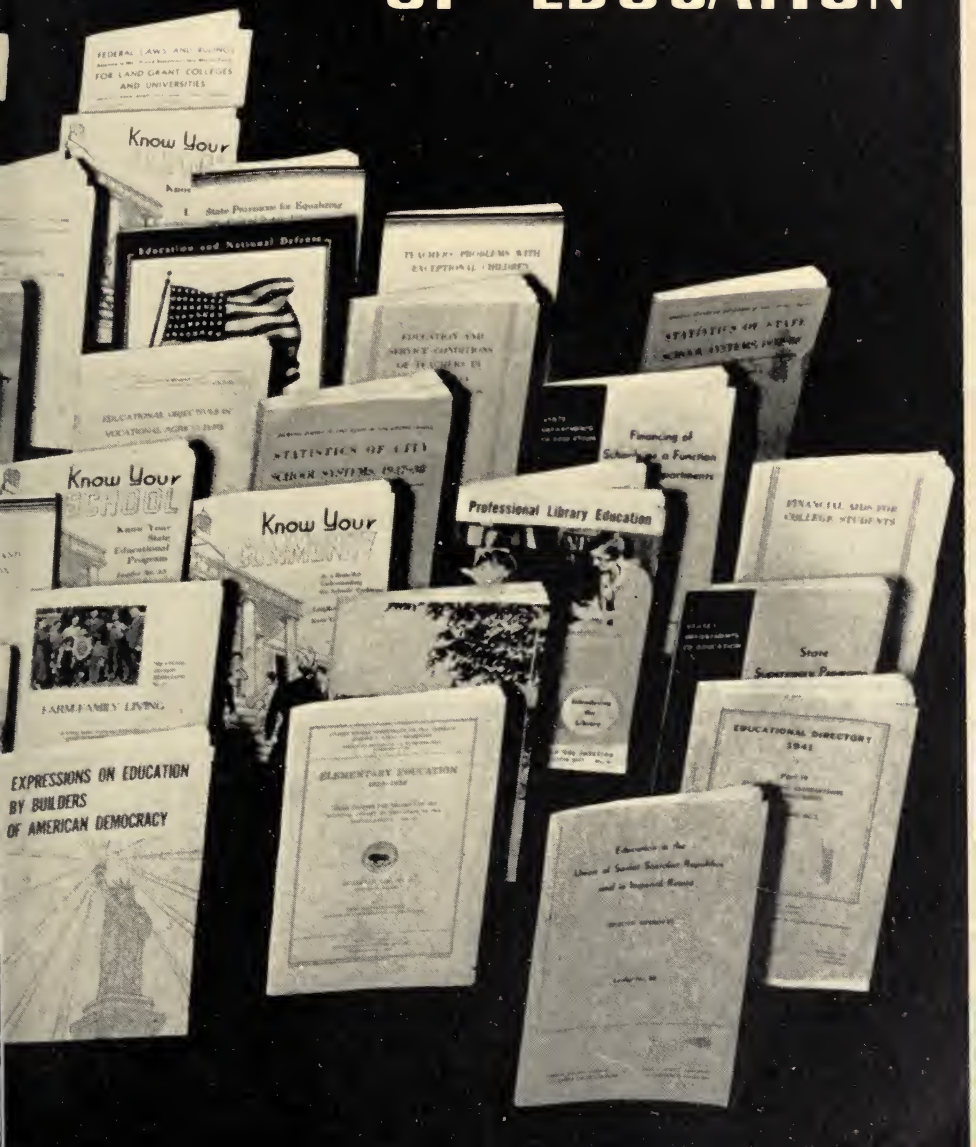
Training for the Painting and Decorating Trade. (Vocational Division Bulletin No. 193.) L. G. Stier. 35 cents.

Training for the Police Service. (Vocational Division Bulletin No. 197.) O. D. Adams. 15 cents.

Publications of the United States Office of Education may be obtained by ordering from the Superintendent of Documents, United States Government Printing Office, Washington, D. C.

1941

Annual Report of the UNITED ☆ STATES COMMISSIONER OF ☆ EDUCATION



ANNUAL REPORT

OF THE

United States Commissioner of Education

FOR THE FISCAL YEAR ENDED

June 30, 1941

JOHN W. STUDEBAKER, *Commissioner*

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FEDERAL SECURITY AGENCY, Paul V. McNutt, *Administrator*

United States Office of Education

JOHN W. STUDEBAKER • *Commissioner*

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LETTER OF TRANSMITTAL

NOVEMBER 1, 1941.

SIR: I have the honor to submit herewith my report embracing the activities of the U. S. Office of Education for the fiscal year ended June 30, 1941.

Respectfully,

John W. Studebaker

U. S. Commissioner of Education.

PAUL V. MCNUTT,
Federal Security Administrator.

FOREWORD

THE FISCAL YEAR which ended June 30, 1941, saw the Nation engaged in a great effort to marshal all of its resources in an all-out program of national defense and of aid to the nations resisting Nazi aggression. Organized education in the United States, ever responsive to individual and social needs, began to adjust its activities accordingly. School people throughout the Nation sought to answer the question "How can the schools best serve the Nation in this crisis?" If we may judge by reports reaching the U. S. Office of Education of new emphasis in school and college programs, the answers given to this question were about as follows:

1. By improving the understanding and increasing the appreciation of Americans young and old of their democratic heritage.
2. By showing that although political democracy may be imperfectly realized in our midst, it nevertheless remains the form of government holding greatest promise for bringing about the steady improvement of the lot of men and women.
3. By increasing the understanding of Americans young and old of the nature of the menace which threatens America; why and how we must be prepared to preserve our liberties.
4. By promoting in every practicable way the better health and greater physical vigor of our population.
5. By promoting an understanding of our Good Neighbors on this Hemisphere.
6. By helping to develop unity in our people through intercultural education designed to increase mutual tolerance, understanding, and good will.
7. By helping to develop the practical skills, the vocational and technical competence needed by men and women in the national defense.

The U. S. Office of Education has during the past year continued to give leadership to the schools and colleges in their efforts to achieve these and other objectives. While continuing to discharge its regular responsibilities, it has assigned its staff and directed its services more and more to assisting education to contribute to the national defense.

This Annual Report of the Commissioner summarizes the many activities of the U. S. Office of Education during the past fiscal year.

It is a compendium of more detailed reports prepared by appropriate administrative officials for the various divisions of the work of the U. S. Office of Education. It is hoped that it will prove useful both as a record of performance of official duties by the staff of the U. S. Office of Education and as a partial reflection of the trends in organized education during a year of national emergency.

John W. Studebaker,
U. S. Commissioner of Education.

I

TRAINING WORKERS FOR THE NATIONAL DEFENSE

OVERVIEW OF THE DEFENSE TRAINING PROGRAM

SPURRED by a sense of urgency due to swift-moving events in Europe, Africa, Asia, and the Near East, the United States during the fiscal year 1940–41 made tremendous strides in its program of national defense. A vast rearmament program got under way. Hundreds of new plants were built and others expanded for the production of war materials. Thousands of shops and factories increasingly turned from regular peacetime production to the manufacture of planes, tanks, guns, and ammunition.

Notwithstanding a large pool of unemployed manpower, expansion of defense production presented the Nation with crucial problems of labor supply and training. Early it became apparent that if serious bottlenecks in the progress of industrial production for defense were to be avoided it would be necessary to train or retrain thousands of workers. Part of this training would have to be given by industry itself. Apprentice programs must be expanded. Extra helpers must be assigned to work beside skilled men in the plants. Many jobs formerly done by highly trained men must be broken down into simple operations which could readily be taken over by semiskilled operatives, and special training classes, both in industry and in the schools of the Nation, must be inaugurated.

Between April 1939 and May 1940 officials of the U. S. Office of Education and representatives of the Army and Navy had carried forward a careful inventory of the training facilities of the public schools of the Nation, with special attention to the potentialities of the Federal-State cooperative program of vocational education with its billion dollar plant, its 35,000 skilled teachers and supervisors, its 75,000 training stations in public trade schools. Consequently, it was not a surprise when the schools were called upon to use these facilities in an emergency training program for defense workers. In June 1940, P. L. 668 was signed, appropriating $15,000,000—

> . . . for payment to States, subdivisions thereof, and other public authorities, through certification from time to time by the United States Commissioner of Education to the Secretary of the Treasury of the name of such agency and the amount to be paid . . . for the cost of courses of less than college grade, provided by such agencies in vocational schools pursuant to plans submitted by such agencies and approved by the United States Commissioner

of Education, which plans shall include courses supplementary to employment in occupations essential to the national defense and preemployment refresher courses for workers preparing for such occupations selected from public employment office registers. . . .

Immediately after the passage of this appropriation, the public vocational schools of the Nation, ordinarily closed for the summer months, became the scene of bustling activity. Instructors were called back from vacations. The doors of the schools were thrown open. Within 2 months enrollments had passed the 100,000 mark.

In October 1940 Congress made an additional appropriation of $60,500,000 (P. L. 812, 76th Cong., 3d sess.) providing for a continuation and broadening of the original training program.

The major provisions of P. L. 812 relating to Education and Training of Defense Workers, read as follows:

Education and training of defense workers: For payment to States, subdivisions thereof, or other public authorities operating public educational facilities, and where hereinafter authorized to engineering schools and universities, through certification from time to time made by the United States Commissioner of Education (hereinafter referred to as the "Commissioner") to the Secretary of the Treasury of the name of such agency or the name of such engineering school or university and the officer thereof to whom payment is to be made, and the amount to be paid, such payment to be made prior to audit and settlement by the General Accounting Office, for the furtherance of the education and training of defense workers, as follows:

(1) For the cost of vocational courses of less than college grade, provided by such agencies in vocational schools pursuant to plans submitted by such agencies and approved by the Commissioner, which plans shall include courses supplementary to employment in occupations essential to the national defense and preemployment refresher courses for workers preparing for such occupations selected from the public employment office registers, $26,000,000.

(2) For the purchase, rental, or other acquisition of new or used equipment when needed by agencies in providing courses pursuant to a plan approved under (1) of this heading when such acquisitions are in accord with detailed proposals submitted by such agencies and approved by the Commissioner, $8,000,000: *Provided*, That the proposals approved by the Commissioner shall include provisions governing the holding of title to and the use of the equipment to be acquired.

(3) For the cost of short engineering courses of college grade, provided by engineering schools or by universities of which the engineering school is a part, pursuant to plans submitted by them and approved by the Commissioner, which plans shall be for courses designed to meet the shortage of engineers with specialized training in fields essential to the national defense, $9,000,000: *Provided*, That only engineering schools which operate under charters which exempt their educational property from taxation shall be eligible to receive these funds: *Provided further*, That not to exceed 20 per centum of the amount allotted to any school shall be allotted to it for expenditure for purchase or rental of addi-

tional equipment and leasing of additional space found by the Commissioner necessary for carrying out its approved plan.

(4) For the cost, including the necessary equipment and supplies, of vocational courses and related or other necessary instruction provided by such agencies for out-of-school rural youth who have attained the age of seventeen and who file a registration card with a public employment office and for nonrural youth who otherwise meet the above requirements whose training is not feasible under subdivisions (1) and (3) hereof, such courses and instruction to be provided pursuant to plans submitted by such agencies and approved by the Commissioner, $10,000,000.

(5) For the cost of vocational courses and related or other necessary instructions provided by such agencies for young people employed on work projects of the National Youth Administration, such courses and instruction to be provided pursuant to plans submitted by such agencies and approved by the Commissioner, $7,500,000: *Provided*, That the amount allotted to any agency shall be available for expenditure for purchase or rental of additional equipment and rental of additional space found by the Commissioner to be necessary for carrying out the approved plan.

The Commissioner shall carry out the purposes of these appropriations under regulations promulgated by him and approved by the President, and there shall be available out of these appropriations an amount determined by the Federal Security Administrator not exceeding 1 per centum of each such appropriation for expenses of administration to enable the Commissioner most efficiently to carry out the purposes of the several appropriations. . . .

That all functions of the Commissioner hereunder shall be performed under the direction and supervision of the Federal Security Administrator.

No trainee under the foregoing appropriations shall be discriminated against because of sex, race, or color; and where separate schools are required by law for separate population groups, to the extent needed for trainees of each such group, equitable provision shall be made for facilities and training of like quality. . . .

Summary of appropriations under P. L. 668 and P. L. 812

Subdivision	Public 668	Public 812	Total
Total	$15,000,000	$60,500,000	$75,500,000
(1) Supplementary and pre-employment refresher courses	15,000,000	26,000,000	41,000,000
(2) Equipment for (1)		8,000,000	8,000,000
(3) Short engineering courses of college grade		9,000,000	9,000,000
(4) Out-of-school rural and nonrural youth		10,000,000	10,000,000
(5) National Youth Administration project workers		7,500,000	7,500,000

Enrollments

Between July 1, 1940, and June 30, 1941, more than a million and a half enrollments were recorded in all phases of the programs authoriz-

ed under the afore-mentioned appropriations. Pre-employment and refresher courses enrolled men and women drawn from the registers of public employment offices to the number of 420,530. Some 467,614 workers already employed in defense industries returned to the schools in hundreds of cities and towns throughout the Nation for supplementary courses of instruction and training. Enrollments of out-of-school youth, living in rural areas and small towns, in courses designed to improve their mechanical skills and enable them upon entering defense industries rapidly to master the operation of particular machine tools exceeded 254,511. Short courses for engineers and technical engineering assistants offered in the engineering colleges and technical schools had a total authorized enrollment of 137,656. And thousands of out-of-school youth employed on NYA work projects were given vocational courses and related or other necessary instruction to total 285,541 course registrations.

Organization and Administration

The general provisions of P. L. 812, already cited, were implemented by regulations promulgated by the Commissioner and approved by the President. These regulations were further supplemented by more detailed statements of policy formulated by the Office of Education in cooperation with State vocational education officials, heads of engineering colleges, and various advisory committees.

The Government agency on the Federal level vested with the responsibility for integrating the various training programs into the labor supply policies for the defense program was originally the Labor Division of the Advisory Commission to the Council of National Defense. This agency later became the Labor Division of the Office of Production Management. Within the Labor Division there were set up two branches which had the responsibility for formulating over-all policy: The Labor Supply Branch and the Defense Training Branch.

Within the Federal Security Agency there was appointed a Director of Defense Training responsible for directing the defense training activities of defense training agencies within the Federal Security Agency: The U. S. Employment Service, the National Youth Administration, the Civilian Conservation Corps, and the U. S. Office of Education.

Within the Office of Education itself the U. S. Commissioner of Education, assisted by the Assistant Commissioner for Vocational Education, and the Chief of the Division of Higher Education, had general responsibility at the Federal level for the direction of the school's training program of the Office of Education. The Chief of the Trade and Industrial Education Service in the Office of Education was designated Director of Vocational Training for Defense Workers, and charged with particular responsibility for the training programs

of less-than-college grade. A Director of Engineering Defense Training, working closely with the Chief of the Division of Higher Education, was made responsible for the training program under the provision of par. 3 of P. L. 812 previously cited.

The defense training programs of less-than-college grade logically and necessarily utilized the administrative organization and personnel of the Vocational Education Division of the U. S. Office of Education and of the State Boards for Vocational Education in the various States. The most important element which made possible the rapid integration of the public vocational schools into the defense labor supply program was a background of 23 years of Federal-State cooperative relationships in vocational education, under the Smith-Hughes and George-Deen Acts. Those relationships are embodied in State Plans for Vocational Education, which, when accepted by the U. S. Office of Education, become in effect contracts binding upon both parties.

So it was natural that with the exception of the Engineering Defense Training Program, a similar procedure was utilized for the defense training program. States submitted plans for each subdivision of P. L. 812 indicating the defense training programs to be undertaken, the provisions for administration and supervision, qualifications of teachers and supervisors, and the training standards to be maintained. These State plans were carefully studied by the Office of Education, and, after any necessary modifications had been made, approved as the basis for operations. In the Engineering Defense Training Program a different procedure was utilized. Relationships were made directly with approved engineering institutions without the intermediation of a State educational authority. Institutions submitted preliminary proposals for courses to be given, and these proposals were approved or disapproved.

The occupations for which training might be given in the program of supplementary and pre-employment refresher courses were listed in a Document entitled *List of Occupations Approved by the Office of Production Management for Vocational Training Courses for Defense Workers* which was published by the U. S. Office of Education. The list enumerates and defines 550 occupations. Some of the occupations included in the list normally require training much more extensive than can be given in defense training courses. They were included because certain phases of related training could be provided in the schools. The inclusion of an occupation in the approved list did not mean *per se* that training should be given for that occupation in any and all communities. It merely meant that such an occupation was important in the defense program and might be considered as an appropriate field for training if local conditions of labor demand and supply warranted pre-employment training.

TRAINING PROGRAMS OF LESS THAN COLLEGE GRADE

Labor Supply and Training

The magnitude of the labor supply job may be measured by available data on employment in defense industries. In 16 selected defense industries as of June 1941, there were 2,440,500 persons employed. This was an increase of 47.6 percent over the number employed as of the same date the previous year. Employment in aircraft industries was more than double the employment in June 1940, and in shipbuilding slightly less than double. There was an increase during the year of 47.2 percent in the number employed in machine-tool industries, and in civil nonagricultural employment there was a gain in employment of 3,365,000 workers since June 1940.

The skilled requirements of defense production are such that about three-quarters of the employment arising out of defense appropriations requires *trained* workers. In view of the present situation of the labor market, it is safe to say that a greater proportion of the workers employed in defense industries than ever before will require formal training on the job, in the schools, or both.

Minimum estimates of additional employment by April 1942 show that 324,000 will be required in shipbuilding, 408,000 in aircraft, and 292,000 in machine tool and ordnance industries. The U. S. Bureau of Labor Statistics further estimates that the number of wage and salary workers in nonagricultural employment will increase by 2½ to 3 million by July 1942. In this connection it is worth noting that, although under normal circumstances industries operate with from 20 to 25 percent of highly skilled labor and about an equal proportion of semiskilled, defense industry requires approximately 37.5 percent of highly skilled and 37.5 percent of semiskilled workers; in other words, there is an increased premium on skill.

From the point of view of the effect of the condition of the labor market upon training, it is possible to distinguish four major problems of varying degrees of importance.

The first and most pressing problem has been a shortage of qualified workers in the higher brackets of skill. Machinists, tool makers, die makers, ship loftsmen, and pattern makers are among those of whom a high order of skill is required. It has been estimated that in the year ending April 1942, selected defense industries will require more than half a million workers in the skilled categories. As the number of unemployed workers with the requisite skills reaches the vanishing point, the greater part of the skilled workers will have to come from the ranks of experienced workers on the lower levels of skill.

Second, although less pressing, the sheer number of persons to be hired in semiskilled jobs has constituted a serious problem.

Third, the induction of large numbers of new workers into semiskilled occupations and the necessity for breaking down the operations

in the skilled occupations has raised the problem of providing an adequate force of foremen and subforemen.

Fourth, as the exercise of priorities in materials has curtailed employment in nondefense industries, there has arisen the problem of retraining the workers thus employed to make them employable in defense industries. Illustrations of this may be found in unemployment in the automobile, silk, and aluminum houseware industries.

Supplementary Training

It is this kind of labor market situation to which defense vocational training has had to adjust itself. Supplementary instruction has been the major source of training utilized to alleviate the shortage of skilled workers. This type of instruction is given during out-of-work hours, and takes one or both of two forms.

In the first instance, as part of an in-plant up-grading program, it seeks to teach employed persons to perform at a higher level of skill than they are now doing by permitting them to work in a school shop under expert supervision and direction and with the pertinent tools and machines. At a time when machine facilities and factories are being utilized to full capacity in actual production, it is not feasible, in many instances, to organize extensive learning on the job in the process of which such machines would be diverted from production.

Secondly, supplementary instruction provides related knowledges which are essential in the performance of semiskilled jobs in the higher levels and of all *skilled* jobs. In this category would fall such courses as blueprint reading, shop mathematics, and mechanical drawing. Here again, it is not feasible, for the most part, to provide such background training on the job. It has been found that organized school instruction makes possible a more effective acquisition of such knowledge.

Prospective trainees for supplementary courses are usually referred to the schools by employers and labor organizations. The educational authorities work with local representatives of the Training-within-Industry branch of the Office of Production Management in the utilization of supplementary instruction as a desirable and effective means of complementing the program of training-within-industry.

Pre-employment Refresher Training

A major source of semiskilled workers in defense industries is the pre-employment courses. The pre-employment courses offer induction training to unemployed workers. The objective is to provide instruction which will fit the trainee for immediate employment. The emphasis is put on training for a specific pay-roll job, rather than on general conditioning.

In Public, Nos. 668 and 812, the formal designation for this type of course was "pre-employment refresher," on the assumption that there

existed a reservoir of skilled and semiskilled workers who, with a short amount of "refreshing," could brush up on skills which they had commanded previously. It is apparent now that the numbers of workers with refreshable skills is gradually, if not completely, being exhausted.

Prospective trainees for pre-employment courses are required by law to be referred to the schools by public employment offices. Other authorization makes possible the referral by the Work Projects Administration of WPA workers to pre-employment courses. Such WPA referrals receive work project wages, while in training. It has been recognized as an element of good public policy to transfer, as rapidly as possible, persons on WPA rolls to gainful employment divorced from the connection with relief.

Developing Secondary Labor Reserves

From the instructional point of view, the problem of developing a secondary labor reserve does not involve training for specific occupations, but rather a general conditioning of the trainee to factory and shop practices and an understanding of tools and machines. The out-of-school youth training program and the training program for National Youth Administration project workers have been set up precisely for this purpose of developing a secondary labor reserve. Since most of the youth affected by these two programs reside in rural communities, the programs serve the additional purpose of providing a conditioned labor supply which may be of substantial importance in connection with the increasing significance of the less densely populated areas in defense production. In view of the potential shortage of farm labor, the specific training of rural youth for defense occupations is carried on with due consideration to defense agricultural labor requirements. Trainees for both programs are required to file a registration card with a public employment office, but no prior registration is mandatory.

Women constitute another group of workers which is not normally in the labor market in the heavy defense industries. The U. S. Office of Education followed the policy during the year that defense training programs should be set up for women workers where there are existing or anticipated employment opportunities for women in specific occupations. There is an increasing utilization of training facilities by women who are preparing themselves for occupations which have been traditionally limited to male workers.

Where there are existing or anticipated opportunities in defense occupations for Negro workers, adequate provision has been made for their training. Negroes have been trained in selected occupations in communities where there may be no opportunities for them at the present time, but in which it is probable that their services will be used at a later date by defense contractors.

Equipment Needs

Existing facilities of public vocational schools, although extensive, were inadequate to meet the concentrated need for heavy training equipment stimulated by the nature of the defense program. The establishment of large defense industries in localities where no industry of any kind had existed before has emphasized lack of equipment.

The equipment problem was partially solved by subdivision (2) of Public No. 812, which appropriated $8,000,000 for acquisition of equipment in connection with the supplementary and pre-employment refresher courses. However, the need of the public vocational schools for equipment, in order to do an adequate job of defense training, was far greater than that which could be met by this appropriation. In the early spring of 1941, the U. S. Office of Education requested that an additional $12,000,000 be made available by Congress for the purchase of equipment. (Such an appropriation was subsequently incorporated in Public Law 146, 77th Cong., 1st sess.) The provisions of the various statutes and the regulations of the U. S. Office of Education affecting the acquisition of equipment make it possible for equipment to be transferred from one school to another within a State, in line with shifts in defense labor requirements.

Applications for the purchase of equipment and the rental of space in connection with the supplementary and pre-employment refresher courses are carefully reviewed. Specialists study the requests and pass upon the technical suitability of the equipment or space for the purposes intended. Substitutions in types of machines may be suggested in order that schools will not be competing with industry for essential materials and equipment. However, in critical situations procedures have been established with the Office of Production Management for securing preference ratings for training equipment. In order to meet the need of courses for the training of ordnance inspectors, a program has been set up in several States by which the schools themselves will make small tools and precision measuring instruments. In order to furnish the schools with crucial materials for training purposes, such as sheet aluminum, sheet plates, and tool steel, procedures have been established with manufacturers and the Office of Production Management which make possible the procurement of slightly imperfect products and reclaimed materials which are not vital to defense needs, but which are adequate for training purposes.

State directors of vocational defense training apply for funds for equipment to the U. S. Office of Education on standardized forms, which call for a detailed statement of needs in terms of specific machines, prices, delivery dates; and, if additional space is requested,

the director supplies complete specifications of the plant or building under consideration.

The significant factors influencing the relative importance attached to the request for funds for equipment (which have far exceeded the funds available) may be stated as follows:

1. Preference is given to schools which will train for the following industries: Aircraft, machine tool, shipbuilding, and Army and Navy establishments.
2. Condition of the labor market in the community.
3. The extent to which existing facilities are currently being used by defense training.
4. The extent to which existing facilities are inadequate to meet immediate defense training needs.
5. The proximity of the school to defense industry plants as an indication of the likelihood that equipment will be used for supplementary as well as pre-employment training.
6. Number of hours per day and days per week the equipment is to be used for defense training.
7. The availability of space to house equipment.
8. Delivery dates of equipment.

Out-of-School Youth Training Program

Public, No. 812 attempted to equalize training opportunities for out-of-school youth by the provisions under subdivisions (4) and (5) of the act. Prior to the passage of the second appropriation act major responsibility of the Office in the conduct of training courses for defense workers devolved upon the Trade and Industrial Educational Service. Under the second act large responsibility was placed also on the Agricultural Education Service.

Early in the fiscal year, the Agricultural Education Service began a study to determine: (1) To what extent there was available in rural communities a surplus of out-of-school youth who might be trained if training opportunities were extended to them; and (2) the availability and adequacy of shop space facilities and equipment for training purposes in rural communities.

The study of the numbers of out-of-school rural youth available for defense training, which was made through personal contacts with State supervisors of agricultural education and in annual summer conference meetings of teachers of vocational agriculture, showed that it was the consensus of State and local workers in agricultural education that there were large numbers of out-of-school rural youth who would be willing and eager to participate in training for national defense activities.

The survey of the adequacy of shop space and equipment available for training purposes in rural communities was made through a formal survey schedule sent to the agricultural education supervisors of each

State. In this schedule they were asked to report to the Office of Education the size of school farm shops, the quality of equipment available therein, the need for new shops, the need for additions to old shops, and the need for additional equipment in each existing department of vocational agriculture in their respective States. Reports were received on the conditions obtaining in 7,898 schools in 44 States, or 95 percent of all of the schools in the United States having departments of vocational agriculture. These reports, when summarized, showed that 2,579 of these schools had at that time greater than average shop floor space and that 2,675 rated "average" to "superior" in the quality of available equipment. The study also showed that 2,295 of the schools replying had no shop facilities at all; that 2,647 of them needed new shop buildings; and that 1,422 needed additions to present shop structures. Furthermore, 6,011 of the schools reported that they would need additional equipment if they were to operate defense training courses of the character later provided under Public Law 812.

On the basis of this study, the Office initiated a series of conferences with the officials of the National Youth Administration for the purpose of exploring the possibilities of constructing new school farm-shops and additions to old shops as National Youth Administration work projects. As a result of this collaboration approximately1,000 new rural school farm-shops were built in the 48 States during the fiscal year.

On October 9, 1940, Congress appropriated $10,000,000 (Public, No. 812) "for the cost, including the necessary equipment and supplies, of vocational courses and related or other necessary instruction for out-of-school rural and nonrural youth." One provision of the Act required that States sharing in its benefits prepare plans showing the purposes for which funds for the training of out-of-school rural youth would be used. The Agricultural Education Service was made responsible for assisting State boards for vocational education in preparing their plans and for reviewing these plans before they were approved by the Office of Education.

Special defense training agents, together with regional agents of the Agricultural Education Service, outlined four shop courses of general pre-employment character for out-of-school youth, for the approval of the Advisory Commission to the Council of National Defense. These four courses were approved as follows:

A–1. Operation, care, and repair of tractors, trucks, and automobiles (including both gas and Diesel engines).

A–2. Metalwork, including simple welds, tempering, drilling, shaping, and machinery repair.

A–3. Woodworking.

A–4. Elementary electricity, including operation, care, and repair of electrical equipment.

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Applications for approval of courses for out-of-school youth and for plans for supervising these courses, sent in by the various States, were reviewed by the Agricultural Education Service of the U. S. Office of Education. As of June 30, 1941, 11,704 approved general pre-employment courses for out-of-school rural youth had been placed in operation throughout the country, in which approximately 227,000 were enrolled.

The shop facilities of some vocational agriculture departments were also used under funds from Public Law 812 for *specific* pre-employment preparatory courses when it was not possible to enroll rural youth in the courses provided under subdivision (1) of this Act. These youth, with no previous vocational training to be "refreshed," could not be given training under funds appropriated for pre-employment refresher courses. Courses were therefore organized to prepare such youth to enter into certain defense industries. These courses were intended to provide training for such specific jobs as riveting, welding, machine-shop operations such as lathe work, drill-press operation, and bench work, aircraft sheetmetal work, and radio service and repair.

Studies made by camp authorities show that some 62 percent of enrollees in CCC camps live in rural areas. It was decided, therefore, that it would be legitimate to provide for thousands of these youth in defense training classes under subdivision (4) of P. L. 812. In some cases the youth were transported from CCC camps to nearby towns; in other cases a qualified instructor went to the camp itself to give instruction in both general pre-employment and specific pre-employment defense training courses. (*See* ch. VI of this report for a more extended discussion of CCC defense training activities.)

National Youth Administration Project Workers' Training

With a view to determining the procedure to be followed in initiating and carrying on the defense training programs for National Youth Administration project workers, provided for under the terms of Public Law 812, the U. S. Office of Education called four regional conferences—in Memphis, Chicago, San Francisco, and Salt Lake City.

At these conferences, which were attended by representatives of the U. S. Office of Education and of the National Youth Administration, State directors of vocational education, and State supervisors of the various fields of vocational education, provisions of the Act applying to the training of National Youth Administration project workers, as well as the regulations and policies governing this type of training were explained.

To assist the States in carrying on this training the Office appointed 10 special agents, 5 to represent the Home Economics Education Service and 5 to represent the Business Education Service. Since a

majority of the National Youth Administration project workers in the field of agriculture were reached through the training provided for out-of-school rural youth, no special agents were appointed to assist in the National Youth Administration training program in this field. Trade and Industrial Education regional agents and special agents responsible for the supplementary and pre-employment refresher program, also assisted in the organization of trade and industrial courses for National Youth Administration project workers.

To prevent duplication within its various services in connection with the defense training program for National Youth Administration project workers, the U. S. Office of Education appointed an intra office coordinating committee composed of a representative of each service—agricultural education, trade and industrial education, home economics education, and business education—to act in an advisory capacity.

Impressed with the need for concentrated work on training teachers in service for work with National Youth Administration workers, the special representatives of the U. S. Office of Education arranged for teacher-training conferences to be held during the summer months.

Courses of three types were offered for National Youth Administration workers as follows:

1. *Supplementary* courses in which the training is directly related to the work project to which the youth is assigned. Examples of this type of training include office procedure and typing related to clerical projects; food preparation as applied to school lunch projects; auto mechanics in connection with work projects on cars, trucks, and road equipment owned by municipal or county government.
2. *Preparatory* training designed to prepare project workers for a particular occupation in which they are interested and to which they are adapted, and in which they will have an opportunity for employment, such as typewriting, training for hospital workers, shop work, and homemaking.
3. *Education for civic and vocational intelligence* directed at the personal development of the individual and at increasing his employability. Examples of this type of training are: Courses in citizenship, health, personal grooming, nutrition, consumer economics, and English.

Relationships With Other Government Agencies

A significant aspect of the administration of the various defense training programs has been the development of cooperative relationships with other public agencies. The determination of joint procedures and policies seemed imperative in the case of the U. S. Employment Service and the Work Projects Administration since these

agencies constitute the source of trainees for pre-employment refresher courses.

The procedure developed by which workers are referred by the Work Projects Administration and State employment services is as follows: The local school authorities draw a requisition upon the Work Projects Administration and the local office of the State employment service for a specified number of trainees. This requisition includes information relating to the occupation or trade for which training is to be given; the operations performed; the machines, tools, and instruments involved in the training; the materials used; the special qualifications which referrals should have; and the working conditions in the job in which instruction is to be given.

Trainees enrolled in the out-of-school youth program are registered with their nearest public employment office on, or before, completion of training. Public employment offices register these trainees by arranging for them to report for an interview at the school, at the employment office, or at an itinerant employment service registration point. The employment registration for trainees presents a problem in rural communities which has been solved in part by arranging for the school bus to transport trainees to employment service registration points, or by allowing school authorities to register trainees and submit employment registration cards to the employment service.

When, in the opinion of the school authorities, the trainees has mastered the skills for which training has been given, the school notifies the employment office that the trainee is ready for employment. Comprehensive progress rating cards are transmitted to the local employment office explaining in detail the qualifications of the trainee.

The primary responsibility for placement arising out of defense training is vested with the public employment services. It is recognized, however, that in a number of instances the relationship of the schools to certain employers is of such a character that the educational authorities might advantageously refer trainees for placement. These placements are reported to the public employment services. The U. S. Office of Education and the State and local school authorities utilize the informational resources of the U. S. Employment Service.

The U. S. Office of Education has also acted as a clearing house on behalf of the States for such phases of the training needs of the armed service as could be met advantageously by the public vocational schools. The administrative regulations provide that the military personnel may be accepted in pre-employment courses without prior referral from the public employment office and without regard to the list of approved occupations if such referral is in line with already established procedures. In addition, the Army and Navy have

received assistance in establishing programs to meet the civilian training needs of arsenals, air bases, and navy yards.

The U. S. Office of Education has maintained close working relationships with the Bureau of Labor Statistics, U. S. Department of Labor. The data prepared by the Bureau with regard to anticipated labor requirements in specific defense industries and for defense industry as a whole have been particularly useful in the long-range planning of training.

Regional, State, and Local Phases of Organization and Administration

The duties of setting up training programs in the schools, ascertaining the labor needs of industry, hiring teachers, purchasing equipment and renting space, and organizing advisory committees are all performed in the State and local communities subject to the rules and regulations of the U. S. Office of Education, the Federal Security Agency, and the Office of Production Management governing training programs for defense workers.

The State board for vocational education is the agency responsible for administering the defense training programs in each State. Under the defense training program each State also has a State director of vocational defense training who is responsible for carrying out policies of the State board for vocational education. In turn, the school boards in the local communities are responsible for the operation of the local defense training programs.

Administrative relationships in the defense training program have been organized on local, State, and regional levels comparable to the relationships which exist on the Federal level. The Council of State Administrators, which is composed of the State director for vocational education, the State administrator of the National Youth Administration, and the director of the State employment service, is the overall agency established to insure the necessary coordination of activities in the State as a whole.

The U. S. Employment Service and the State employment service advise State and local councils with regard to the needs for preemployment training for defense industries; give the number of new workers needed in each occupation and the approximate date at which they will be needed, and outline the occupational or preliminary skill necessary to secure employment in each occupation for which training programs are to be set up. Through appropriate clearance procedures the training programs in a State in which training facilities are in excess of local demand may be opened to workers in another State in which the facilities are inadequate.

To insure efficient coordination of training activities on a regional basis, the Office of Production Management set up regional labor supply committees in 12 regions. In each instance, the labor supply

committee, with the regional representative of the Bureau of Employment Security, Social Security Board, as acting chairman, is composed of representatives from the Training-within-Industry branch of the Office of Production Management, the U. S. Office of Education, the National Youth Administration, and the U. S. Civil Service Commission, as well as representatives of the worker and employer groups. The responsibilities of the regional labor supply committees may be enumerated as follows: To determine needs for labor recruitment service to defense industries in the region; to formulate plans for providing necessary services; to secure collective action of constituent agencies in the execution of labor recruitment service; to evaluate the effect of labor recruitment activities in carrying out the established labor supply policies; and to report on problems that continue because of limitations on existing authority or facilities or because they involve complex inter-regional characteristics.

Instructional Motion Pictures

The U. S. Office of Education, during the year, undertook the development of visual aids specifically designed for assisting instructors in the vocational training of defense workers. Plans and specifications were made for a series of 50 motion pictures to be produced by private commercial producers of films on contract with the U. S. Office of Education. Eighteen titles in the series have been completed and the others are in production.

Forty projected titles in the series deal with machine-shop work—such subjects as The Care and Operation of: The Engine Lathe, The Milling Machine, The Shaper, The Vertical Boring Mill, The Drill Press, etc. Ten of the series deal with shipbuilding skills and portray the work of the shipwright and the shipfitter.

These training motion pictures were planned and developed by a committee of the U. S. Office of Education composed of men competent in the subject matter covered by the films. To provide the direct supervision necessary for technical accuracy and teaching effectiveness, advisory committees also were appointed by the State Directors of Vocational Education in Connecticut, Massachusetts, New York, New Jersey, Pennsylvania, Michigan, Minnesota, Missouri, and Kansas to assist in the production of the particular blocks of films photographed in the schools and shops of these States chosen because convenient to the producing companies.

The films are designed to show actual demonstrations of specific jobs on specific machines by expert operators; to emphasize such points as safety, the importance of blueprints, the need for cleanliness and good housekeeping, the necessity for checking lubrication; to explain the basic principles of correct machine operation as they apply to specific jobs; and to use the motion-picture techniques of slow motion,

animation, and magnified views to assist instructors in overcoming some of the instructional difficulties of the subjects covered. Their use with trainees in defense classes should assist in developing understanding of trade terms, of related technical knowledge, of basic principles involved, as well as assist in developing an appreciation of good craftsmanship and of correct and safe habits of work.

All 50 of these motion pictures, as quickly as they are completed, will be released to the schools and to other institutions interested in defense training at a price which covers only the cost of printing and distributing prints. It is anticipated that all of these motion pictures will be ready for distribution by December 31, 1941. Accompanying teachers' manuals giving a summary of the contents of the pictures, offering suggestions for their use, and providing necessary supplementary information are being prepared.

Advisory Committees

Since 1935 the U. S. Office of Education has actively urged and supported the organization of representative advisory committees to help guide the programs of vocational education in the States and local communities. These advisory committees have marked a distinct advance in the machinery for democratic policy making in education. They have given valuable advice and counsel to public boards of education in connection with the many problems of vocational industrial education. They have brought to bear their wealth of information and experience and have acted as the right arm of elected boards of education in matters of policy making affecting the interests of labor and of management. They are typical of that democracy which we are defending—a democracy which makes use of all the special abilities and knowledges of its members through various devices to insure free criticism, full discussion, and joint collaboration.

In connection with the defense vocational training program, these local advisory committees, representative equally of labor and of management, have been of inestimable value. Reports to the U. S. Office of Education indicate that in more than 1,500 communities local advisory committees have been established, and that where they exist they make significant recommendations concerning the conduct of courses, the methods of selecting trainees, shop equipment, and training standards. An analysis of the membership of State advisory committees, presented elsewhere in this report, shows that in addition to representation of employees and employers on these committees, consultants representing State Employment Services, the WPA, State Departments of Education, the NYA, CCC, vocational educators, and other groups were active in all the 48 States and in Puerto Rico.

At the Federal level advising the U. S. Office of Education concerning the conduct of both the defense vocational training and regular

continuing vocational education programs, were advisory committees with representation as follows:

Advisory Committee on Trade and Industrial Education

Mrs. Betty Hawley Donnelly, Executive Secretary, Advisory Board of Industrial Education, Board of Education, 110 Livingston Street, Brooklyn, N. Y.
John P. Frey, President, Metal Trades Department, American Federation of Labor, Washington, D. C.
George L. Googe, Southern Representative, American Federation of Labor, Atlanta, Ga.
Max Meyer, 1410 Broadway, New York, N. Y.
Emil Rieve, President, Textile Workers Union of America, 44 East 23d Street, New York, N. Y.
R. O. Small, State Director of Vocational Education, Boston, Mass.
T. J. Thomas, Assistant to the President, Chicago, Burlington and Quincy Railroad Company, Chicago, Ill.
B. H. Van Oot, State Supervisor of Industrial Education, Richmond, Va.
John H. Zink, President, Heat and Power Corporation, Baltimore, Md.

Advisory Committee on Vocational Agriculture

Fred Brenckman, Washington Representative, National Grange, 1343 H Street, NW., Washington, D. C.
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ENGINEERING DEFENSE TRAINING

Established on October 9, 1940, under the provisions of Public, No. 812, Seventy-sixth Congress, third session, the Engineering Defense Training program has in a few months developed into a significant factor in meeting shortages of engineers with training in fields essential to the national defense. By the end of the fiscal year, June 30, 1941, 144 engineering colleges located in 47 States, the District of Columbia, and Puerto Rico had been authorized to set up under its provisions 2,354 short, intensive courses to accommodate 137,656 trainees, and $8,795,171 of the $9,000,000 appropriation had been allocated.

In the spring of 1940 it became apparent that the national defense program would soon require, for service in both industry and the Federal agencies, greatly increased numbers of engineers with training

in a wide variety of technical fields. The engineering colleges, with investments in plant and equipment and experienced teaching staffs, offered an existing means of training additional personnel.

This situation was recognized in a report on Training for National Defense presented by the U. S. Commissioner of Education at the request of the President. This report included recommendation for the utilization of the engineering colleges to give instruction "in a wide variety of fields requiring preparation somewhat beyond the trade school or secondary education grade."

In June 1940 Congress had appropriated $15,000,000 for a summer defense training program of "less than college grade," the qualification referring to the character and content of the courses and not to the types of institutions giving the training. While a number of engineering colleges offered to cooperate in this vocational training, the general feeling among engineering educators was that the engineering schools should utilize their facilities, without interrupting their regular programs leading to degrees, mainly for specialized training on the engineering school level.

Early in July 1940, a consultant was appointed in the U. S. Office of Education to aid in presenting a proposal for the consideration of the Defense Council and the Congress concerning just what the colleges of engineering could do to contribute most effectively to the defense training program, and to be the liaison officer between the engineering schools and the Government agencies concerned with national defense.

A supplementary report, "Proposals To Expand the Program of Training for National Defense Through Schools and Colleges," submitted by the U. S. Commissioner of Education on July 27, 1940, reiterated the earlier recommendations for the utilization of the facilities of the engineering colleges. Already, it pointed out, there had developed "a marked shortage in naval architects, ship draftsmen, marine engineers, engineers skilled in airplane structures, airplane power plants and airplane instruments, machine tool designers, and engineers to supervise and speed up production in the industries essential to the national defense program."

The need for training on the college level was confirmed by contacts between the Office and representatives of the National Defense Advisory Committee, the Army, the Navy, the Civil Service Commission, the Department of Labor, the National Academy of Sciences, the Maritime Commission, and the Weather Bureau, as well as with representatives of industries concerned with national defense. While there was uncertainty as to the extent of the defense program for the next 2 years, these representatives were convinced that its success would depend to an extraordinary degree upon the availability of properly qualified technical and supervisory engineering personnel that could not be trained directly either by industry or by the armed

forces because of their lack of facilities, and could not quickly be secured through the regular engineering programs of the colleges.

A study was also made of the facilities available at the engineering colleges. The results were incorporated in confidential briefs describing 31 possible training courses to meet anticipated shortages of technically trained personnel, and listing schools with the special facilities in staff and equipment needed to give them effectively.

National Advisory Committee

On August 27, 1940, the U. S. Commissioner of Education invited 11 engineers and engineering educators to act as a National Advisory Committee on Engineering Defense Training. This committee was appointed to aid the Commissioner of Education in formulating policies, in facilitating cooperation of the engineering colleges of the country and the Government, and in safeguarding the permanent defense values of engineering colleges. It was constituted as follows:

A. A. Potter, Dean of Engineering, Purdue University (Chairman, also consultant to the U. S. Office of Education).
F. L. Bishop, Secretary, Society for the Promotion of Engineering Education.
R. E. Doherty, President, Carnegie Institute of Technology.
Gibb Gilchrist, Dean of Engineering, Agricultural and Mechanical College of Texas.
H. P. Hammond, Dean of Engineering, Pennsylvania State College.
W. O. Hotchkiss, President, Rensselaer Polytechnic Institute.
R. S. McBride, Consulting Engineer, Washington, D. C.
Thorndike Saville, Dean of Engineering, New York University.
C. C. Williams, President, Lehigh University.
B. M. Woods, Chairman, Department of Mechanical Engineering, University of California.
Allen W. Horton, Jr., U. S. Office of Education (Secretary).

The first meeting of the National Advisory Committee on Engineering Defense Training was held in Washington on September 20 and 21, 1940. In addition to the members of the committee there were present, during all or part of the meetings, representatives of the Advisory Committee to the Council on National Defense, Civil Service Commission, Army, Navy, and the U. S. Office of Education. The following matters received consideration: Safeguarding engineering colleges in the interest of national defense; defense training on the engineering college level; and coordination of engineering defense training programs with defense training of less than college grade, with defense training within industry, and with the special requirements of Government defense agencies.

Definite plans for the organization of the engineering defense training program were laid at this meeting. It was agreed that full responsibility for the selection and admission of students to the defense training programs should be vested in the engineering colleges, but that high-school graduation should be considered the minimum pre-

requisite. It was also recommended that the Government should reimburse colleges for all costs of special defense training courses and that no tuition should be charged. At this meeting the committee proposed sample regional surveys to determine training needs in the New York, Pennsylvania, California, and Chicago areas.

The sample regional surveys made in conformity with the committee's proposal uncovered serious shortages of engineers in a number of industries. Thus it was found that the aircraft industry of Long Island and northeastern New Jersey area alone would need nearly half of the output of the engineering colleges of the entire country. In Pittsburgh, Pa., and the 11 surrounding counties, only 257 qualified men were found available to meet an expected need for about 10 times that number. Definite shortages of technologically trained people were also found to exist in Pennsylvania, California, and in the Chicago areas.

Legislation Approved

On October 9, 1940, the President approved an act appropriating $9,000,000 to the U. S. Office of Education for the "cost of short engineering courses of college grade, provided by engineering schools or by universities of which the engineering school is a part, . . . designed to meet the shortage of engineers with specialized training in fields essential to the national defense." This appropriation was to cover the cost of such a program for the remainder of the fiscal year.

Immediately after the passage of the bill, 22 regional advisers were appointed to coordinate the engineering defense training program with the needs of industry and Government. Those invited to serve as advisers were leaders in engineering education who accepted this assignment with no compensation other than the opportunity to aid in national defense. Their participation was made possible by their respective institutions granting time normally devoted to academic duties.

Development of Program

The first meeting of the regional advisers was held in Washington on October 31 and November 1, 1940. Those in attendance agreed that each adviser could aid the program most effectively by keeping in close touch with the defense industries and engineering colleges of his region; acting as chairman of a regional committee of engineering college representatives, each of whom was responsible for the engineering defense training program of his own institution; and keeping the members of this committee fully informed of actions taken and reports made at meetings of regional advisers with representatives of the U. S. Office of Education. While the U. S. Commissioner of Education must maintain official contacts with educational institutions, the regional adviser could provide an informal and more per-

sonal relationship with the institutions that would greatly facilitate progress.

At the second meeting of the National Advisory Committee, consideration was given to 358 course proposals which had by that time been submitted by 72 institutions. In considering these proposals general policies were recommended for the guidance of the staff in approving other courses subsequently received. The committee agreed that the following criteria should be used in evaluating proposals:

1. Demonstration of a defense need for the course.
2. Special facilities available at the institution, in equipment and staff, for the proposed instruction.
3. Location of the institution in respect to the training need.
4. Availability of a suitable number of qualified trainees.
5. Reasonableness of the estimated cost.

Immediately after this meeting 64 institutions were notified that one of more of their preliminary proposals for EDT courses had been approved, the total number of approvals issued at this time covering 250 courses. One class actually met on December 9, 1940, and a few others were organized in December, but, because of the necessity of perfecting arrangements for the new activity and of enrolling trainees, instruction in the majority of these courses did not begin until January.

Subsequent meetings of the National Advisory Committee were helpful in clarifying procedures and in bringing about effective cooperation between the engineering colleges and the U. S. Office of Education. They facilitated a two-way exchange of information that resulted in a clear perception in the field of the EDT program as an integrated Nation-wide effort, and at the same time brought to the EDT staff current information on problems arising in the local areas.

Operating Procedures

When an engineering institution, either through the regional committee or through its own contacts with industry, discovered a need for defense training which it was able to meet, it prepared a preliminary proposal on a form furnished by the U. S. Office of Education. This proposal constituted a formal request for authority to organize the course. Information was given therein on the nature and extent of the defense need to be met, the number and qualifications of trainees it was proposed to enroll, the method by which these trainees would be placed in employment after completing the course, the names and qualifications of the proposed instructors, and the estimated cost of the course for maximum desired, and minimum numbers of trainees. Cost figures were broken down to show the cost of organization, administration, instruction, additional space and equipment, and other items.

Upon receipt in the U. S. Office of Education of this preliminary proposal it was analyzed and checked as to conformity with basic requirements; whether the course came within the intent of the law; whether a real need for the proposed training was shown; whether the course was well planned to accomplish the desired purpose; whether staff and equipment were adequate; whether the unit cost was reasonable; and other considerations. If the information given on the proposal was ambiguous or inadequate, correspondence with the institution was necessary to secure supplementary information. If the proposal was approved, a formal authorization to organize the course was executed, attached to the duplicate copy of the proposal, and returned to the institution. The original copy was then sent to the accounting unit, which earmarked the funds expected to be needed to pay for the cost of the course. Submission and approval of a formal plan was a prerequisite to participation in the program by any institution.

When an institution received approval for a preliminary proposal it proceeded to organize the course, enroll students, and begin instruction. If the minimum number of students approved for the course were not obtained the course was cancelled; otherwise, after the class had met for 2 weeks a final proposal for the course was prepared by the institution on the basis of actual enrollment and a much more definite knowledge of probable cost. This was sent to the Office of Education where it went through the same routine of examination. If approved, the accounting unit substituted it for the corresponding approved preliminary proposal, revised its records, and prepared a voucher for the amount approved in the final proposal as the budget for the course. This voucher, when signed by the U. S. Commissioner of Education, was sent to the U. S. Treasury, which disbursed the amount to the institution. After the completion of instruction in the program of an institution a final report was prepared and submitted by the institution, and any unexpended balance from the budget amounts for approved courses was returned to the U. S. Treasury. Each of the 2,354 proposals approved under the EDT program during the fiscal year ending June 30, 1941, followed the procedure just outlined. In addition, several hundred others that could not be approved received careful examination.

Approvals were granted under the EDT program for courses in which the instruction was to begin not later than June 23, 1941, and to be completed by September 30, 1941. A substantial proportion of the EDT enrollment was in classes that continued in session during the summer of 1941. Such revisions in authorized enrollments and allotment of funds as took place after June 30, 1941, because of the cancellation of preliminary proposals or the substitution therefor of final proposals, could only be downward.

Types of Instruction Provided

Regional differences in defense training needs, in facilities for instruction, and in the availability of qualified students resulted in many variations in the EDT programs at individual institutions. Some courses were designed to prepare students for employment in defense work; others to up-grade those already so employed. Some required the full time of the student; others were given after working hours. The time necessary to complete the course varied from a few weeks to several months, although the most prevalent length was between 12 and 16 weeks. Classes were held both on and off the college campuses, utilizing the facilities of extension centers, noneligible colleges, high schools, and industrial plants.

The purpose of the program, "to meet the shortage of engineers with specialized training in fields essential to the national defense," was accomplished in a number of ways: (1) by giving professional engineers instruction in defense specialties in which they had hitherto had no experience, e. g., classes in aircraft structural design for civil engineers; (2) by giving employees in defense plants training that would fit them for more difficult and responsible work; (3) by teaching the fundamentals of engineering to those without previous technical training or experience—graduates of high schools or of nonengineering college courses—to fit them for service as assistants to engineers and for subprofessional duties in the engineering field.

In the earlier planning stage it was assumed that, although in-service training would necessarily be part-time instruction given after working hours, most of the pre-employment training could take the form of intensive full-time courses. Experience soon showed that it was difficult to procure suitable numbers of qualified trainees to enroll in full-time courses; most of the persons qualified for admission to the courses were already employed. A number of proposed courses on a full-time basis had to be cancelled because the minimum number of qualified trainees could not be obtained. Accordingly, much of the "pre-employment" training given under EDT took the form of evening courses for persons preparing to shift from nondefense and nonengineering jobs to technical defense employment. An exception was the considerable number of full-time courses conducted during the summer of 1941. Most of these started in June, when it was possible to enroll large numbers of students just graduated from high schools and from nonengineering college courses. Even with these included, the number of EDT trainees in full-time courses was less than 15 percent of the total.

Subjects taught under the EDT program varied from basic engineering courses like Engineering Drawing and Strength of Materials to highly refined specialties such as Aircraft Engine Design, X-ray Inspection, and Ultrahigh-frequency Radio Technique. General

Engineering and other courses of broad application had the greatest enrollment, followed closely by courses classified under Mechanical Engineering and Industrial Engineering. Smaller, but still large, enrollments were in the fields of Aeronautical, Metallurgical, Civil, and Electrical Engineering, and in Marine Engineering and Naval Architecture.

With such variations in course content, it is obvious that corresponding variations were needed in qualifications required for admission to the separate courses. Since all instruction under the EDT program was to be of college grade, the minimum prerequisite for any EDT trainee corresponded with the usual requirement for admission as a freshmen to a regular engineering curriculum: High-school graduation with a minimum of 2 years of mathematics. For the more advanced subjects the required prerequisites were 2 or 3 years of engineering college work, the holding of a specified degree, or even in a few cases the completion of certain graduate work, depending upon the character of the course. In practice, formal educational requirements were relaxed somewhat for prospective enrollees whose practical experience qualified them to handle the courses satisfactorily.

Aside from the necessary educational and experience requirements, there were few restrictions upon EDT enrollees. Discrimination because of sex, race, or color was forbidden by the Act. No age limits were set up, nor was there any citizenship requirement, but trainees were required to be employable in defense work and, unless already so engaged, to be in a position to accept such employment upon completing the course. Each institution was responsible for the qualifications and admissibility of applicants for the EDT courses in its program.

Wide Geographical Distribution

Many of the participating institutions conducted a substantial portion of their EDT program off their campuses, setting up classes at locations where the demand for training was most heavily concentrated. Without attempting an exhaustive list, it may be mentioned by way of example that Pennsylvania State College held classes in more than 100 towns; Purdue University in 16; West Virginia University in 12; The University of California in 9; and Alabama Polytechnic Institute in 9. In general, it may be stated that wherever there was an expressed need for engineering defense training, some nearby college was willing to set up the necessary courses to satisfy it. Thus, for example, Cornell University, located at Ithaca, N. Y., conducted numerous courses for defense industries in Buffalo, Binghamton, Elmira, and Geneva, in addition to its on-campus program. The University of Texas, which had an extensive on-campus program at Austin, also set up courses in marine engineering and in naval architecture for the benefit of shipyards in Orange. The University

of Washington conducted a group of courses in aircraft engineering at Seattle as well as many in the field of marine engineering and naval architecture at Bremerton. Many other similar examples could be cited.

Courses were approved in every State, the District of Columbia, and Puerto Rico, although in one western State no instruction was actually given because of the lack of qualified students. Heaviest demand was for in-service training and, therefore, the greatest enrollments were in the industrial States, but institutions in areas with little or no defense industry did an excellent job in providing a reservoir of trained workers for employment elsewhere. It is interesting to note that little difficulty was reported in placing trainees.

An important phase of the EDT program has been the rapid development of industrial cooperation in the planning and conducting of courses. As the number of defense contract awards increased and more plants expanded their production, industry after industry recognized the fact that personnel with the needed training and experience was no longer available in adequate numbers and intensive training of the type provided for by the EDT program was urgently needed.

Training for the Armed Forces

One important feature of the EDT program was the provision of specialized technical training for officers, enlisted men, and civilian employees of the U. S. Army and Navy. While it was by no means unusual for members of these services to enroll in the general courses on their own initiative, many special classes were organized to give the particular instruction desired, in response to specific requests from commanding officers. Many of these were full-time courses to which trainees were assigned by their superiors.

The fact that modern warfare is highly mechanized and requires the services of technically trained personnel in large numbers is now well recognized. The tremendous expansion that is taking place in the armed forces has resulted in a need for many more officers with a high degree of technical knowledge and has placed a heavy strain upon the specialist training facilities. Under these circumstances both the Army and the Navy have availed themselves of the opportunity offered by the EDT program to utilize the services of colleges and universities well qualified to give instruction of the kind desired.

A typical example of this cooperation is the organization of Diesel Engineering courses for the U. S. Navy. A large proportion of the new and old vessels currently being acquired for naval services are diesel-engine driven; consequently there is a need for many more engineer officers qualified to supervise the operation and maintenance of this type of machinery. Early in the EDT program the Navy Department assigned about 50 officers to full-time courses in Diesel

Engineering at the Pennsylvania State College and Lehigh University. Subsequent requests from the Navy resulted in the extension of the diesel engineering training program to North Carolina State College, Cornell University, and the University of California. A total of 228 naval officers were given this instruction before the closing of the EDT program. Plans are now being made for continuing this training program on an enlarged scale at these and other institutions.

Statistical and Financial Tables

Tables 1 to 4 which follow supply detailed information on: *Enrollments in the three programs of less than college grade (table 1); Cumulative payments to States and Territories by types of programs (table 2); Authorized enrollments and allotments by States and institutions for the Engineering Defense Training Program (table 3);* and *Distribution of enrollment among engineering fields (table 4).*

TABLE 1.—*Total enrollments in national defense vocational training programs for fiscal year ended June 30, 1941* [1]

State or Territory	Supplementary and pre-employment program		Out-of-school rural and nonrural youth	Youth employed on NYA work projects
	Supplementary	Pre-employment		
1	2	3	4	5
Total	467,614	420,530	254,511	285,541
Alabama	7,097	1,763	11,468	6,958
Arizona	315	611	1,034	809
Arkansas	2,552	768	9,044	5,057
California	56,096	45,099	3,203	5,297
Colorado	3,666	4,495	3,322	2,431
Connecticut	8,918	10,292	145	1,614
Delaware	1,185	757	441	365
Florida	16,952	5,083	5,048	4,899
Georgia	9,873	4,181	12,184	2,374
Idaho	235	1,371	1,396	728
Illinois	30,432	25,338	4,275	18,099
Indiana	14,414	10,931	4,215	6,285
Iowa	2,834	1,103	3,419	2,637
Kansas	2,825	7,557	2,908	4,433
Kentucky	7,898	4,127	12,175	6,982
Louisiana	5,800	3,746	7,245	5,576
Maine	513	1,338	1,290	7,255
Maryland	12,691	7,662	2,578	1,290
Massachusetts	8,376	11,315	680	1,617
Michigan	23,041	25,598	7,155	9,758
Minnesota	2,750	2,864	4,227	4,393
Mississippi	3,447	3,237	13,528	7,148
Missouri	3,749	6,256	6,814	14,628
Montana	132	827	2,052	1,452
Nebraska	19	641	1,862	6,564
Nevada	620	43	371	170
New Hampshire	1,639	1,284	517	
New Jersey	14,176	16,042	1,218	7,495
New Mexico	1,704	490	1,384	3,091
New York	82,896	66,979	1,266	14,053

[1] P. L. 668 and Subdivisions 1, 4, and 5 of P. L. 812, 76 Cong., 3d sess.

TABLE 1.—*Total enrollments in national defense vocational training programs for fiscal year ended June 30, 1941*—Continued

State or Territory	Supplementary and pre-employment program		Out-of-school rural and nonrural youth	Youth employed on NYA work projects
	Supplementary	Pre-employment		
1	2	3	4	5
North Carolina	2,697	2,229	17,274	16,347
North Dakota		662	1,531	1,264
Ohio	8,278	18,424	7,309	20,487
Oklahoma	5,048	2,717	9,167	5,038
Oregon	4,593	9,791	2,142	3,341
Pennsylvania	38,308	46,097	8,512	26,601
Rhode Island	823	1,468	39	430
South Carolina	2,525	3,057	10,453	5,654
South Dakota		698	917	1,274
Tennessee	4,825	9,391	12,568	4,493
Texas	14,973	10,185	26,782	27,848
Utah	4,119	3,356	1,388	1,611
Vermont	656	544	904	837
Virginia	14,091	2,804	6,610	4,516
Washington	14,306	8,464	1,831	3,205
West Virginia	4,920	6,357	7,467	3,970
Wisconsin	5,403	17,293	8,094	137
Wyoming	3,828	1,099	1,373	418
District of Columbia	1,641	1,813	713	1,123
Hawaii	3,364	562	462	
Puerto Rico	6,371	1,721	2,511	3,489

TABLE 2.—*Vocational Training for Defense Workers—Cumulative payments to States and Territories, by types of programs, July 1, 1940–June 30, 1941* [1]

State or Territory	Pre-employment refresher and supplementary courses		Rural out-of-school youth (including instruction and equipment)	NYA project workers (including instruction and equipment)
	Instruction costs	Purchase of equipment for use in training		
1	2	3	4	5
Total	$32,430,000.00	$7,919,870.41	$9,890,411.90	$7,245,429.63
Alabama	237,619.46	123,081.31	454,095.00	176,715.00
Arizona	36,737.92		48,678.00	18,365.00
Arkansas	139,635.40	5,129.95	334,513.00	121,027.50
California	2,313,712.97	1,534,285.96	179,913.00	265,553.75
Colorado	273,416.24	12,000.00	92,602.00	88,926.80
Connecticut	945,007.00	285,980.00	30,589.00	52,973.75
Delaware	106,311.50	19,831.17	23,655.88	13,365.00
Florida	382,763.87	94,280.49	179,754.49	92,070.00
Georgia	357,699.88	153,051.66	499,620.00	200,475.00
Idaho	118,862.50	4,993.21	74,509.00	43,987.50
Illinois	1,754,675.98	410,525.29	203,710.00	368,228.00
Indiana	652,949.47	141,058.66	186,750.00	180,427.50
Iowa	147,767.95	51,707.36	189,310.16	77,091.44
Kansas	280,929.58	99,888.29	168,160.00	55,316.25
Kentucky	374,610.42	27,530.00	378,374.00	143,697.50
Louisiana	278,205.18	54,204.67	274,810.00	84,795.00
Maine	188,244.04	33,982.95	71,950.00	97,322.08
Maryland	504,224.00	260,644.74	116,487.00	48,633.75
Massachusetts	1,331,100.63	245,087.54	38,974.00	116,572.50
Michigan	1,942,253.83	196,324.08	216,852.00	352,695.00

[1] Subdivision (1) Public, No. 668 and Subdivisions (1), (2), (4), and (5) Public, No. 812, 76th Cong., 3d sess.

TABLE 2.—*Vocational Training for Defense Workers—Cumulative payments to States and Territories, by types of programs, July 1, 1940–June 30, 1941*—Continued

State or Territory	Pre-employment refresher and supplementary courses		Rural out-of-school youth (including instruction and equipment)	NYA project workers (including instruction and equipment)
	Instruction costs	Purchase of equipment for use in training		
1	2	3	4	5
Minnesota	$340,642.93	$11,120.00	$218,781.00	$146,272.50
Mississippi	313,840.00	63,686.18	441,749.34	136,620.00
Missouri	392,039.02	36,887.24	286,907.00	211,612.50
Montana	58,504.75		51,086.31	29,700.00
Nebraska	64,273.25	6,885.00	136,597.00	82,417.50
Nevada	25,564.98		25,760.00	5,667.50
New Hampshire	131,731.45	16,748.70	30,240.00	17,245.35
New Jersey	964,694.68	274,309.90	72,874.00	131,139.20
New Mexico	72,271.62		72,288.52	39,567.51
New York	7,927,438.13	535,627.97	201,120.00	731,362.50
North Carolina	150,054.87	17,882.48	558,139.00	211,612.50
North Dakota	58,410.96		90,390.00	51,307.50
Ohio	1,588,096.44	393,646.00	303,186.14	398,670.15
Oklahoma	253,432.41		282,588.00	158,152.50
Oregon	623,175.09	95,870.47	67,561.00	70,684.79
Pennsylvania	2,023,511.22	937,011.00	394,748.00	557,617.50
Rhode Island	176,188.91	80,051.10	13,660.00	18,562.50
South Carolina	231,325.70	1,922.50	342,376.00	148,800.00
South Dakota	45,542.90		77,549.00	25,790.00
Tennessee	347,972.79	236,813.63	397,580.00	85,758.75
Texas	807,889.21	473,475.83	748,873.00	435,729.00
Utah	414,793.68	54,780.02	61,915.00	61,614.64
Vermont	31,521.25	54,650.00	35,120.00	17,077.50
Virginia	367,038.92	208,538.14	360,193.00	180,395.48
Washington	432,919.21	326,742.81	83,001.00	88,357.50
West Virginia	642,209.06	163,031.33	219,293.00	123,993.62
Wisconsin	913,445.81	151,850.55	206,721.00	366,320.00
Wyoming	253,021.42	24,752.23	46,260.14	16,519.75
District of Columbia	262,132.34		29,606.77	36,995.57
Hawaii	51,926.15		29,867.64	
Puerto Rico	97,663.03		241,074.51	56,430.00
Virgin Islands				5,197.50

TABLE 3.—*Engineering Defense Training—Authorized enrollments and allotments of funds, by States and institutions (as of June 30, 1941)*

Institutions by States	Total authorized enrollment	Total allotment
Total, United States	137,656	$8,795,171
ALABAMA	7,193	247,552
Alabama Polytechnic Institute	5,064	166,644
University of Alabama	2,129	80,908
ARIZONA:		
University of Arizona	18	2,131
ARKANSAS:		
University of Arkansas	101	3,891
CALIFORNIA	6,601	357,548
California Institute of Technology	821	123,023
Stanford University	93	4,969
University of California	4,092	109,462
University of Santa Clara	121	8,920
University of Southern California	1,474	111,174

TABLE 3.—*Engineering Defense Training—Authorized enrollments and allotments of funds, by States and institutions (as of June 30, 1941)*—Continued

Institutions by States	Total authorized enrollment	Total allotment
COLORADO	3,201	$171,797
Colorado School of Mines	540	37,523
Colorado State Agricultural and Mechanic Arts	518	30,995
University of Colorado	1,378	67,906
University of Denver	765	35,373
CONNECTICUT	4,585	171,123
University of Connecticut	2,628	108,485
Yale University	1,957	62,638
DELAWARE:		
University of Delaware	468	18,576
FLORIDA:		
University of Florida	1,545	170,938
GEORGIA:		
Georgia School of Technology	370	20,990
ILLINOIS	5,356	258,284
Bradley Polytechnic Institute	217	6,479
Illinois Institute of Technology	4,755	242,272
Northwestern University	239	5,100
University of Illinois	145	4,433
INDIANA	7,179	234,470
Purdue University	5,735	185,842
Rose Polytechnic Institute	832	35,555
University of Notre Dame	612	13,073
IOWA	1,389	79,015
Iowa State College of Agricultural and Mechanic Arts	559	43,155
State University of Iowa	830	35,860
KANSAS	3,733	179,324
Kansas State College of Agriculture and Applied Science	536	55,768
University of Kansas	3,197	123,556
KENTUCKY	777	37,423
University of Kentucky	301	15,440
University of Louisville	476	21,983
LOUISIANA	884	63,970
Louisiana Polytechnic Institute	72	5,219
Louisiana State University	236	13,779
Southwestern Louisiana Institute	106	7,784
Tulane University of Louisiana	470	37,188
MAINE:		
University of Maine	2,034	37,879
MARYLAND	3,270	162,114
Johns Hopkins University	1,151	56,853
University of Maryland	2,119	105,261
MASSACHUSETTS	3,141	246,516
Harvard University	100	7,875
Massachusetts Institute of Technology	992	135,621
Massachusetts State College	42	650
Northeastern University	1,014	41,325
Tufts College	709	48,627
Worcester Polytechnic Institute	284	12,418
MICHIGAN	6,162	205,349
Detroit Institute of Technology	274	9,865
Lawrence Institute of Technology	812	17,728
Michigan College of Mining and Technology	74	4,968
Michigan State College of Agriculture and Applied Science	360	16,351
University of Detroit	367	18,775
University of Michigan	1,536	62,261
Wayne University	2,739	75,401
MINNESOTA:		
University of Minnesota	910	121,993
MISSISSIPPI:		
Mississippi State College	133	19,302
MISSOURI	1,357	96,078
Missouri School of Mines and Metallurgy	146	18,887
Washington University	1,211	77,191

TABLE 3.—*Engineering Defense Training—Authorized enrollments and allotments of funds, by States and institutions (as of June 30, 1941)*—Continued

Institutions by States	Total authorized enrollment	Total allotment
MONTANA:		
Montana School of Mines	25	$2,732
NEBRASKA:		
University of Nebraska	335	21,732
NEVADA:		
University of Nevada	34	813
NEW HAMPSHIRE	963	39,256
Dartmouth College	325	9,495
University of New Hampshire	638	29,761
NEW JERSEY	3,695	359,068
Newark College of Engineering	1,628	147,220
Princeton University	218	18,316
Rutgers University	910	75,277
Stevens Institute of Technology	939	118,255
NEW MEXICO	333	29,475
New Mexico College of Agriculture and Mining	46	4,523
University of New Mexico	287	24,952
NEW YORK	10,231	654,906
Brooklyn Polytechnic Institute	423	32,058
Clarkson College of Technology	160	4,495
College of the City of New York	817	66,091
Columbia University	405	39,542
Cornell University	3,273	101,324
Defense Training Institute	362	133,639
Manhattan College	613	37,147
New York University	1,702	94,930
Pratt Institute	169	8,130
Rensselaer Polytechnic Institute	558	60,335
Syracuse University	508	15,690
Union College	709	38,380
University of Rochester	532	23,145
NORTH CAROLINA	960	140,799
Agricultural and Technical College of North Carolina	36	3,773
Duke University	67	6,820
North Carolina State College	857	130,206
NORTH DAKOTA	246	33,144
North Dakota Agriculture College	55	2,675
University of North Dakota	191	30,469
OHIO	9,296	458,258
Antioch College	125	2,410
Case School of Applied Science	1,812	114,828
Fenn College	929	54,654
Ohio Northern University	647	38,284
Ohio State University	1,260	94,813
Ohio University	1,319	49,322
University of Akron	574	9,386
University of Cincinnati	385	8,155
University of Dayton	265	5,789
University of Toledo	1,980	80,617
OKLAHOMA	1,537	49,663
Langston University	97	1,399
Oklahoma Agricultural and Mechanical College	25	7,219
University of Oklahoma	1,166	33,202
University of Tulsa	249	7,843
OREGON:		
Oregon State College	55	1,691
PENNSYLVANIA	34,530	3,211,137
Bucknell University	368	24,507
Carnegie Institute of Technology	3,415	289,969
Drexel Institute of Technology	3,192	212,740
Grove City College	82	7,408
Lafayette College	385	26,111
Lehigh University	378	34,339
Pennsylvania State College	18,111	1,763,970
Swarthmore College	916	49,755
University of Pennsylvania	2,851	292,644
University of Pittsburgh	4,477	488,538
Villanova College	355	21,156

TABLE 3.—*Engineering Defense Training—Authorized enrollments and allotments of funds, by States and institutions (as of June 30, 1941)*—Continued

Institutions by States	Total authorized enrollment	Total allotment
RHODE ISLAND	557	$27,963
Brown University	387	23,984
Rhode Island State College	170	3,979
SOUTH CAROLINA	934	61,567
The Citadel	334	19,988
Clemson Agricultural College	88	8,505
State Agricultural and Mechanical College	145	4,354
University of South Carolina	367	28,720
SOUTH DAKOTA:		
South Dakota State College of Agriculture and Mechanic Arts	267	10,793
TENNESSEE	1,039	60,637
Tennessee Polytechnic Institute	35	1,350
University of Tennessee	494	11,337
Vanderbilt University	510	47,950
TEXAS	2,033	252,990
Agricultural and Mechanical College of Texas	915	136,138
College of Mines and Metallurgy	40	5,860
Southern Methodist University	456	31,032
Texas College of Arts and Industries	79	8,930
Texas Technological College	41	6,775
University of Texas	502	64,255
UTAH	503	48,257
University of Utah	460	46,407
Utah State Agricultural College	43	1,850
VERMONT	205	12,681
Norwich University	185	11,117
University of Vermont	20	1,564
VIRGINIA	2,048	108,979
University of Virginia	535	32,695
Virginia Military Institute	203	9,000
Virginia Polytechnic Institute	1,310	67,284
WASHINGTON	939	27,374
Gonzaga University	21	380
State College of Washington	65	5,340
University of Washington	853	21,654
WEST VIRGINIA:		
University of West Virginia	3,424	119,254
WISCONSIN	299	24,786
Marquette University	99	5,962
University of Wisconsin	200	18,824
WYOMING:		
University of Wyoming	136	8,811
DISTRICT OF COLUMBIA	2,527	115,992
Catholic University of America	205	12,064
George Washington University	1,780	49,735
Howard University	542	54,193
PUERTO RICO:		
University of Puerto Rico	98	6,150

TABLE 4.—*Engineering Defense Training—Distribution of enrollment among engineering fields* [1]

Course classification	Total actual and authorized enrollment
AERONAUTICAL ENGINEERING	11,945
Fundamentals	1,324
Inspection and testing	2,244
Aircraft (complete planes)	1,461
Structures	4,601
Other	2,315
ARCHITECTURAL ENGINEERING	433
BASIC SCIENCES	2,407
Mathematics	2,073
Other	334
CHEMICAL ENGINEERING	6,117
Inspection and testing	1,162
Explosives	2,691
Production	801
Other	1,463
CIVIL ENGINEERING	9,790
Inspection and testing	866
Sanitary, drainage, etc	757
Structures	3,020
Surveying and mapping	3,755
Other	1,392
ELECTRICAL ENGINEERING	8,397
Fundamentals	2,012
Communications	2,353
Electronics	1,189
Power generation and transmission	1,814
Other	1,029
GENERAL ENGINEERING	32,896
Fundamentals	9,508
Engineering drawing and descriptive geometry	23,072
Other	316
INDUSTRIAL ENGINEERING	23,787
Industrial management	2,519
Production engineering	11,502
Production supervision	8,458
Other	1,308
MARINE ENGINEERING AND NAVAL ARCHITECTURE	3,593
Hulls	1,908
Equipment	620
Other	1,065
MECHANICAL ENGINEERING	27,217
Fundamentals	3,223
Inspection and testing	7,631
Internal-combustion engines	1,047
Machine design	7,101
Steam power	569
Tools and dies	5,625
Welding	1,112
Other	909
METALLURGICAL ENGINEERING	9,196
Metallurgy and Metallography	5,157
Physical metallurgy	1,144
Other	2,895
MINING ENGINEERING	336
UNCLASSIFIED	1,542
TOTAL	137,656

[1] Based upon the cumulative total of reported actual enrollments and additional enrollment authorized as of June 30, 1941.

II

GENERAL SERVICES TO EDUCATION

APPARENT throughout this report are the increased demands made upon the staff of the U. S. Office of Education during the past year as a result of the national defense program. One indication of these increased demands is to be found in the incoming mail to the U. S. Office of Education, for the fiscal year, inquiries for educational information and for services totaled 441,326. No record is kept of the thousands of interviews or other calls that are also inquiries for information or service.

Not only in the emergency programs for the training of defense workers and in the activities of the Vocational Education Division of the U. S. Office of Education, but in the various other divisions was this demand felt. Specialists throughout the Office participated in important conferences to find ways in which the schools could help in national defense; assisted in the preparation of informational materials for use of school administrators, teachers, and other educational leaders; represented organized education on regional advisory councils on health, welfare, and related activities affecting the national defense; held conferences with Army and Navy officials and the Public Works Administration in efforts to provide school facilities for children residing in defense areas; collaborated with the Treasury Department in a program to aid school children in understanding the part they can play through purchase of defense savings stamps; and cooperated with various governmental and voluntary agencies on programs which concern the children and youth of the Nation. The story of these efforts runs through all divisions of this report.

Preparation of Education and National Defense Pamphlet Series

Under direction of the Assistant Commissioner, and with the advice of a committee of 11 staff members, the U. S. Office of Education undertook the publication of a series of pamphlets on "Education and National Defense." Authors of the pamphlets include both staff members and other professional workers prominent in education and related fields. The series as planned numbers 25 publications, dealing with various aspects of the defense program as it affects the schools and other educational agencies. Both teachers' and leaders' manuals, designed to give suggestions for action in terms of defense needs, and informative pamphlets dealing with certain problems which have been made acute because of the present emergency, are included. Among

the pamphlets off the press are the following titles: *What the Schools Can Do, Home Nursing Courses in High Schools, Hemisphere Solidarity, Education Under Dictatorships and in Democracies,* and *Democracy in the Summer Camp.* Two more were in press at the close of the year: *How Libraries May Serve,* and *Food For Thought: The School's Responsibility in Nutrition Education.* Among pamphlets in preparation are the following titles: *Our Country's Call to Service, Sources of Information on National Defense, Community Programs, What Democracy Means, Living Democracy in Secondary Schools, Populations Adrift, Appreciating Our Latin-American Neighbors, This America: A Guide to the Study of Inter-American Relationships, Techniques for Reading News, Guidance Problems in the Defense Situation, Vocational Rehabilitation and National Defense.*

Information Exchange on Education and the National Defense

This new service, made possible by a Foundation grant available to the U. S. Office of Education for experimental purposes on emergency services to schools, was set up in the U. S. Office of Education in January 1941. Although the number of staff members varied from month to month, at its peak, the first of June, it consisted of four professional workers—specialists in elementary, secondary, and higher education, and a librarian—and three clerks.

The purpose of this service is to provide a clearing house for the collection, analysis, and dissemination of information regarding practices of school systems and institutions of higher education as they relate to the National Defense. Schools were solicited for materials prepared during the year or given new emphasis recently in connection with the defense program. Selections were made from the material submitted and 50 copies of each item selected for use were requested so that a sufficient number of "packets" could be made up to meet demand for materials. (A "packet" is a collection of approximately 10 individual items which bear on a common problem; they are bound together and sent out to schools upon request on a 2-week loan basis.) Forty loan packets were available as of June 30, 1941.

A catalog of the packets and materials for loan was widely distributed. Supplements to this catalog were prepared and issued as additional packets became available. By June 30, the Exchange had loaned 1,282 packets and 522 separate pieces. The packets cover all levels of education and deal with a variety of subjects. The following titles are representative: The role of the elementary school in the national emergency; The role of the secondary school in the national emergency; The role of higher education in the national emergency; Understanding and practicing democracy in the elementary school; Good citizens understand, appreciate, and work with others to improve school and community; Good school citizens appreciate and help to conserve the Nation's natural resources; National Defense and

vocational education for youth and adults; and The library in relation to education and national defense.

Inter-American Educational Relations

In addition to the regular activities in the field of Inter-American educational relations, such as the evaluation of credentials of foreign students who enroll in colleges and universities in this country, studies of educational systems in other countries, and the interchange of students and professors with the American republics, the U. S. Office of Education outlined a program of special activities relating to Inter-American educational relations. This program was set up to promote the further development of understanding and appreciation of the other American republics.

General Advisory Committee to the U. S. Office of Education on Inter-American Educational Relations

Arthur Scott Aiton, Professor of History, University of Michigan, Ann Arbor, Mich.
Edna Dean Baker, President, National College of Education, Evanston, Ill.
Herbert E. Bolton, Professor of History, University of California, Berkeley, Calif.
Isaiah Bowman, President, Johns Hopkins University, Baltimore, Md.
Sturgis E. Leavitt, Professor of Spanish, University of North Carolina, Chapel Hill, N. C.
Waldo Leland, Director, Council of Learned Societies, Washington, D. C.
Leo S. Rowe, Director, Pan American Union, Washington, D. C.
J. Carey Taylor, Assistant Superintendent, Department of Education, Baltimore, Md.
Francis Spaulding, Dean of School of Education, Harvard University, Cambridge, Mass.
Paul R. Hanna, Professor of Education, Stanford University, Stanford University, Calif.
A. Curtis Wilgus, Professor of History, George Washington University, Washington, D. C.
Rev. Wm. J. Cunningham, Professor of Education, University of Notre Dame, Notre Dame, Ind.

One study included in the plan, *Inter-American Friendship Through the Schools*, was completed by the end of the fiscal year. This was a study of what elementary and secondary schools are doing for the development of cultural relations. Three of the Education and National Defense pamphlets also relate directly to this field of Inter-American activity.

Early in the spring of 1941 a conference of representatives of a dozen publishing companies was held in the U. S. Office of Education to advise on a survey of teaching materials on Latin America. This survey includes both courses of study and textbooks, and is to discover topics to be treated, the space or time devoted to each, the level of difficulty of available material, and the adequacy of existing materials.

This study, it is hoped, will help to answer the questions, "In what areas are there shortages of well-written material on Latin America?" and "How may courses of study be made to provide an adequate variety of material?"

In this program the Office cooperated with the Coordinator of Commercial and Cultural Relations Between the American Republics. At the request of the executive secretary of the education committee of the Coordinator's office the Commissioner of Education sent letters to school officials urging further attention to Inter-American matters in their school programs.

Also at the suggestion of the executive secretary of the education committee, the Office proposed for consideration and financial assistance a series of 15 projects on Inter-American educational relations on which the Office would like to cooperate with the Coordinator's office. Five of the projects have been approved and with information to the effect that funds were being transferred to the account of the U. S. Office of Education. These projects are as follows:

1. Listing and distribution of teaching materials on other American peoples for the United States schools.
2. Exhibits of books and other materials on Latin America for use in United States schools.
3. Exhibits of educational material relating to the United States for use at Inter-American expositions, congresses in other American Republics, and on request at Ministries of Education and libraries in Latin America.
4. Publication of bulletin entitled *Inter-American Friendship Through the Schools.*
5. Teacher-training and demonstration school centers in the United States for improving teaching concerning other Americas.

Participation in the Regional Coordinating Councils as established by the Coordinator of Health, Welfare, and Related Activities

The U. S. Office of Education is one of the Federal agencies whose programs are necessarily involved in these aspects of National Defense. The Commissioner therefore assigned 14 staff members from practically all divisions and services of the Office to work under the direction of the Assistant Commissioner as representatives or alternates on the Regional Councils. Materials were prepared and sent to the Regional Coordinators acquainting them with the work of the Office, and representatives have attended meetings in the various regions and advised with the several coordinators when they were in the area on field trips.

Study of School Facilities in Defense Areas

The expansion of existing and the creation of new Army, Navy, and industrial establishments with the resulting concentration of population in hundreds of places throughout the country in carrying on activities essential to the National Defense brought to the fore many problems of planning and providing community facilities. Not the least of these problems is that of providing school facilities in the areas

where the school population mounts above the capacity of the school facilities that the community could normally supply. The question, "How large is the school problem resulting from the National Defense Program?" had to be answered. On October 9, 1940, Senator Walsh introduced S. Res. 324 (76th Cong.) calling upon the Secretary of the Navy and the Secretary of War "to make a full and complete study and investigation of all school facilities at or near navy yards, Army and Navy reservations, and bases at which housing programs for defense workers are being carried out or are contemplated." These Secretaries requested the U. S. Office of Education to make the study called for by the resolution.

In December, 1940, the Office sent to State superintendents and commissioners of education a form and instructions for collecting information for evaluating the adequacy of existing school facilities and for preparing estimates of facilities needed to accommodate children of school age of personnel connected with projects essential to the defense program. Representatives of the chief State school officers cooperated with local school authorities in obtaining the information. In addition, numerous field trips were made to view at first-hand activities in Army, Navy, and industrial establishments where expanding activities had created school problems.

Reports received showed that there was an imperative need for additional school facilities in defense areas, and that many local school administrative units faced with the problem of immediately providing school plant facilities and teachers for a large number of additional children, were without authority to obtain through regular channels the necessary funds. In an official report (incorporated in S. Doc. 20—77th Cong.) the U. S. Commissioner of Education recommended the following plan for paying the cost of school needs in defense areas:

1. For children residing on public property the Federal Government should bear the cost of required capital outlay and current expense, except that when such property is liquidated, a pro rata part of the cost should be assumed by the local school administrative unit or units involved.
2. For children residing on private property not subject to immediate taxation, the Federal Government should lend to the local school administrative unit the required funds for capital outlay and current expense that cannot be derived locally until the property in question appears on the tax rolls, except that during the non-tax-producing period the Federal Government should pay, in lieu of taxes, its pro rata part of the current expenses.

Legislation (Public, No. 137) was enacted the latter part of the year authorizing an appropriation of $150,000,000 for public works made necessary by the defense program, meaning "any facility useful or necessary for carrying on community life." Among the facilities mentioned are schools.

Estimates on file in the U. S. Office of Education as of May 15, 1941, indicated that from 300,000 to 350,000 children of school age would in September find themselves in localities without adequate school facilities, i. e., without school buildings and teaching personnel. Based on these figures, it was estimated that approximately $130,000,000 was needed for capital outlay, operation and maintenance, and salaries of teachers and other instructional costs.

A field staff of senior specialists on school facilities, working out of the offices of the 12 regional coordinators for health, welfare, and related activities, was employed the last of the fiscal year to assist the State and local school authorities in determining actual school needs arising from activities of the National Defense Program. These specialists report their findings and recommendations to the U. S. Office of Education as a basis for its certification of need to the Federal Works Agency.

"School needs" as determined include (*a*) school plant facilities in the form of new buildings, additions to and/or alterations of existing buildings; (*b*) transportation equipment necessary for full utilization of facilities in (*a*) above; (*c*) cost of operation and maintenance of school plants and of transportation provided by Federal funds ((*a*) and (*b*)) above; and (*d*) salaries of teachers and other costs of instruction necessary for the influx of defense-connected children.

Preparation of Materials to Acquaint Children With the Defense Savings Program

Schools of the Nation during the year manifested a broad interest in the cause of National Defense and indicated a desire to take part in any program to which they could make a contribution. To assist schools, the U. S. Office of Education and the Defense Savings Staff of the Treasury Department formulated a plan and invited participation of schools in developing an intelligent understanding and an active interest in the program of National Defense and the ways and means of implementing it. Jointly these two Federal agencies are preparing publications for use in the schools that will present in a clear and concise manner the changes now taking place in the theories and practices of government, the place of America in the changing world, our need for defense, the preparation of means for defense, and the methods of financing our total program for National Defense. The schools throughout the country have been advised of the plan and of the materials to be made available for their use by the Federal Government. The requests coming from the schools for copies of these materials when available for distribution are most gratifying.

Research and Publications

In spite of increased demands for participation in such programs as those just described, the staff has been fairly successful in maintaining

its programs of research and publication for which it is widely known and on which the profession and the general public alike depend. A total of 47 studies were completed during the year. These studies included the following fields: Organization and administration of public education, school program, biennial survey of education, series on State departments of education, series on education and national defense, libraries, education in other countries, personnel, miscellaneous bibliographies, directories, etc.

Field Service

The services of members of the professional staff are available to school officials and educational organizations insofar as resources permit. The following excerpts from letters received show types of requests which the Office considers it an obligation to fill if it is at all possible to do so:

From a State supervisor of elementary schools:

Probably the most pressing instructional need in Tennessee is an adjustment of the materials in the primary grades to the needs and abilities of children. The State law and the regulations of the State Board of Education permit children to enter the first grade as young as five years and six months. In other words, children who become six years of age by January 1st may enter the first of the school term. The development of reading readiness, the use of experience charts, preprimers, primers, and the first readers are too much for many of the children. As a result of this situation a large number of children are retained in the first grade. I would like your assistance in making an outline of work for the first three grades that will make it possible for more children to make normal progress.

From an assistant State superintendent in charge of instruction:

During the past year we have managed to cover about half of the State with our administrative conferences. During May we would like to spend some time appraising our effort and getting out our handbook. . . . We would like to have one of the U. S. Office of Education staff members serve on the conference team in Oakland County on May 8, and in Ingham County on May 9. In addition to this we would like to have him work with members of our staff on May 9 and the morning of May 10.

From the chairman of the Board of a university:

The Superintendent of Public Instruction and President of the State Council of Education of the State of Pennsylvania desires the University of Scranton to submit to him and his associates an "Education Program." . . . Your name has been given to me as one of the outstanding representatives of higher education in America. We would, therefore, like to have you consent to give to us, for and on behalf of the University of Scranton, either individually or in collaboration with others, the benefit of your advisory services in preparing for submission to the Superintendent of Public Instruction and the State Council of Education of Pennsylvania a proper "Education Program."

From the director of a junior college:

I have been asked to write, asking you for a representative from the Office of Education to meet with representatives of administration and faculty of the ten junior colleges of the State of Connecticut. . . . We would

particularly like to have someone who can speak with authority on the position of the Federal Government towards private junior colleges.

From a State superintendent of education:

We are planning . . . a very important piece of material which will aid the school libraries throughout the State. It is our plan to develop, through a committee of teachers from both elementary and secondary schools, a recommended book list from which purchases may be made by schools against the State-appropriated textbook fund. We are interested in developing a particular kind of list, one which contains valuable material in certain content fields which would be of use to teachers in developing their unit work. . . . We are wondering if it would be possible to secure some consultative services from you. It would seem that the most valuable help which you could give would be in the preliminary stages when we are setting up general plans for the work. Would it be at all possible for you to spend several days . . . with certain members of our instructional staff about April 28?

AMERICAN SCHOOL SYSTEMS

The American School Systems Division during the year made studies and furnished information and consultative service regarding State and local school organization and administration, the financing of schools, elementary and secondary school curriculums, supervision of instruction, school building problems, parent education, and legal provisions relating to various phases of the public-school system.

Studies Completed

Among studies of significance made by staff members of this division were those relating to various phases and functions of State departments of education. Those completed include:

The State Board of Education and the Chief State School Officer.—This study analyzes the legal provisions regarding State boards of education and the chief State school officer and aims to show in what board or office the principal administrative control over public education is vested and to indicate the degree and nature of State control vested in such board or office.

Financing the Schools as a Function of State Departments of Education.—This deals with the responsibilities of State departments, such as supervision of public-school budgeting and acounting, establishment and administration of teachers' salary schedule, apportionment of State school funds, and auditing public-school business transactions.

Assistance in School Plant Problems as a Function of State Departments of Education.—This describes the kinds of assistance given by State departments of education with regard to school plant problems and the organization and functions of school building work in the State departments.

Supervision of Secondary Education as a Function of State Departments of Education.—This study presents the history,

organization, personnel, functions, activities, and cooperative relationships of supervision of secondary education as exercised by State departments of education in the 48 States.

Supervision of Elementary Education as a Function of State Departments of Education.—Dealing with supervision at the elementary school level, this study traces the development of elementary school supervision and describes the organization and function of State supervisory programs and the activities and working relationships of the State elementary school supervisor.

A survey was completed in the field of early elementary education to ascertain the extent to which the public elementary and secondary schools release pupils during school hours to attend week-day classes in religious education, and to ascertain under what conditions pupils are released, and the ways in which the programs were initiated and organized.

A report on *Federal Aid for Education in 1938–39 and in 1939–40* was completed. This report analyzes the various purposes for which funds are provided by the Federal Government for education.

Two chapters for the Commissioner's *Biennial Survey* were completed in this division. One of these chapters treats of the school plant—trends, present situation, and needs. The other deals with practices and concepts relating to city boards of education. The report considers the powers and duties of school boards, qualifications for membership, selection, term and compensation of members, and indicates trends with respect to methods of selection and other matters. A digest of educational measures which were introduced in the 77th Congress was also completed.

Choose a Book About Things To Be Conserved is the title of a publication prepared in cooperation with the Special Problems Division.

Among studies in progress that will be completed in 1942 are: Three chapters of the *Biennial Survey—Trends in Secondary Education, Trends in Elementary Education,* and *A Review of Legislation Enacted in 1939 and in 1940; The Organization of State Departments of Education,* one of the State study series; *What Democracy Means,* one of the defense publications; and *State Plans for Financing Education.*

Consultative Services and Conferences

Upon the invitation of the Southern States Work Conference on School Administrative Problems, the specialist in elementary education attended the conference and acted as consultant to the Committee on State Curriculum Programs, and the specialist in school finance acted as consultant to the Committee on State and Local Financing of Education. The specialist in State school administration served in a consultative capacity at a meeting of county superintendents in South Carolina on pupil transportation problems in South Carolina

counties, at a meeting of representatives of the New England State Departments of Education relating to State procedures in State programs for financing education, and to the Governor's Commission on Education in its proposal for organizing and financing the public schools of Texas. The specialist in school building problems acted as consultant to the Quantico Post Children's School, Marine Barracks, Quantico, Va., on planning school buildings for the children living on the reservation. The specialist in parent education served as consultant and instructor at the Parent-Teacher Institute at the University of New Hampshire and at the School for Family Life at the University of Vermont. The specialist in elementary education acted as consultant to a committee of the faculty of Hampton Institute on curriculum problems.

Cooperative Relations

The members of the division cooperated with numerous organizations and committees on matters relating to education. Cooperation with the National Committee on Coordination in Secondary Education was continued. The specialist in secondary education is a member of the committee and acts as its secretary. The specialist in secondary education also acted as secretary of the cooperative study of secondary school standards, and he was a member of the following committees whose meetings he attended: Committee on Implementation of Studies in Secondary Education; a committee established jointly by the National Association of Secondary School Principals and the Progressive Education Association for the purpose of developing a substitute for units and credits in appraising, recording, and reporting the growth of pupils; and the NYA organization of State committees on student work projects. Cooperation has been given the Association for Childhood Education by the specialist in nursery-kindergarten-primary education, and by the specialist in parent education, who attended and took part in the national meeting of the Association. Further cooperation was effected by furnishing the Association with reports on educational legislation and on services for young children available from Government agencies, and through a National Committee on Home-School Cooperation by assembling descriptions of problems that classroom teachers find most often in their relationship with children and parents.

A cooperative plan with the American Association of University Women, begun several years ago by the preparation of study outlines for the use of its local branches, was continued and in all, 10 such outlines have been prepared. These having been widely used, plans were made to include 2 additional outlines in the series during the coming year. Many other cooperative relationships with national organizations were continued with evident mutual helpfulness.

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The Twelfth Annual Conference of the National Advisory Council on School Building Problems was held in February at Atlantic City. This Council is composed of school superintendents, school board members, heads of school building divisions in city and State Departments of Education and school board members appointed by the Commissioner, and acts as an advisory group to the Office in the school building field. A report of the conference was prepared by the specialist in school building problems who acts as secretary for the Council. The general topic of the Conference was "How shall we plan rooms for the different activities of the community high school?"

The two specialists in the field of elementary education in cooperation with the Assistant Commissioner and with the Assistant Commissioner of Education of New Jersey extended invitations to members of the National Association of State Directors of Elementary Education, for a group visit to nearby schools just prior to the American Association of School Administrators meeting. Visits were made to a rural elementary school and to a consolidated elementary-high-vocational school. Conferences followed with the State, county, and local staff members with respect to work observed and to the common problems of State elementary education supervisors.

HIGHER EDUCATION

Some principal activities carried on during the year by this division included the following: Fostering better educational relations with Latin America, in cooperation with the Department of State; surveys and studies of national scope; studies that have a bearing on State problems of higher education; studies pertaining to organization of higher educational institutions; other miscellaneous or general services.

Inter-American Educational Relations

One section of the Division of Higher Education is particularly concerned with the development of inter-American educational relations. In carrying out its program it cooperated with the Division of Cultural Relations, Department of State, in administering the United States' side of the Convention for the Promotion of Inter-American Cultural Relations. To date the following named Republics have ratified the Convention: Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the United States, and Venezuela.

During the academic year 6 professors and 10 students from the United States went to the other Republics on an official exchange basis, and 13 students of the other Republics were studying in the United States under the same plan. Since some of the American Republics ratified the Convention too late to participate actively in

the program this year, it is expected that the number of exchange students will be increased during 1942.

In addition to its program of exchanges, the section on inter-American educational relations participated in a number of other activities. It cooperated with a large number of educators and students from the other American Republics who visited the Office seeking information and counsel on the educational system and institutions of this country. It assisted teachers and students from the United States who were planning programs of study in the inter-American field both in this country and in the other Republics.

Survey of the Higher Education of Negroes

The Survey of the Higher Education of Negroes was continued and an appropriation of $10,000 from Congress for 1942 completes the total amount of $40,000 that Congress authorized for this purpose.

Two important fields are being covered: First, the social and economic background of Negro higher education, and, second, the nature of the educational services that are being rendered.

Special attention has been given to the broader social setting of Negro higher education. If the complex problems relating to Negro colleges and universities are to be fully understood, a fundamental knowledge of the historical development of race relations and of the social and economic background of the Negro is of major importance.

The first part of the survey attempts to analyze some of the problems and assumptions which underlie the American bi-racial organization, to indicate how the present patterns and relationships came about, how they are perpetuated, and the social costs to a democracy incident to their maintenance, and to delineate some of the conditions which must be met if a truly democratic social structure is to be attained. In the study of social and economic factors affecting the American Negro, previous studies of 1,104 southern counties, prepared for the Council on Rural Education of the Julius Rosenwald Fund, have been utilized. Maps were prepared to show the location of colleges for Negroes, the density of Negro population in various areas, and the basic economy and degree of urbanization in each county. The findings of numerous other studies covering such topics as geographical distribution and migration trends, occupational distribution, occupational opportunities and limitations, and the educational status of skilled and white collar workers are given consideration. The data have been analyzed to show the social, economic, and educational factors in relation to county types and to the location of institutions of higher education for Negroes.

The second part of the survey consists of 11 major and minor studies that define the educational services now being rendered by Negro institutions and indicates needed programs for the future.

As a result of analyzing the total educational program of institutions of higher education for Negroes, much quantitative information has been gathered. This was made possible by the application of the evaluative technique of the North Central Association of Colleges and Secondary Schools to a representative group of 25 Negro colleges. The following fields of institutional organization were covered: Institutional objectives, faculty competence, faculty organization, conditions of faculty service, the curriculum, instructional practices, the library, admission practices, the student personnel service, administrative practices, and financial income and expenditure.

The survey as another of its studies administered a number of important educational tests to nearly 1,600 seniors in 50 institutions giving 4 years of study and to 5,000 freshmen in both 4-year and junior colleges. It also investigated the extent and nature of curriculums available in institutions for Negroes and compared these with curriculums available for white persons in those States maintaining both white and Negro institutions of higher learning.

A study was made of college plans of high-school seniors, and an investigation was made of the general status of Negro students in northern institutions of higher education. Another study covered the cost of maintaining various types of institutions, and included cost data on 301 institutions located in all sections of the country. Other studies were concerned with library service, health status and trends, and adult education practices in Negro colleges; and two statistical studies dealt with enrollments and with the income and expenditures of Negro colleges and universities.

It is expected that the findings of the survey will be published in three volumes. The first volume, now in press, is entitled *The Socio-Economic Status of Negroes.* The second volume will bring together the different educational findings. The third volume will be a summary of conclusions.

The survey has been fortunate in receiving from the General Education Board for 1941–42 the sum of $7,120 for the purpose of implementing the findings of the survey. This implementation will be carried out in cooperation with the Association of Colleges and Secondary Schools for Negroes which has organized a cooperative college study involving four of the principal educational agencies concerned with Negro education.

Inspection of Howard University

As required by law, the annual inspection of Howard University was made. The University showed a remarkable growth in student enrollment over the year preceding. In 1939–40 the enrollment reached 2,338, while in 1940–41 it reached 2,810, the highest in its history. The income of the institution in 1939–40 was $1,609,487.60.

Of this income 68.8 percent was received from the Federal Government. A full copy of the report of Howard University is on file in the U. S. Office of Education.

Graduate Study

The Division of Higher Education has continued its interest and cooperation in studies related to graduate instruction. A year ago the Association of American Universities undertook a study of the requirements for entrance to graduate schools of its own membership. In this connection the Office acted in an advisory capacity in setting up the form or schedule which was sent to the different schools. Already plans are under way to obtain the cooperation of the Graduate Section of the Association of Land-Grant Colleges and Universities in carrying on a similar study of the entrance requirements of the graduate schools within that organization. The study will include other representative graduate schools also.

Administration of the Land-Grant Funds

The laws and rulings pertaining to the land-grant colleges and universities, involving Federal appropriations of $5,030,000, were administered as usual during the year.

Education of Administrators and Teachers

Following the appointment last year of a specialist in this field, a study was undertaken to canvass current practice and opinion in schools and colleges of education with respect to programs of professional education for school administrators. Sixty-two institutions offering such programs at the graduate level participated. Paralleling this inquiry, 36 State departments of education joined in an inquiry into opportunities provided, under State department leadership and stimulation, for inservice growth in competence and effectiveness of administrative personnel. It is hoped that publication of the information gathered through these inquiries may result in a number of field studies and experiments in which the U. S. Office of Education may participate.

A study of the education of teachers as a State function was completed as a part of a coordinated program of research on State departments of education in which specialists throughout the entire Office participated. The investigation covered the organization, services, functions, and relationships of divisions and other units of the State departments having directive or supervisory functions with respect to higher institutions. The study extended two lines of investigation that have been pursued by the Office for several years: First, the discovery of needed improvements in the organization and functioning of agencies engaged in the education of teachers; and, second, the relationships and functions of various State agencies with respect to institutions of higher education.

Another project was the continuation of activities initiated in the National Survey of the Education of Teachers. This project was designed to make information more easily and more widely available to workers throughout the country concerning the more significant and helpful studies of teacher education that have been made. The selected bibliography published in Volume I of the Survey in 1933, and continued in a bibliography published in 1936, was brought up to date during 1941 in a bibliography selected from approximately 3,000 references. These three publications, which contain selections from a total of more than 8,700 references, constitute probably the best-known series of bibliographic references on teacher education in the country.

An investigation was begun of the major trends in the development of summer sessions during the period 1931 to 1940. The study will review the present status of some of the important issues in summer sessions, including administration, finance, methods of promotion, staff, student personnel, and programs of service, and will bring up to date the study made of summer sessions by the U. S. Office of Education 10 years ago. An inquiry form was sent to 650 deans and directors of summer sessions in colleges and universities as well as teachers colleges. Replies have been received from approximately 500 institutions. Tabulations have been made, and the study is well on its way toward completion.

Upon the recommendation of the Committee on Transfer of Credentials of the National Council of Chief State School Officers, the U. S. Office of Education has undertaken a study to ascertain the common elements of transcript forms used in the several States in the issuance of teachers' certificates upon the basis of college credentials, and to investigate certain related problems such as the simplification of the arrangement of transcript items, and problems of a professional nature involving the content of the items of information requested. It is hoped that as a result of this study means may be found to secure more helpful information with a minimum of difficulty.

A brief study was made of the nature of State requirements for the certification of public-school teachers. The scholastic qualifications of teachers have now reached the highest average level in the history of American education. Within another year more than one-fourth of the 48 States will require 4 years of college work as a minimum for all public-school teachers.

COMPARATIVE EDUCATION

Because of the world situation, the connections of the U. S. Office of Education with foreign countries were characterized by more and closer contacts with the Latin-American republics, the entire shutting off of communication with a few European countries, a dearth of

international congresses, and the frequent difficulties in obtaining desired data on education.

Through the Department of State publications and information were furnished the universities of St. Augustine and Arequipa, and the Ministry of Education in Peru; the Colégio Libre at Buenos Aires in Argentina; Universidad Tecnica at Valparaiso, Chile; Gertrudis Bocanegra Library at Patzcuaro, Ariripe Junior Institute in Brazil; Paraguayan Consulate at Tegucigalpa, Honduras; and the Ministry of Education in Ecuador.

Additional exchanges of publications were arranged with the Ministry of National Education of Italy, and boards having control of the licensing of physicians in Massachusetts, Connecticut, Rhode Island, and New York, were consulted as to the standing to be allowed young men from the United States who would complete the medical curriculum in the University of Rome in June 1941. The statements of those boards were sent to the students in Rome. Publications of the Office were furnished the American Embassy in Madrid for distribution to Spanish educators.

Inquiries were initiated through the Department of State about schools of agriculture in Latin America, American schools in Central and South America, dental schools abroad, the secondary and normal school programs in Peru, and the education system of Bolivia. Only the first mentioned of these was brought to fruition.

Little information was obtainable about education in Germany, Austria, Czechoslovakia, Poland, France, Belgium, Holland, Bulgaria, Rumania, Greece, and Yugoslavia. The regular periodicals and official reports and publications came from most of the other countries of the world.

Travelers from Canada, China, Cuba, England, Estonia, Iran, Latvia, Palestine, Panama, Poland, Turkey, Yugoslavia, and other countries were aided in acquiring an understanding of education in the United States.

The chief of the Division gave much time to meetings of such organizations as the Committee on Inter-American Cooperation in Agricultural Education; the Catholic Bureau of Inter-American Collaboration and Pax Romana; Conference of Textbook Editors and Publishers held in Washington, March 18, 1941, for which he wrote a summary report; the Committee of the U. S. Office of Education for the Development of Understanding and Appreciation of the other American Republics; the American Society for the Advancement of the Hebrew Technical Institute in Haifa, Palestine; and the Education Advisory Committee of the Office of the Coordinator of Commercial and Cultural Relations Between the American Republics.

The Division completed Bulletin 1940, No. 9, *Education and Service Conditions of Teachers in Scandinavia, The Netherlands and Finland;* a

directory of schools of agriculture in the Latin American Republics; Pamphlet No. 15, Education and National Defense series, *Education under Dictatorships and in Democracies;* and a report on *Secondary Education in Austria, 1918–1938.*

Progress was made on manuscripts relating to education in Italy, education in Cuba, and some questions on the education and service conditions of teachers in Scandinavia, The Netherlands, and Finland. Steps were taken to obtain data on education for and the practice of dentistry in countries other than the United States and Canada.

Assistance to Students in Comparative Education

One hundred persons wrote to the Division for information about education in foreign countries. Of these, 61 were students of comparative education in colleges and universities and preparing either term papers or master's or doctoral dissertations. Twenty-six did not state their purpose, but the tone of the letters indicated that they also were students. Eleven were lecturers or persons preparing to give talks before special groups. Two were reading for their own pleasure or profit. They asked about education in 32 different specific countries, Europe, Latin America, and the world. Canada, England, Germany, and Latin America seemed to be the main centers of interest. While most of the requests were for data on education in general, many asked about special phases such as agricultural, commercial, vocational, and secondary education; educational planning; treatment of youth in dictator countries; higher education; education for adults; and religious education. Considerable numbers of students came from nearby institutions to ask for direction in making studies of education in other countries.

Credential Evaluation

Requests for the evaluation of foreign student credentials came from 202 colleges and universities in the United States, and 1 in Canada; 9 high schools; 13 State departments of education, including California, Connecticut, Georgia, Illinois, Indiana, Maryland, Michigan, New Jersey, New York, Oregon, Pennsylvania, Virginia, Washington; 4 city school systems; 7 boards of examination in either medicine or nursing; 1 board of pharmacy; 1 board of registration for engineers; 6 offices of the United States Government, including the Navy Department and the air corps of the War Department at Washington, Army air corps at Chicago, Naval Reserve flying cadet office and flying cadet examining board at New York City, and the Civil Service Commission; and 7 private organizations located in Los Angeles, New York City, and Philadelphia, most of them acting in behalf of refugees.

They asked for aid in a total of 1,158 cases of students coming from 70 countries, as follows: Argentina, 11; Australia, 1; Austria,

169; Belgium, 18; Bolivia, 1; Brazil, 15; British Guiana, 3; British West Indies, 6; Bulgaria, 10; Canada, 67; Chile, 10; China, 31; Chosen, 2; Colombia, 3; Costa Rica, 4; Cuba, 12; Czechoslovakia, 33; Danzig, 1; Denmark, 11; Dutch East Indies, 1; Dutch West Indies, 1; Ecuador, 2; Egypt, 2; Eire, 9; El Salvador, 2; England, 45; Estonia, 1; Finland, 2; France, 69; Germany, 217; Greece, 18; Guatemala, 5; Haiti, 1; Hawaii, 1; Hungary, 29; Iceland, 3; India, 10; Iran, 1; Italy, 36; Japan, 11; Latvia, 8; Lithuania, 14; Mexico, 11; Morocco, 1; Netherlands, 15; Newfoundland, 1; New Zealand, 5; Nigeria, 1; Norway, 9; Palestine, 12; Panama, 8; Peru, 8; Philippine Islands, 13; Poland, 38; Portugal, 1; Puerto Rico, 5; Rumania, 12; Scotland, 6; Soviet Union, 17; Spain, 6; Sweden, 12; Switzerland, 34; Syria, 5; Thailand, 3; Turkey, 17; Union of South Africa, 4; Uruguay, 1; Venezuela, 1; Wales, 4; Yugoslavia, 12.

For one reason or another, 190 cases were reviewed in accordance with the policy of the Office that, on proper request, any case will be reviewed at any time and the evaluation changed if that seems warranted.

Translations

Formal translations in connection with the evaluation of credentials were made by members of the Division from 26 different languages into English, as follows: Bulgarian, 1,615 words; Carpatho-Russian, 900; Croatian, 3,670; Czech, 14,725; Danish, 1,825; Dutch, 1,345; Finnish, 650; Flemish, 200; French, 19,230; German, 103,300; Italian, 6,650; Latin, 3,435; Latvian, 5,320; Lithuanian, 5,520; Magyar, 15,350; Norwegian, 1,250; Polish, 20,950; Portuguese, 2,045; Rumanian, 5,210; Russian, 14,275; Serbian, 6,300; Slovakian, 7,600; Slovenian, 1,650; Spanish, 17,995; Swedish, 3,025; Ukrainian, 2,000; or a total estimate of 266,035 words. It secured aid from other agencies in making translations from 7 other languages: Arabic, 200 words; Armenian, 250; Chinese, 550; Greek, 6,695; Hebrew, 1,550; Japanese, 700; Turkish, 2,700; a total of 12,645 words.

This of course does not include the large amount of reading and study that members did in foreign language material without making translations. That is far more than the amounts indicated above.

Exhibition

In October of 1940, the Division arranged and placed on exhibition in the Fine Arts Gallery of the Interior Department building a collection of photostatic copies of certificates, diplomas, and degrees granted in foreign countries. The exhibition was kept open 2 months. Fifty-three countries were represented and 41 different languages were used in the 300 or more documents that were on display. All levels of instruction from primary schools to postuniversity studies, as well as many different kinds of vocational training were indi-

cated. A catalog of the exhibit was prepared and mailed to college and university registrars in the United States.

SPECIAL PROBLEMS

As in other services, normal functions of the Special Problems Division were increased and the scope of regular activities broadened by the growing interest throughout the country, and corresponding demands for service, in education's participation in the national defense efforts. This involved changes in the type of services requested and added new functions definitely concerned with education in the present emergency situation. Many cooperative projects were undertaken. The net result has been an increase in responsibilities and activities rather than in the number of research projects undertaken during the year and of resulting publications issued directly by the division staff.

Two monographs in the coordinated State studies' series were completed during the year. One treats of the organization and functions of the 48 State departments of education for the improvement of instruction (Bulletin 1940, No. 6, Monograph No. 7); the other describes the supervision of adult education carried on by State departments of education.

Services to Exceptional Children

In pursuance of its regular responsibilities for the education of exceptional children, the following are among major projects undertaken: In compliance with a request the previous year from the executive committee of the National Association of Training Schools for Juvenile Delinquents and the superintendents of a selected group of institutions for delinquents, the division assumed responsibility for the organization of staffs to study the educational programs of the institutions indicated and to prepare reports embodying suggestions for reorganization, revision, or other improvement of the educational programs. The respective staffs, in whole or in part, spent a few days observing the situation in each institution as a whole, but with particular reference to the educational program, including the school organization, the curriculum in relation to the needs of the school population, the place assigned to education in the total institutional program, and other phases concerned with instruction.

The observations were usually followed by conferences of the institutional and visiting staffs, or sections of the former and with the administrative officials in which the educational objectives, practices, and problems of the program were analyzed and discussed.

For a number of the institutions visited, written reports were submitted to the respective superintendents at their request, with such

suggestions for desirable revisions in the program as were deemed necessary to its satisfactory development.

A total of 13 publicly supported institutions, with one exception State-supported, were served during the year by staffs numbering three or more specialists in different fields from the U. S. Office of Education and State departments of education. The States included were: Alabama, Arkansas, Colorado, Florida, Georgia, New York, Pennsylvania, Rhode Island, Tennessee, Texas, and Virginia.

A second survey project undertaken in this general area was in response to a request coming from the Austin, Tex., State School for the Mentally Deficient. A staff member of the division spent a week in that institution studying its educational program, submitting a report with recommendations for action. In this institution, as in at least half of the institutions for delinquent children visited, there has been progress in effecting some or all of the recommendations made from the Office.

The following cooperative projects were also undertaken: (1) A study was completed in cooperation with the American Association on Mental Deficiency. A special inquiry form supplementing the periodical statistical form sent out by the U. S. Office of Education and concerned directly with the school program, was sent to 70 State-supported institutions for the mentally deficient. Returns were tabulated and analyzed in the U. S. Office of Education, showing both general trends and variations in practices among the schools replying. The general findings of this study were reported to the Association at its annual meeting in June 1941. The detailed report was sent to each institution, calling attention to significant problems and to possibilities for more extended services on the part of these schools.

(2) A second cooperative project is still under way, involving the preparation of a report on the education of gifted children, one result of a conference held the preceding year. Contributions are being made to this report by a number of educators throughout the country interested in this particular field.

Among regular consultative services rendered in this field through Office conferences, correspondence, and field trips, a staff member assisted a State committee meeting in Atlanta, Ga., to consider problems of the education of the blind, deaf, and socially maladjusted in that State.

Conservation and Visual Education

The usual consultative, advisory, and informational services in these two fields were rendered throughout the year by conferences, correspondence, and the preparation of printed and mimeographed materials.

Two important conferences concerned with conservation education were held: One concerned with the preparation of a manuscript on teaching conservation in the high schools of California, published by the State Department of Education; the other, a conference called in the U. S. Office of Education by the Commissioner of Education, of officials of Government agencies working in the general field of conservation. The educational aspects of the conservation activities of the several agencies represented were discussed, especially in relation to the technical information available from these agencies with reference to their adaptability for use in schools.

The discussions served to familiarize each of the agencies with contributions of the others and with the availability of the U. S. Office of Education for clearing material issued by them suitable for classroom purposes.

Two publications in these areas were completed during the year. One (Bulletin 1941, No. 4, *Conservation Films in Elementary Schools*) is a bulletin for teachers in the elementary grades which gives practical suggestions on the use of films in the classroom, with special reference to films on conservation, followed by a fully annotated selected list of films suitable for such use. Another publication, U. S. Office of Education Pamphlet No. 80 (Revised 1941) completed during the year, includes a list of sources of visual aids of 18 different types, as well as a list of sources of different kinds of equipment available for the use of teachers for instructional purposes. In preparation during the year was a list of 50 or more selected references for teachers on visual education.

Rural Education

In the field of rural education an especially important project involving a study of the education of children of migratory laborers was undertaken. The Children's Bureau is conducting a parallel study concerned chiefly with social and economic conditions of the families of these laborers. It is expected that the findings of these two studies will give quite a complete picture of the migratory situation as it concerns children of agricultural laborers in one area of the United States, a pertinent problem at the present time. Field work was completed on the study being made in this division, and compilation of statistics and the preparation of reports on results of the study are well under way.

Completed during the year, in the interest of rural children, was an extensive statistical study of the educational opportunities, especially for vocational preparation, available to rural youth.

Negro Education

In the service devoted to Negro education, much of the time of the specialist was devoted to activities concerned with the progress and development of the National Survey of Higher Education of Negroes.

Two rather extensive new projects undertaken during the year in this field are the planning and directing of a series of radio programs on participation of Negroes in American life, and the preparation of an annotated bibliography on Negro education covering the 5-year period ended in 1940. The series of dramatic programs for which most of the research has been done during the fiscal year just ended, will be presented during the fall and winter, probably covering a period of 6 months.

STATISTICS

The major statistical work during the 1941 fiscal year was the collection and preparation for tabulation of reports from school systems and educational institutions for the school year ended June 30, 1940, for the *Biennial Survey of Education in the United States, 1938–1940.* The following reports were included in this year's collection:

State school systems (including the District of Columbia and outlying parts of the United States)		57
City school systems		3,123
Universities and colleges		1,730
University and college libraries		1,730
Nurse-training institutions		1,572
State and private residential schools for exceptional children		456
For:		
Blind	54	
Deaf	85	
Mentally deficient	160	
Socially maladjusted	157	
Total		8,668

The three field agents of the division spent 377 days rounding up approximately 1,640 reports that were not sent in by mail and giving special advice on uniform reporting procedure and related problems. The problem of improving the system of reporting by the local district to the State department of education, in order to conform more nearly with the recommendations of the National Advisory Committee on School Records and Reports, was discussed with every State department of education.

A method of uniform reporting of debt service transactions by city school systems was presented at a Sectional Meeting of the Convention of the National Association of Public School Business Officials of Detroit, Mich.; and two members of the staff met with the Research Committee on School Accounting Practice of the Business Officials' organization at which a tentative draft of a manual on *Financial Accounting for Public Schools* was presented for criticisms and suggestions. During the year revisions have been made in this tentative draft, preparatory to preliminary publication.

Field work was also done with the State offices responsible for collecting data from institutions of higher education in certain States, looking toward collecting reports through these offices. This procedure is already used for teacher-training institutions in Connecticut, Pennsylvania, and Wisconsin, and has resulted in an improvement in the number, promptness, and quality of the reports.

The study of survival rates for pupils from the fifth grade through college graduation was continued through 1938 and projected through 1940, and a study was made of the age distribution of men in college of selective-service ages, 21 to 35, in 1941.

The usual service was rendered the land-grant colleges through the preparation of the preliminary statistical report for distribution at their annual convention, and to colleges and universities in the preparation of their budgets through the sampling report on *College Income and Expenditures*, distributed in November.

THE LIBRARY

Services of the U. S. Office of Education Library continued to expand, due to continuing expansion of the Office in general, and particularly those related to national defense. The library shares in all such activities, which have included: Guidance, radio, information exchange, engineering education for defense, Latin-American relations, and other fields. The National Defense Vocational Training program necessitated acquiring a large amount of technical material for immediate use and collecting technical bibliographies in different fields for the use of its personnel.

The textbook collection has been increased during the past year by the addition of upwards of 300 volumes of early American texts, juveniles' and children's literature from the collection of Mrs. Hornor of New York, from Mrs. Coburn of New Hampshire, from Mr. Kerr of Massachusetts, from Harvard College duplicate collection, and from dealers in Washington and nearby Virginia. These books have been organized and made available to research workers and graduate students in education. As they reveal many facts in the development of content, in subject matter taught, and in methods used, they form an important part of a research library of original sources. A duplicate collection of the text books is being built up for lending purposes.

During the year, the library acquired a number of college and university catalogs for filling up gaps in the series, and valuable issues for the earlier years have been secured by gift and by purchase. The same is true of the reports of State and city boards of education, and through cooperation with other libraries and with school boards, much material has been secured. This library, by exchange, has also helped to fill the gaps of other libraries.

The thesis collection and the course of study collection are becoming increasingly popular. The first-named has grown to 4,400 volumes,

with 72 institutions represented; 847 theses were sent out by means of inter-library loans, an increase over the 629 loans of the previous year. The collection of courses of study has been growing rapidly in response to some 6,700 letters sent out to State, city, and county superintendents for their most recent material. The courses of study are now being checked for Latin-American material. A duplicate collection is being built up for lending purposes.

The Catalog Division, in addition to its continuing work, also cooperated in the new projects by cataloging the new acquisitions for the vocational training for various jobs and for other defense work. Progress was made in a long-needed project, the binding and cataloging of a number of foreign educational periodicals, especially in Russian, Swedish, Estonian, French, and German.

A large collection of children's books, the *Five Hundred Books for Children,* that formed the bibliography published by the Office (Bulletin 1939, No. 11) were cataloged and shelved in an attractive place in the reading room, and are of great interest to the readers.

During the year, Bulletin 1913, No. 28, *Expressions on Education by Builders of American Democracy,* was revised by a member of the staff, and published as Bulletin 1940, No. 10; *Good Reference* bibliographies were compiled and published as *No. 64: Adult Education; No. 65: Safety Education; No. 67: Selection of Students in Higher Education; No. 63: Student Participation in School Administration; Bibliography of Research Studies in Education* (Bulletin 1940, No. 5) was compiled, this comprising the studies in 1938–39.

A corps of clerks from the Bureau of the Census was detailed to work in this library in the school reports alcove, and spent a number of months collecting and organizing data to help that Office in setting up a formula to predict intercensal population changes. The library was also used by other researchers from different colleges and universities who worked in the files of college catalogs, educational journals, and the like, furthering their research projects.

Statistics

Volumes cataloged	6, 422
Card filed in card catalog	31, 923
Volumes bound	1, 037
Books loaned	7, 697
Theses loaned	746
Inter-library loans	847
Reading room attendance	11, 527
Books used in reading-room	33, 913
Books borrowed from Library of Congress	410

LIBRARY SERVICE

The objective of the newly organized Library Service Division is to assist the libraries of the country in extending and improving their

services. During the past year, the work was affected greatly by the defense program. Early in the summer of 1940, the division made the initial contacts with the appropriate Army officials, to see what library services were needed for the rapidly growing armed forces and to offer the aid of librarians. The facts concerning these needs were communicated from time to time to the librarians and the library organizations.

In addition, the division has been active in connection with the industrial mobilization for defense. Defense planners and leaders needed printed materials for their research, and workers in defense industries were requesting technical books in ever-increasing numbers. The division accordingly took steps to assist in meeting both of these requirements. It cooperated with the national library associations and with the Library of Congress in planning for a survey of library research materials needed for defense activities. Out of this grew the *Guide to Library Facilities for National Defense*, work on which was done by a special joint committee of librarians, and publication by the American Library Association.

As a result of the continued reports from public libraries that they were finding themselves unable to meet demands being made upon them by the defense program, the Library Service Division undertook a Nation-wide survey of the situation early in 1941. For this undertaking the American Library Association lent to the U. S. Office of Education the chief of its public library division.

Facts were obtained regarding library conditions in more than 200 areas affected by the National Defense Program. The project sought information on library services needed (1) by workers in defense industries, and (2) by communities affected by population shifts resulting from defense activities. It endeavored to find out how much was needed to render the required services in terms of additional technical books, personnel, mobile equipment, and temporary quarters. In addition, the reporting libraries presented figures on the local financial situation and on the status of their requests for additional local support.

The facts obtained showed that public libraries in the defense areas were being overwhelmed by requests for essential services in connection with the defense program and that outside financial aid was needed to enable them to meet these national responsibilities. After the data were reviewed and recommendations made by the Advisory Committee on Public Library Service, appointed by the U. S. Commissioner of Education, a request for a special appropriation to aid public libraries was included in the 1942 budget estimates of the U. S. Office of Education and was approved by the Administrator of the Federal Security Agency. Funds, however, have not become available.

In the Office's program for promoting better relations with the other American republics, work was started on several bibliographies on Latin America, suitable for use in elementary and secondary schools of the United States. Planning was also begun on exhibits of books and other materials on Latin-American subjects to be lent to our schools for the purpose of stimulating interest and showing what materials are available. The specialist in school libraries was responsible for the selection of a small group of children's books portraying child life in the United States for possible translation into Spanish and for distribution to schools in the other American republics.

Research Studies and Surveys

Along with the special activities occasioned by the national emergency, the Library Service Division carried on as much as possible of its regular research program, its statistical studies, and its field and consultative services.

Completed during the year was an exploratory study of unit costs in school library operation. This project was made possible by the American Library Association Committee on Fellowships and Scholarships, which assigned one of its 1940–41 fellows to work under the supervision of the Library Service Division. Eleven secondary schools cooperated by keeping records of the time spent by their librarians and assistants upon the various library processes and routines. The schools were ones which had received a score of 85 or more in the Cooperative Study of Secondary School Standards and which had: (1) A trained full-time librarian; (2) a book budget; (3) a book collection cataloged and classified by an accepted system; and (4) available financial and statistical records.

The data obtained in the study made it possible to present findings regarding such questions as: Cost per reference or information question answered, cost per bibliography prepared, cost of instructing a class in the use of a library per period, cost per book circulation, and cost per title cataloged and classified. In addition, it was shown how much of the total labor time was devoted to each of the various library activities, such as reference, circulation, and care of collection, cataloging and classifying, administration, etc. Although the findings of this exploratory study are based on limited data, it is hoped that they will serve as a basis for more extended studies in the future.

An annotated bibliography on school library administration was completed. This compilation covered books, periodicals, and pamphlets published during the period 1930–40 and contains references of practical usefulness for school administrators and librarians concerned with the effective management and control of school libraries. The division was also responsible for the completion of a pamphlet de-

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scribing the essential character of libraries in the present emergency, one of the special series on Education and National Defense.

The work on a statistical survey of public libraries in the United States was nearly completed. This compilation, the first since 1929, will furnish figures on the use, resources, expenditures, and operating personnel of this institution. Data have been gathered also during the year from the libraries at the institutions of higher education and the compilation and interpretation will be begun shortly. The study of the State agencies for library service, interrupted by activity in connection with the defense program, is being pushed to completion. Much of this material should be especially useful for any post-war planning of educational programs.

Consultative Services

Inadequacy in the number of staff prevented the division from meeting all the requests that came for service and advice. Included in the field service which was rendered, however, was the daily clinic on books for young people held by the specialist in school libraries at the request of the Southeastern Library Association during its conference in Savannah, Ga. This Association includes the States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. Another service was rendered at meetings of the Texas Teachers Association in Fort Worth, during which school library problems were considered. Upon invitation, other places visited in Texas for library group discussions were San Antonio, Denton, and Dallas. School groups in Alabama requested and received similar aid during the year.

Consultative service in the field was furnished to the Florida State Department of Education which was planning a bulletin covering materials suitable for elementary and secondary schools in that State. A staff member also participated in a group conference on the training of school librarians, held just prior to the annual conference of the American Library Association in Boston.

Professional Organizations

Another activity of the division was service on the boards and committees of the professional organizations. One staff member acted as vice chairman of the Joint Committee of the National Education Association and the American Library Association on School Libraries; another served on the American Library Association Board for Service to Children and Young People; and a third was a member of the American Library Association Board on Salaries, Staff, and Tenure, which had under way preparation of a model classification and pay plan for the personnel of university and college libraries, similar to the one previously prepared for municipal public libraries.

HEALTH AND PHYSICAL EDUCATION

A comprehensive review was made of the more important pieces of research in all phases of school health work in the past 5 years, and this was published as a chapter of the *Biennial Survey*. The pamphlet, *State-wide Trends in Health and Physical Education*, which furnishes a brief account of activities in all fields of school health work in all States, and contains a synopsis of laws bearing on the subject, was revised and republished. Two circulars which have been in much demand, one on the State requirements for special teachers of health and physical education, and the other listing the institutions offering special training in these fields, were brought up to date.

School medical and nursing services have not been reviewed in detail since the survey in connection with the White House Conference of 1930. A study was completed of the provisions for health services in cities of 10,000 population or more. These services offer every variety in personnel and practices but, on the whole, much progress has been made in the past 10 years.

The matter of health instruction in schools has been of much concern, for although health is presumed to be "the first objective in education," instruction in hygiene is lacking in most high schools, and is none too well done in elementary grades. As aid toward the correction of this lack, an investigation was begun of the training received by prospective teachers and as to how such training may be improved.

INDUSTRIAL ARTS EDUCATION

The U. S. Office of Education cooperated with the Committee on Education of the American Prison Association, in a study that had for its purpose the development of objective measures for evaluating the educational programs conducted in prisons. For many years prison officials have realized the need for a set of standards that might be used by any prison in determining the effectiveness of its educational provisions and which would be suggestive for improvements. The specialist in industrial arts contributed to the development of the standards in the committee's report, which was issued by the Association in August 1941.

Changes that have been taking place in educational thought and practice over a score of years indicate a trend toward a school curriculum that gives a larger place than formerly to activities representing practical and essential forms of human behavior and which are commonly found in everyday experiences. Especially is this true for activities dealing with processing and constructing work in material things. As industrial arts work is included in this last-named type of activities, the leaders in this field of education have for some time been pressing the advantage to be derived from this general curriculum

trend to further the development of industrial arts courses and to insure that they are of a character that will best contribute to the adjustment of the individual to the activities associated with living and making a living in our modern social industrial work.

In order that there might be collected and disseminated, on a Nation-wide basis, information that would show the growth of industrial arts work and the changes occurring in its program, a study was made by the Office of past and present shop activities, information on industrial arts products and services of value to consumers and users of such commodities and services, forms of shop organization for instruction, enrollments in industrial arts subjects, physical facilities for instruction, expansion of pupil experiences beyond the in-school activities, and activities for girls.

The results of this study showed increasing enrollments, enriched programs of shop and related work, much improved physical facilities, enlarged opportunities for girls, and changes in shop organization to meet better the needs for exploratory experiences. This report was issued in 1941 as *Trends in Industrial Arts* (Pamphlet No. 93).

The specialist in industrial arts continued to work with the Committee on Standards of the American Vocational Association, in developing "instructional yardsticks" for determining what should be the goals for accomplishments in various shop activities by grade levels. The reports of this committee are issued from time to time as publications of the American Vocational Association.

The national defense program as it is concerned with the training of skilled workers strikes roots down into the field of industrial arts as a source for (1) persons qualifying, through the industrial arts work they have had in high school, to enter upon specialized training; (2) shops and equipment for training purposes; and (3) teachers to give instruction in vocational training programs to meet defense needs.

No extensive study has ever been made of the programs, enrollments, and number of teachers in industrial arts. Because information on these subjects is constantly needed by school administrators, industrial arts supervisors, and professors of education in teacher-training institutions, as basic material for the study of problems in this field of education, this Office has undertaken a project for this purpose.

A carefully developed questionnaire was sent to schools in places having a population of 2,500 or more. The form calls for information on offerings and enrollments by grade levels, time schedules, kinds of shop organization, and supervision. The reports from the schools are being received and analyzed.

TESTS AND MEASUREMENTS

Consultative aspects of the work in tests and measurements increased this year due to the defense program. Numerous conferences were held with Army and Navy test technicians and other defense officials, relative to the types of prognostic tests to use in procuring persons for the different defense activities. Several conferences were held with staff members of the WPA concerning educational research projects referred to that agency for approval.

Two studies were completed during the year. One is being published as a chapter of the *Biennial Survey,* and is entitled *Educational Research Studies of National Scope or Significance.* This is a study of the unique contributions as to methodology of research, organizational procedures, or findings of various national research studies in education. The other study completed this year was the *Personnel Services as a Function of State Departments of Education*—a report of one of the field studies made of State departments of education.

The study of cumulative records made progress during the year. A conference of governmental specialists and experts in personnel work from school systems throughout the country was held to plan the next steps in this study. The members of this conference signified their willingness to cooperate in the further development of the study. Tabulation of the material from the questionnaire sent to school systems concerning the use of cumulative records continued.

A guidance study to be made in cooperation with the WPA was initiated and is making progress. This study is concerned with the discovery of factors such as achievement test scores and interest questionnaire scores which will predict success in vocational courses and other courses in high school. The consultant visited the cooperating centers during the year to aid in getting uniformity of approach. Centers visited included: Camden, N. J., Chicago, Ill., Milwaukee, Wis., St. Paul, Minn., Los Angeles, Calif., and San Jose, Calif.

Materials illustrating the newer methods of evaluation were gathered in preparation for classifying the several types and issuing an annotated bibliography of these newer methods.

III

VOCATIONAL EDUCATION SERVICES

THERE HAS been a continued growth in the federally aided program or vocational education as indicated by the increase from year to year in the number of schools and classes, the number of teachers employed, and the number of persons enrolled in these courses. There is every indication that the enrollment figures for the 1941 fiscal year, which are not yet available, will show that there has been an appreciable enrollment increase.

Enrollments in all schools and classes for the year 1940, the latest for which statistics are available, totaled 2,290,741, which includes 584,133 persons enrolled in vocational agriculture courses; 758,409 in trade and industrial education; 818,766 in home economics courses; and 129,433 in distributive education.

AGRICULTURE

Approximately 500 additional departments of vocational agriculture were organized during the year.

A definite effort was made by the Agricultural Education Service to further the organization of part-time and evening classes on a year-round basis. Particular stress was placed upon the need for such instruction in order to help some 20,000 Negro families to avoid annual migrations from farms to cities.

Members of the Agricultural Education Service continued to stress the training of agricultural teachers through directed observation work in practice schools and through actual participation in teaching work in these schools. In conferences of supervisors, resident teacher trainers, and critic teachers of agriculture, sponsored by the U. S. Office of Education, in a number of States during the year, these groups were encouraged to provide opportunity for prospective agricultural teachers to observe and to participate in supervised farm practice work carried on by vocational agriculture students during the summer months. State supervisory and teacher-training staffs were encouraged to establish more practice-training centers at points outside the teacher-training centers, and to establish additional practice centers so that only a small number of trainess would be assigned to any one

center. These centers are being placed, also, in schools where all types of vocational agriculture programs—all-day, part-time, and evening—are in operation, and teacher-training institutions are adjusting the technical and academic schedules of the trainees so that they may spend a longer time in practice centers.

A training conference was conducted by members of the Agricultural Education Service at Orangeburg, S. C., for the supervising teachers and teacher trainers responsible for preparing Negro teachers of vocational agriculture in Florida, Georgia, North Carolina, South Carolina, and Virginia. This conference was designed primarily for teachers of vocational agriculture in centers used by recognized teacher-training institutions for training Negro teachers of vocational agriculture.

Studies were made during the year of the provisions for the training of teachers of vocational agriculture and for practice teaching in California, Colorado, Minnesota, Montana, North Dakota, Oregon, and Utah. In connection with each of these studies a conference was held at which recommendations were formulated for the improvement of teacher-training programs.

The Service has endeavored to focus special attention of the States upon the need for developing courses in which instruction and supervised farm practice are carefully integrated. In one State assistance was rendered in working out procedures to be followed in planning "workshops" designed to give teachers experience in formulating a complete course in agriculture. Each teacher enrolled in a workshop was expected to analyze the farming practices in his community and to outline the teaching program he would follow in an effort to meet the instructional needs of those in the community.

Assistance to States was continued in developing subject matter at State conferences for vocational agriculture teachers and at a special conference for State supervisors and teacher trainers of agricultural education. During the year attention was given to the preparation of teaching materials covering the following subjects: Developing individual farming programs; selection, organization, and use of teaching materials; building electrical equipment for the farm; livestock loss prevention; teaching cooperation and farm credit; and painting farm buildings.

Joint Agriculture and Home Economics Services

Through the joint efforts of the Agricultural Education and the Home Economics Education Services of the U. S. Office of Education, the States have become conscious of the importance of improving farm-family living through the development of joint classes for young men and women and boys and girls, in vocational agriculture and homemaking. For many years those concerned with homemaking and agricultural education have recognized the need for instruction in farm-family living. As an aid to furthering this program, the

Home Economics and Agricultural Education Services prepared a joint publication entitled, "Farm-Family Living" (Vocational Division Monograph No. 22), which contains suggestions for the setting up of cooperative programs in vocational agriculture and home economics.

Another joint project carried on by the Agricultural and Home Economics Education Services was the preparation of a document entitled, "Negro Farm Families Can Feed Themselves." This resulted from a joint conference of Negro teacher trainers in agriculture and home economics education, called by the Office of Education, and held at Tuskegee Institute in February 1941. Copies of the document have been distributed to the 18 States having separate schools for Negroes, with the idea that it will be used in local communities in which both home economics and agriculture teachers are employed.

Farm Youth Organization

Membership in the Future Farmers of America, the national organization of farm boys studying vocational agriculture in the public schools, continued to grow during the year. Approximately 237,000 farm boys were enrolled in this organization in 7,000 local chapters as of June 1941. Major emphasis was placed by the national F. F. A. organization on providing chapter libraries, developing ability of members to speak in public, home improvement, farm fire prevention, conservation of natural resources, livestock loss prevention, leadership training, and the development of a national F. F. A. camp. This national organization is sponsored by the U. S. Office of Education.

The first buildings of the national camp located 2½ miles from Mount Vernon, home of George Washington, were completed during the year. By June 1, two permanent buildings had been completed, consisting of a barracks to house 80 persons and a combination kitchen–dining hall–assembly building. Included in this development are a water system, camp office, roads, drives, and a reconditioned caretaker's house. The national camp is to be used annually by groups of F. F. A. members who visit the National Capital from all parts of the United States and in conducting systematic leadership training work for officers and special member groups. The funds to purchase the site, erect the buildings, and furnish equipment for this camp are being raised by the F. F. A.

At the time the national F. F. A. camp was started, preliminary work on reconditioning George Washington's old gristmill which adjoins the camp, was also started. The mill was leased to the F. F. A. organization by the Virginia Conservation Commission in order that it might be kept open to the public. On June 1, 1941, the mill was opened for visitors and will be open, with guide service, during the summer months each year.

The New Farmers of America, national organization of Negro students of vocational agriculture held its national convention at Pine Bluff, Ark., in August 1940 with 600 active members in attendance. Delegates were present from each of the 18 States in which N. F. A. organizations have been established with a membership of approximately 25,000.

The Agricultural Education Service worked out with the Farm Security Administration a plan for financing productive enterprise projects of students of vocational agriculture who are sons of families which have borrowed money from the Farm Security Administration. Under this plan teachers of vocational agriculture in the rural schools of the country assume responsibility for the development of student productive enterprise projects and for their supervision. Loans are made to students conducting these enterprises for the purchase of livestock, seed, plants, feed, fertilizers, or materials needed by them in developing a sound supervised farm practice program.

The Service also cooperated with the Bureau of Agricultural Economics of the U. S. Department of Agriculture in preparing material to assist teachers of vocational agriculture in making use of the Bureau's flexible farm lease in connection with their instruction programs. This material contained, among other helps, suggestions to be followed by teachers in giving instruction on the leasing and renting of farm lands. As a result of this program, students of vocational agriculture received valuable instruction on leasing arrangements and relationships.

The Service and the National Youth Administration cooperated in a movement to bring about improvement in farm shops in vocational agriculture departments by distributing floor plans to be used in the construction and alteration of such shops.

The Agricultural and Home Economics Education Services of the U. S. Office of Education cooperated with the Farm Credit Administration in the development of a plan for assisting farm families holding real estate mortgage loans from Federal land banks in meeting their financial obligations.

Probably the most significant development in agricultural education during the year was the effect of the defense training program for rural youth upon the farm shop program of vocational agriculture departments in rural high schools. The four general preemployment courses offered in defense training classes have awakened State supervisors and teachers of vocational agriculture to the definite potentialities for increased service through shop work for farm boys. The defense training program has also directed the attention of supervisors and teachers to the possibility of employing local tradesmen as farm shop instructors and of using local garages and machine shops, with their up-to-date equipment, as instructional headquarters for courses

in farm mechanics. Representatives of the Agricultural Education Service have stressed these possibilities through direct contact and in correspondence with State agencies. The popularity of these farm shop courses has promoted the interest of local superintendents of education in the program of vocational education as a whole, and has given them a realization of the service which can be rendered through such courses to some of the student body who do not ordinarily respond to the regular education courses offered in the schools.

TRADE AND INDUSTRY

Activities of the Trade and Industrial Education Service were centered largely upon the federally financed plan of defense training authorized under Federal legislation. This, however, has not prevented the service from following its established policy of encouraging the expansion of existing vocational education facilities and the development of new centers in areas not previously served.

Reports from all sections of the country indicate that a number of new centers of instruction have been established and that increases of as high as 20 percent will be recorded in the enrollments in day trade-school classes. These increased enrollments have occurred, it should be pointed out, even in the face of the increased use of school plants for programs of defense training.

In its contacts with the States during the year, the U. S. Office of Education has emphasized the necessity: (1) For increasing trade and industrial training facilities, and (2) for organizing training activities in communities which had previously been without training programs. In line with this emphasis new vocational school buildings have been constructed, old buildings have been reconditioned, garages and storehouses have been constructed, additional equipment and hand tools have been purchased, and additional personnel have been employed. Although many of these additions to training facilities have been made in connection with training for defense occupations, the facilities have, nevertheless, been made available to persons enrolled in existing vocational training programs.

Apprentice Training.

In an effort to encourage observance of the regulations of the Federal Committee on Apprenticeship which designates the standards that shall govern the work experience of apprentices and prescribes a minimum period of training for these apprentices, representatives of the U. S. Office of Education advised during the year with representatives of State Boards for Vocational Education in Washington, Arizona, and Montana, in regard to securing State apprenticeship legislation requiring systematic training of apprentices for their trades or occupations. Apprenticeship laws were passed by all three of these

States during the year. Only three States in the Pacific region—New Mexico, Utah, and Wyoming—are still without apprenticeship laws.

Previous to the period of this report, the States of Oregon, California, Colorado, Nevada, and Idaho had passed apprentice laws requiring that apprentices be given related training in the trades or crafts for which they are preparing.

The U. S. Office of Education cooperated with State Boards for vocational education in promoting apprentice training. This training includes organized instruction in the classroom to supplement practical experience acquired on the job, together with such training in specialized skills as can be more effectively offered in organized shop classes.

Training for Special Groups

For several years the U. S. Office of Education has cooperated with the States in their efforts to provide different types of schools and courses to meet the needs of different groups.

State, county, or district trade schools.—Mention has been made elsewhere in this report of the trend in some States toward the establishment of State, county, or district trade schools, to meet the training needs of those living in smaller communities which are not in position to provide adequate trade and industrial training or in which there is not sufficient demand in numbers for trained workers to justify the operation of trade-preparatory training programs. State trade schools located at strategic points have helped solve the training needs of these communities. New York State Department of Education has recently requested the State Legislature to provide additional funds to expand the facilities of the trade schools at Alfred, Canton, and Morrisville, where, in addition to courses in shopwork and related subjects, instruction is offered in technical subjects, such as chemistry, electricity, and designing. A number of States are now considering the establishment of State trade schools.

Technical schools.—A second type of training developed with cooperation of the U. S. Office of Education, is provided in the technical high school—junior or senior—and in the junior college, in which technical courses of less than college grade at the postsecondary level are offered in industrial occupations, in accordance with the accepted standards of federally aided vocational education.

In trade school classes for girls approved by the U. S. Office of Education, many of those enrolled are high-school graduates, particularly those in training for dental assistants, medical assistants, and persons receiving training for cosmetology. There is a tendency not only to raise the age limit materially, but also to provide trade courses for women in units, each of which, complete in itself, forms a part of

the whole teaching unit. Students who drop out before they have completed the full course, may thus return to take other units as need arises.

Cooperative part-time diversified courses, which are arranged to provide a combination of classroom instruction and actual working experience in local business or industrial establishments, and which are encouraged by the Office of Education, were in operation in a number of States.

Foreman Training

One of the activities which the Office of Education has consistently recommended to the States and in which its representatives continued to assist during the year, is the foreman training plan for preparing foremen to "break in" new workers and to provide additional training for such workers. Special attention was focused on foreman training in plants whose activities have been materially expanded as a result of defense contracts. The employment of large numbers of new workers in such plants, many of them with little occupational experience and with limited training, made it necessary for foremen and squad leadmen to train these workers.

Demonstration Projects

In cooperation with the National Youth Administration, the U. S. Office of Education conducted a demonstration project in Pittsburgh, Pa., through which 118 youth, 72 boys and 46 girls, were given instruction for 12 hours a week in shopwork and related subjects. Vocational classes started as a part of this demonstration offered training in subjects ranging from domestic service to air-conditioning. The object of the training conducted in connection with this demonstration was to provide, for those enrolled, vocational training which would better fit them for employment in industry by improving their skills and knowledge of particular trades or occupations. Judging from the interest shown in the demonstration courses and the results obtained therefrom, this plan might well be carried on in other centers where large groups of out-of-school youth are enrolled in NYA projects. The New England States, under the sponsorship of the U. S. Office of Education and State boards for vocational education, have conducted training in arts and crafts centers as a part of which demonstrations are given by experienced craft workers in processes followed in making pottery, weaving textiles, and making silver and pewter articles.

The U. S. Office of Education laid emphasis upon the need for organization of more effective programs of trade training for Negroes. Advisory committees consisting of both white and Negro members, representing employers and workers, were organized in many localities for the purpose of determining the types of training that will best serve the interest of the Negro.

Training of the general industrial type for Negroes was provided in increasing degree. Evening school training in coal mining for Negroes was expanded in several States.

More attention than in previous years was given to activities involving vocational guidance and the placement in employment of persons enrolled in trade and industrial training classes.

Recognizing the importance of placement of trade course graduates, States in the North Atlantic Region, assisted by a representative of the Office, have for a number of years been conducting a continuing study of what becomes of the trade school graduate. A recent report of this study indicated the number who have completed a particular course, the percentage entering trades for which they were trained, and the entering wage at which they were employed.

Teacher Training

Two principal services have been performed in the field of teacher training in trade and industrial education. In the first place, the Trade and Industrial Education Service has detailed members of its staff to assist the States in giving training to prospective supervisors of instruction in Army and Navy stations.

The Service also cooperated with the Training-Within-Industry Branch, Labor Division, Office of Production Management, in planning assistance to industries that are training their own mechanics and operators.

Since it is necessary for the operation of a program of trade and industrial education to recruit instructors direct from industry, continued emphasis was given to the necessity of providing adequate professional training for these extension teachers after they have entered the professional field. Even the most trade-competent instructors may fail as teachers because their professional training for teaching has been inadequate. The U. S. Office of Education continued to stress also the necessity for basing the professional training of trade instructors upon the actual problems faced by these instructors in their teaching activities.

An increasing tendency was noted during the year among the States to promote in-service teacher training in evening classes by itinerant teacher trainers—a practice advocated by the Office of Education. Specialized teacher training for such groups as policemen and firemen is carried on largely in short-unit summer courses. There was a noticeable trend also toward the apprentice type of "break in" training for teachers, another practice encouraged by the U. S. Office of Education.

Almost from its beginning the Federal Board for Vocational Education maintained one agent for work with girls and women, and this work was continued by the U. S. Office of Education when the func-

tions and personnel of the Board were assigned to it in 1933. In this connection it is interesting to note that the importance placed upon training of women in one State—Connecticut—and in a number of cities has resulted in the employment of women supervisors to promote classes for the education of women and girls in the trades and industries.

Vocational administrators have been concerned with the fact that the majority of the trade and industrial education facilities were located in the larger centers of population. In an attempt to remedy this situation and to make trade and industrial training available wherever the need for such training exists, a number of States have, under encouragement from the U. S. Office of Education, established State or district trade schools in localities in which they could be available to as large a number of youth as possible, particularly those living in smaller communities.

Reports from a number of States indicate that extension training in the trade and industrial field on a craft basis is receiving greater recognition than heretofore. Through its field representatives, the Office has stressed the importance of organizing evening trade extension classes on a craft basis, and in this way of covering a wider field of subject matter and insuring greater continuity in the training program from year to year.

HOME ECONOMICS

The major responsibility of the Home Economics Education Service is to help the States to develop and carry out effective programs of homemaking education.

In line with this purpose, representatives of the Service have rendered a variety of services during the year, among which are the following examples:

Cooperated with the National Nutrition Conference, the National Youth Administration, the Federal Housing Authority, the Work Projects Administration, the American Red Cross, and the Regional Federal Advisory Councils on Defense, in a variety of defense activities. These activities have included, among others, assistance in emphasizing nutrition education as a school and community responsibility; in stressing contributions women can make to the defense program; in pointing out the necessity for homemakers to make adjustments to changed housing conditions; and in focusing attention upon training for nursing service and care of the sick.

Promoted a general program of education in the principles and practices of democracy through State programs of homemaking education. Attention of supervisors and teachers in all States has been specifically called to the importance of demonstrating democracy in all professional and personal relationships. Parent

education programs have stressed the fact that education for democracy must begin in the home. Community programs of family life education have provided many opportunities to study the processes involved in democratic action as community groups have tried to discover and meet common family needs.

Reviewed total programs of homemaking education with State staffs in more than half the States. In each case where staff members have worked with a State on this problem, the descriptive report, prepared annually by the State for the U. S. Office of Education, has been the basis for evaluating the present programs and formulating future plans.

Helped States with the development of community programs in family life education by taking part in conferences, giving special consultation service, and opening the channels for new forms of cooperation between local, State, and national agencies.

Participated in the development of curriculum study programs in cities and States. This has included gathering and interpreting data on family needs and evaluation of the educational means by which to meet these needs.

Assisted in developing local initiative and leadership through teacher-training conferences held in several States and in Puerto Rico and Hawaii, and in three special conferences on supervision which were held in different sections of the country.

Helped to strengthen teacher education through the calling of a conference of selected representatives of teacher-training institutions and State departments of education to develop a basis for future planning in the education of home economics teachers. Six colleges and universities received help in evaluating their curricula in home economics education, and in cooperative studies participated in by representatives of all departments of these institutions concerned with home economics education programs. In several institutions previous curriculum studies were followed up to see what progress had been made.

The Home Economics Education Service also cooperated with other representatives of the Office in visiting State training schools and advising on methods of improving the facilities and curricula of these schools to better meet the needs of youths served by them; assisted in the preparation of a handbook on consumer education to be issued jointly by three divisions of the Office; participated in the preparation of guides for the use of the materials formulated at the "outlook" conference called by the Department of Agriculture for home management specialists in land-grant colleges and State agricultural extension services; aided in planning and conducting a conference in which assist-

ance was given State representatives in analyzing social and economic conditions in their respective States, and in formulating the types of education needed to meet these conditions.

The Home Economics Education Service maintained cooperative relationships with a great variety of defense and nondefense agencies and organizations. These include the Bureau of Home Economics, Home Economics Extension Service, Farm Security Administration, Farm Credit Administration, Agricultural Adjustment Administration, Rural Electrification Administration, Agricultural Marketing Service, and the Surplus Marketing Administration in the U. S. Department of Agriculture; the Consumers Division of the Office of Price Administration and Civilian Supply; the Children's Bureau; the U. S. Public Health Service; Work Projects Administration; Federal Housing Administration; National Youth Administration; the American Red Cross; and numerous national educational organizations.

Among the developments in the field of home economics education during the year the following seem significant:

There was a growing awareness of the important part family life plays in education for democracy as evidenced by an increase in the number and variety of demands for help in family life education.

The efforts of home economics education were more closely coordinated with the efforts of other agencies. This has been true not only nationally but in State and local communities as well. Home economics personnel in the schools have worked more intensively with other organizations in meeting demands of the defense program, in planning for better nutrition, and with State and local committees in organizing long-time family life education programs.

Increased consideration is being given by home economics education workers throughout the country to fundamental values on family life worth retaining during the international crisis and the inevitable reconstruction period to follow. For example, increasingly parents are coming to home economics educators for help in meeting changes in family living brought about by such changed social conditions.

BUSINESS

As of June 30, 1941, 47 States, the District of Columbia, Hawaii, Puerto Rico, and Alaska had approved plans for carrying on distributive education under Federal grants provided by the George-Deen Act of 1936. During the year, also, many States submitted revised State plans to replace those which were used as a basis for the initiation of the distributive education program.

It is estimated that distributive education programs were in operation in approximately 1,300 centers at the close of the fiscal year. This is in comparison with 981 centers in 1940.

In addition to its normal activities, the Business Education Service cooperated with State supervisors of distributive education in a study of the replacement training problems arising from the absorption into defense industries and into the army of persons formerly employed in retail stores.

State Supervisors Employed

Twenty-five States have now employed full-time supervisors. This is in contrast to a total of 17 employed as of the close of the previous year. Nine States employed full-time assistant supervisors. Colorado, Connecticut, Minnesota, New Jersey, and Washington, where distributive education is now being temporarily directed by supervisory personnel from other branches of vocational education, plan to employ supervisors by September 1, 1941. Under the plan followed in Louisiana, Michigan, New York, and Pennsylvania, State supervisors provide leadership, guidance, and assistance in connection with training programs in clerical and other office positions.

Assistance has been given by the Business Education Service to colleges and universities in organizing professional courses in distributive education. During the summer of 1940, 22 colleges and universities offered professional courses for the training of teachers, coordinators, directors, and supervisors in this field of vocational education. A number of these institutions now supplement their regular education courses with technical courses in marketing, advertising, credits, collections, and other subjects. Another trend in this direction is the initiation of cooperative part-time training in distributive education in junior colleges.

One of the plans advocated by the Office in connection with distributive education programs is the appointment of area, district, or zone coordinators, a trend which was noted 2 years ago. This trend was accelerated during the past year. The district or zone coordinator plan has enabled the States to do more intensive work. Under this plan coordinators make more frequent visits to individual towns and as a result are able to start a larger number of classes than is possible where the zone coordination plan is not used. In addition, the plan has resulted in the employment of itinerant teachers and itinerant teacher trainees.

Homogeneous Group Training

The U. S. Office of Education encouraged and the States have adopted the plan whereby distributive education training is offered in the larger centers to homogeneous rather than heterogeneous groups of store employees—that is, to department store, grocery store, drug store, and similar groups separately—rather than to all such groups as a whole. The homogeneous group plan is especially adaptable to

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the smaller centers, where the number of trainees from any one field of retailing is insufficient to justify the establishment of local training. In previous years many cooperative, part-time programs were organized on a postgraduate, secondary level. As a result of the reduction of the supply of retail store workers through the entrance of many of this group into defense industries, the tendency is to a return of the former practice of offering cooperative part-time distributive education in the eleventh and twelfth grades in high school in order to train prospective retail store workers.

An encouraging trend which has been brought about to some extent by the advocacy of the U. S. Office of Education of increased training service for those employed in small retail establishments is the tendency of this group to turn to organized training as the means of securing competent store workers.

The activity of the Business Education Service along other lines has stimulated a widespread interest in cooperative part-time programs in office and clerical training, a field in which the Service has given service and counseling.

Training for teachers of distributive education was expanded during the year. Twenty-two federally reimbursed colleges and universities offered summer session courses in technical and professional subject matter. In addition, many nonreimbursable institutions have expressed the need of such offerings. Teacher training has been carried on, also, through in-service programs and through annual State-wide conferences of from 2 to 6 days' duration. In this connection the Business Education Service encouraged the States to require their teacher-coordinators and local supervisors to secure training by working in an actual store job at least every third summer, so that they may have first-hand contact with business problems.

An increased number of classes in distributive education for Negroes have been organized during the year. That it is needed is indicated by the fact that Negro workers, as well as employers and managers of retail store businesses, are showing an increased interest in distributive programs.

Cooperative Activities

Included in the list of organizations with which cooperative activities were carried on by the Business Education Service are the following: The National Association of Retail Druggists, the American Pharmaceutical Association, the American Association of Colleges of Pharmacy, and the National Association of Boards of Pharmacy with which the Service cooperated in outlining a training program for owners, managers, and employees of retail drug stores, to be developed by a subject matter specialist employed by the U. S. Office of Education; the National Association of Retail Meat Dealers, the Amal-

gamated Meat Cutters and Butchers of America, the National Live Stock and Meat Board, and the Institute of American Meat Packers, with which the Office advised in developing course outlines and instructional material for owners, managers, and employees of retail meat stores, to be prepared by the U. S. Office of Education; the National Restaurant Association, with whom the Office cooperated in developing a training program for waitresses and hostesses, to be prepared in bulletin form by the Office; the National Association of Retail Furniture Dealers, which assisted the Business Education Service in preparing the bulletin, *Selling Home Furnishings;* The National Paint, Varnish and Lacquer Association with which the Service cooperated in preparing a bulletin covering training programs for those who sell paint, varnish, and lacquer; the National Shoe Retailers' Association, with which the Service cooperated in outlining a training program for those in the retail shoe trade, to be prepared by a specialist in this field.

Helpful relationships have been established also between the Business Education Service and many other national and general trade associations, chambers of commerce, and service organizations of a miscellaneous nature.

The Service maintains cooperative relations, in addition, with teachers' associations, labor groups, colleges, universities, business educators, and similar agencies, in planning and setting up distributive education programs, preparing instructional material in research, and in other related activities.

Several specific trends which have had a bearing upon the activities of the U. S. Office of Education during the year are discernible in the field of business education, and more particularly that phase of business education which has to do with the training of workers in the distributive occupations—those involved in getting farm and manufactured products from the producer to the consumer. Special emphasis was placed during the year upon the establishment of programs of distributive education in a greater number of small towns and cities as well as upon training for small-store employees.

A second trend in the field of distributive education, also, is the increase in part-time classes held during store hours, for store owners and managers and workers in grocery, meat, hardware, drug, furniture, paint, clothing, and shoe stores.

A third trend in the field of distributive education is the emphasis upon long-range training programs which will not only provide more comprehensive curricula on all levels of employment but will at the same time offer opportunities for training in the more representative types of distributive businesses. With the encouragement of representatives of the Business Education Service, eight States—Alabama, Illinois, Kentucky, Mississippi, Tennessee, Texas, Virginia, and

Wisconsin—and several of the larger cities initiated long-range training programs during the year.

In connection with part-time cooperative programs of distributive education under which high-school students spend part of the day in classroom work and the rest as workers in stores and other business establishments, the recent trend has been toward the organization of classes for homogeneous groups rather than toward classes of a variety of groups. For example, in a number of cities department store employees are enrolled in one program and grocery store employees in another. This is in contrast to the practice formerly followed, in many places, and followed even now in smaller centers, of enrolling workers from a number of different types of stores in one group.

OCCUPATIONAL INFORMATION AND GUIDANCE

The second annual conference of State Supervisors of Occupational Information and Guidance was held under the auspices of the U. S. Office of Education in May 1941. With a view to getting assistance in achieving objectives, they set up committees for various purposes, on each of which they have appointed a member of the staff of the U. S. Office of Education.

One committee, for instance, is to produce a series of handbooks showing the functioning relationship between guidance programs and the various types of vocational education—agricultural education, trade and industrial education, home economics education, and distributive education. Three other studies—one to secure information for a handbook on initiation, organization, and administration of a guidance program at the local level; one on guidance courses offered by teacher-training institutions in States employing State supervisors of occupational information and guidance; and one to secure information for a handbook on counseling procedures to be used in small schools which have inadequate resources for employing specialists in guidance work—are to be undertaken by the committees.

The diversity of service requested in the field of occupational information and guidance is reflected in the correspondence addressed to the Office on this subject during the year. Wherever possible, correspondents are referred to State and local agencies able to render assistance. This practice gives State departments of education an opportunity to make contacts with, and render service to, those within their own borders and to realize the demand which exists for guidance service.

Field work reached 39 different States during the year. Eighteen States were visited two or more times by two or more members of the staff. Approximately 151 cities and school districts were given field services at the direct request of local school officials and in cooperation with State school authorities.

Teacher-training activities were carried on by the U. S. Office of Education in cooperation with State school authorities in connection with summer sessions at North Carolina University, Duke University, University of Florida, and Kansas State College; in connection with special short courses at Texas Technological College, University of South Carolina, and Clemson College, South Carolina; in a special counselor training conference at Allegan, Mich., and at the University of North Carolina; and through informal conferences in Missouri, Kansas, Illinois, and Louisiana.

Particular attention has been given in connection with work with the States to the importance of building an adequate cumulative record of the background and achievements of students in an effort to make guidance programs effective, and of making occupational surveys and follow-up studies of students who have left school. County-wide follow-up studies of school leaders completed by district supervisors of vocational agriculture and homemaking in Anderson and Colleton Counties, S. C., for instance, are examples of the latter activity. The Occupational Information and Guidance Service also assisted in making a State-wide follow-up study including 74 schools in New York.

Assistance was given by the Office in connection with 25 conferences for teachers in smaller communities.

Among organizations with which the Occupational Information and Guidance Service of the Office cooperated during the year was the Employment Service of the Bureau of Employment Security. A joint committee composed of members of the Service and the Bureau studied problems related to a guidance program in which the public schools and the Employment Service have a common interest, including the selection of trainees for defense training classes.

The Occupational Information and Guidance Service also cooperated with the Home Economics Education Service in conducting a series of studies and demonstrations concerned with community problems in home economics; with a group composed of representatives of the Department of Agriculture, the Employment Service of the Bureau of Employment Security, the American Youth Commission, and the Agricultural Education Service of the Office in a study designed to encourage better rural adjustment through the setting up of definite guidance machinery; and with the National Vocational Guidance Association in a conference to discuss the relationship between guidance work and the national defense training program, and in other guidance activities.

The Occupational Information and Guidance Service continued to encourage State supervisors in this field to take the initiative in outlining guidance policies and activities for general acceptance. A second trend actively encouraged is a closer liaison between the State

guidance services and the vocational education services. A third important development is the increasing awareness of State teacher-training institutions of the need for providing all future teachers and teachers now in service with background and training in guidance procedures.

PUBLIC SERVICE TRAINING

Particular attention was given by the consultant in public service training to methods of organizing training courses to meet the needs of persons employed by the smaller municipalities and by counties. In many instances the number of local employees in one field of work is too small to justify the organization of a training program, but if a larger area can be included it is a simple matter to provide the needed program. For that reason the Office has advocated the development of training for public service on a district or State basis instead of in a local school district or a municipal department.

Two conditions resulting from the national emergency situation have served to emphasize the need for expansion in the program of training for public service employees. These are:

1. The loss of public personnel through induction into the Army, or transfer to more desirable positions in private employment and with the Federal Government.
2. The increase in the need for additional public service by reason of the expansion in defense industries.

These conditions call for training for those now employed in public-service work for new and additional duties, as well as for untrained persons who will be needed for public-service work.

EMPLOYEE-EMPLOYER RELATIONSHIPS

One of the principal activities in employee-employer relations during the year was the encouragement of the appointment of State and local advisory committees in connection with programs of trade and industrial education in the States. New policies governing the appointment and operations of such committees were formulated with the help of organized labor groups, business leaders, and executive officers of State boards for vocational education. These policies call for equal representation on advisory committees of labor and management, and for appointment as consultants on these committees of representatives of other interested groups and agencies—the public employment service, Work Projects Administration, State departments of labor, and similar organizations.

Following the issuance of these policies, the States were requested to submit to the U. S. Office of Education the composition of their State and local advisory committees, including the names of the

members of these committees, and the organizations they represent, with the names of the committee consultants.

A summary of the information secured from the States as a result of this request shows that:

> There were 57 State advisory committees in operation. Committees were organized in 48 States and in Puerto Rico. 159 employees and 159 employers held membership on these committees. Of a total of 374 consultants appointed to the committees, 53 represented State employment services; 50, the Work Projects Administration; 35, State departments of labor; 46, National Youth Administration; 13, Civilian Conservation Corps; 94, vocational education agencies; and 83, other miscellaneous agencies.

Reports to the U. S. Office of Education indicated, also, that approximately 1,000 local advisory committees had been established.

At the request of the U. S. Commissioner of Education, the American Federation of Labor and the Congress of Industrial Organizations each designated two persons to assist in matters pertaining to employee-employer problems. Contact with these worker representatives was maintained through frequent meetings and by individual conferences. These labor consultants assisted in preparing material for use by the States and by advisory committee members, concerning committee organization and utilization. They also counseled and advised with the Office regarding grievances, criticisms, and other matters and questions raised by various labor groups in connection with federally aided programs of vocational education for defense workers.

With the advice and counsel of the consultants designated by the American Federation of Labor and the Congress of Industrial Organizations, the consultant in employee-employer relations prepared a manual on advisory committees for the use of school authorities and committee members. Approximately 40,000 copies of this manual (Miscellany 2801 of the Vocational Division) *Representative Advisory Committees—A Manual for School Authorities and Committee Members*, have been distributed to State and local school authorities, advisory committee members, and labor organizations.

RESEARCH IN VOCATIONAL FIELDS

Among research activities carried on by the Vocational Division may be mentioned a study of the history of agricultural education of less than college grade, which was conducted in cooperation with the States, and was completed during the year. The results of this study will be published in bulletin form. Cooperating with the National Committee on Standards for Vocational Education in Agriculture, of the American Vocational Association, and with the various

States, the U. S. Office of Education continued its national evaluation of vocational education in agriculture, begun in 1939. Representatives of the Agricultural Education Service conducted evaluations in schools of 37 States for the purpose of training State evaluation committees. Three hundred and fifty-five evaluations were completed as of June 30, 1941.

In the field of home economics education the U. S. Office of Education cooperated with the Office of Experiment Stations and the Bureau of Home Economics of the United States Department of Agriculture in compiling a mimeographed publication, "Notes on Graduate Studies and Research in Home Economics"; cooperated with a committee of the National Education Association and the Society for Curriculum Study in securing data for and preparing a publication, *Family Living and Our Schools;* and worked with various universities and colleges, especially home economics teacher-training institutions, on curriculum revision studies. During the year the agent for research in the Home Economics Education Service conducted a 2-weeks' institute for 20 persons who direct research and graduate students in home economics education; acted as consultant on committees of the Land-Grant College Association, one of which stressed the strengthening of science and economics courses pursued by home economics students in colleges, and the other, criteria for evaluation of college instruction.

The Business Education Service conducted a number of studies during the year in distributive education for the food, drug, and meat merchandising businesses, with a view to setting up course outlines and developing instructional material for a comprehensive training program for owners, managers, and employers of such businesses. The Service, has, moreover, encouraged the States to employ competent personnel to carry on studies and investigations in the field of distributive education. Steps have been taken to organize a national research committee to work with the Business Education Service in correlating research projects and thus preventing duplication of research work.

The Occupational Information and Guidance Service cooperated with representatives of 16 teacher-training institutions in North Carolina in a 2-year study of the factors involved in determining the extent to which guidance work should be required of prospective teachers, as well as in setting up methods of in-service training for teachers and counselors in the principles of guidance and better rounded programs of graduate instruction in guidance techniques.

The Service also cooperated with the U. S. Employment Service of the Social Security Board, the Training-Within-Industry Branch, Labor Division, Office of Production Management, and the Federal Committee on Apprenticeship of the United States Department of

Labor, in publishing statements on selecting trainees for defense training and the selection of apprentices. The Service is continuing its research on the practices followed in making follow-up studies of students who have left school or graduated, and on local community surveys.

APPROPRIATIONS FOR VOCATIONAL EDUCATION

Appropriations for allotment to the States and Territories for vocational education for the fiscal years 1941 and 1942 are shown in table 5, and the allotments to the States and Territories for the fiscal year 1941 are shown in table 6. Allotments for 1942 under the George-Deen Act cannot be finally determined until the 1940 census returns of farm population are released by the Bureau of the Census. The allotments for 1942 under the Smith-Hughes Act are shown in table 7.

TABLE 5.—*Appropriations for allotment to the States and Territories for vocational education, 1941 and 1942*

Act	Fiscal year ended—	
	June 30, 1941	June 30, 1942
Smith-Hughes Act		
Total	[1] $7, 167, 000	[1] $7, 167, 000
Vocational agriculture	3, 027, 000	3, 027, 000
Vocational trade, industry, and home economics	3, 050, 000	3, 050, 000
Vocational teacher training	1, 090, 000	1, 090, 000
George-Deen Act		
Total	[2] 12, 750, 000	[2] 13, 500, 000
Vocational agriculture	3, 700, 000	3, 800, 000
Vocational trade and industry	3, 800, 000	3, 900, 000
Vocational home economics	3, 800, 000	4, 000, 000
Distributive occupations	610, 000	900, 000
Vocational teacher training	840, 000	900, 000
An Act making appropriations for the Territory of Hawaii		
Total	30, 000	30, 000
Vocational agriculture	10, 000	10, 000
Vocational trade, industry, and home economics	10, 000	10, 000
Vocational teacher training	10, 000	10, 000
An Act making appropriations for the Island of Puerto Rico		
Total	105, 000	105, 000
Vocational agriculture	30, 000	30, 000
Vocational trade and industry	30, 000	30, 000
Vocational home economics	30, 000	30, 000
Vocational teacher training	15, 000	15, 000
Grand total	21, 052, 000	21, 802, 000

[1] Permanent and continuing appropriation. Estimated expenditure $7,000,000.
[2] Allotments to States made on basis of $14,483,000 as authorized in the Act.

TABLE 6.—*Allotments of Federal money to the States and Territories for vocational education for the fiscal year 1941* [1]

State or Territory	Smith-Hughes funds (appropriated)				George-Deen funds (authorized to be appropriated)					
	Total	Agriculture: For salaries of teachers, supervisors, and directors	Trade, industry, and home economics: For salaries of teachers	Teacher training: For salaries of teachers and maintenance of teacher training	Total	Agricultural education	Trade and industrial education	Home economics education	Distributive occupations	Teacher training
1	2	3	4	5	6	7	8	9	10	11
Total	[2] $7,157,977.62	[2] $3,018,853.83	[2] $3,049,265.27	[2] $1,089,858.52	[3] $14,483,000.00	$4,067,200.00	$4,058,975.00	$4,048,825.00	$1,254,000.00	$1,054,000.00
Alabama	160,268.82	106,018.23	32,611.15	21,639.44	401,144.05	165,947.24	55,072.91	135,856.98	24,429.46	19,837.46
Arizona	35,926.19	15,926.19	10,000.00	10,000.00	80,408.60	20,000.00	20,000.00	20,408.60	10,000.00	10,000.00
Arkansas	113,969.95	82,028.87	16,776.23	15,164.85	305,740.84	138,607.14	30,995.77	105,115.82	17,120.09	13,902.02
California	313,266.41	84,540.06	182,301.17	46,425.18	493,375.58	76,828.34	213,243.37	108,333.79	52,410.87	42,559.21
Colorado	61,536.56	28,757.35	22,779.21	10,000.00	123,622.04	35,018.40	31,752.56	36,851.08	10,000.00	10,000.00
Connecticut	89,214.52	26,484.45	49,589.77	13,140.30	144,923.17	20,000.00	64,104.14	33,938.47	14,834.50	12,046.06
Delaware	30,000.00	10,000.00	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Florida	84,785.54	39,488.86	33,290.52	12,006.16	159,855.59	34,542.21	50,149.93	50,602.96	13,554.13	11,006.36
Georgia	175,228.68	112,207.67	39,236.98	23,784.03	430,909.73	175,634.20	62,833.09	143,788.43	26,850.55	21,803.46
Idaho	37,587.72	17,587.72	10,000.00	10,000.00	85,860.29	23,322.53	20,000.00	22,537.76	10,000.00	10,000.00
Illinois	420,534.11	111,199.48	246,935.68	62,398.95	673,513.00	123,722.64	279,646.92	142,496.48	70,444.17	57,202.79
Indiana	185,584.34	80,412.77	78,689.02	26,482.55	360,165.48	100,662.97	102,283.38	103,044.87	29,897.00	24,277.26
Iowa	146,260.73	83,146.09	42,908.77	20,205.87	331,923.17	121,080.05	62,961.33	106,547.48	22,811.05	18,523.26
Kansas	111,527.42	64,167.24	31,978.49	15,381.69	250,754.04	87,561.92	49,499.38	82,227.05	17,364.88	14,100.81
Kentucky	157,592.30	101,201.53	35,010.22	21,380.55	379,737.33	145,672.06	60,643.33	129,684.62	24,137.19	19,600.13
Louisiana	124,390.87	70,683.15	36,522.14	17,185.58	282,172.30	102,842.00	53,597.61	90,576.86	19,401.35	15,754.48
Maine	50,615.30	26,528.15	14,087.15	10,000.00	101,582.84	21,171.85	26,416.52	33,994.47	10,000.00	10,000.00
Maryland	92,659.43	36,602.80	42,714.98	13,341.65	162,385.90	29,400.76	58,788.05	46,904.63	15,061.81	12,230.65
Massachusetts	225,939.31	23,310.27	167,878.22	34,750.82	294,968.15	20,000.00	174,008.92	29,870.92	39,231.31	31,857.00
Michigan	270,137.03	85,855.27	144,684.11	39,597.65	459,102.70	96,872.60	171,207.64	110,019.17	44,703.06	36,300.23
Minnesota	148,887.03	72,816.70	55,103.85	20,966.48	317,424.54	110,858.20	70,365.18	93,310.90	23,669.73	19,220.53
Mississippi	124,424.02	93,141.81	14,847.09	16,435.12	349,001.51	168,741.26	27,283.12	119,356.49	18,554.13	15,066.51
Missouri	209,813.81	98,675.62	81,459.38	29,678.81	431,203.86	137,990.54	106,052.83	126,447.79	33,505.35	27,207.35
Montana	39,875.61	19,875.61	10,000.00	10,000.00	90,801.51	25,331.93	20,000.00	25,469.58	10,000.00	10,000.00
Nebraska	82,280.54	49,713.06	21,299.32	11,268.16	192,684.27	72,518.94	33,409.76	63,704.76	12,720.99	10,329.82

Nevada	30,000.00	10,000.00	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
New Hampshire	32,679.49	10,714.23	11,965.26	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
New Jersey	218,495.63	39,135.29	146,312.71	33,047.63	302,649.11	20,000.00	164,895.07	50,149.88	37,308.52	30,295.64
New Mexico	37,642.12	17,642.12	10,000.00	10,000.00	82,607.48	20,000.00	20,000.00	22,607.48	10,000.00	10,000.00
New York	679,136.35	115,167.53	461,031.10	102,937.72	947,775.59	89,138.46	500,480.36	147,581.33	116,209.68	94,365.76
North Carolina	192,981.96	131,572.98	35,484.35	25,924.63	485,954.01	198,094.85	66,222.13	168,604.08	29,267.15	23,765.80
North Dakota	51,635.26	31,635.26	10,000.00	10,000.00	129,730.19	49,191.21	20,000.00	40,538.98	10,000.00	10,000.00
Ohio	371,096.69	119,248.45	197,495 50	54,352.74	627,015.40	125,453.59	237,563.83	152,810.82	61,360.55	49,826.61
Oklahoma	143,352.81	87,756.55	36,002.87	19,593.39	337,188.90	126,795.87	57,856.10	112,455.55	22,119.60	17,961.78
Oregon	57,324.88	25,866.11	21,458.77	10,000.00	111,628.76	27,693.47	30,789.18	33,146.11	10,000.00	10,000.00
Pennsylvania	537,709.58	172,677.04	286,273.09	78,759.45	858,491.92	106,072.11	370,028.00	221,276.85	88,914.06	72,200.90
Rhode Island	47,842.03	10,000.00	27,842.03	10,000.00	88,296.97	20,000.00	28,296.97	20,000.00	10,000.00	10,000.00
South Carolina	106,714.19	76,236.31	16,259.29	14,218.59	274,928.97	113,473.43	34,676.21	97,692.95	16,051.82	13,034.56
South Dakota	51,323.28	31,323.28	10,000.00	10,000.00	128,452.67	48,313.48	20,000.00	40,139.19	10,000.00	10,000.00
Tennessee	156,555.22	95,875.76	39,282.82	21,396.64	376,206.74	150,491.95	59,084.68	122,859.89	24,155.35	19,614.87
Texas	343,814.26	191,491.24	104,691.96	47,631.06	780,504.42	291,248.04	146,433.22	245,386.28	53,772.22	43,664.66
Utah	35,132.76	13,466.11	11,666.65	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Vermont	33,424.97	13,424.97	10,000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Virginia	145,433.63	91,209.99	34,419.18	19,804.46	337,148.87	117,718.58	62,036.16	116,880.97	22,357.89	18,155.27
Washington	89,381.85	37,840.26	38,757.07	12,784.52	165,452.09	37,731.20	53,077.76	48,490.36	14,432.86	11,719.91
West Virginia	104,667.06	68,990.85	21,535.80	14,140.41	226,923.60	55,607.33	53,981.55	88,408.27	15,963.56	12,962.89
Wisconsin	169,327.36	77,210.55	68,083.37	24,033.44	343,977.87	109,088.25	86,784.01	98,941.39	27,132.12	22,032.10
Wyoming	30,000.00	10,000.00	10.000.00	10,000.00	80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
District of Columbia					80,512.97	20,000.00	20,512.97	20,000.00	10,000.00	10,000.00
Alaska					80,000.00	20,000.00	20,000.00	20,000.00	10,000.00	10,000.00
Hawaii [2]	30,000.00	10,000.00	10,000.00	10,000.00	80,020.99	20,020.99	20,000.00	20,000.00	10,000.00	10,000.00
Puerto Rico [2]	105,000.00	30,000.00	60,000.00	15,000.00	254,271.99	126,739.41	21,941.06	79,764.66	14,253.00	11,573.86

[1] Allotments based on United States Census returns of 1930 for the years 1940–41.
[2] The allotments to Hawaii and Puerto Rico are not included in the totals under the Smith-Hughes Act.
[3] The sum of $12,750,000 was appropriated for the fiscal year 1941 with the provision that allotments to the States and Territories be made on the basis of $14,483,000, the full amount authorized.

TABLE 7.—*Annual allotment to States of appropriations for vocational education under the Smith-Hughes Act, decennial period ending June 30, 1951*[1]

State or Territory	Total	Agriculture	Trade, industry, and home economics	Teacher training
Total	$7,150,122.03	$3,018,452.99	$3,041,913.15	$1,089,755.89
Alabama	160,044.88	103,607.31	34,812.93	21,624.64
Arizona	37,046.56	17,046.56	10,000.00	10,000.00
Arkansas	111,971.39	79,524.59	17,566.69	14,880.11
California	357,191.16	105,080.02	199,385.48	52,725.66
Colorado	61,935.48	27,908.18	24,027.30	10,000.00
Connecticut	89,031.72	28,879.79	47,104.90	13,047.03
Delaware	30,000.00	10,000.00	10,000.00	10,000.00
Florida	101,647.90	44,629.98	42,534.53	14,483.39
Georgia	174,945.56	107,427.43	43,674.04	23,844.09
Idaho	38,245.86	18,245.86	10,000.00	10,000.00
Illinois	405,974.06	109,401.87	236,290.75	60,281.44
Indiana	183,651.72	80,709.33	76,777.24	26,165.15
Iowa	139,673.12	76,199.97	44,097.97	19,375.18
Kansas	99,285.46	54,873.43	30,664.37	13,747.66
Kentucky	160,882.94	104,617.70	34,543.92	21,721.32
Louisiana	130,420.89	72,500.33	39,876.53	18,044.03
Maine	50,374.23	26,421.38	13,952.85	10,000.00
Maryland	96,669.22	38,827.09	43,940.16	13,901.97
Massachusetts	213,885.85	23,962.29	156,973.05	32,950.51
Michigan	275,033.16	94,395.37	140,516.74	40,121.05
Minnesota	151,336.00	73,483.52	56,538.22	21,314.26
Mississippi	126,033.69	91,758.05	17,606.23	16,669.41
Missouri	204,221.35	95,586.50	79,745.65	28,889.20
Montana	38,233.08	18,233.08	10,000.00	10,000.00
Nebraska	72,968.55	42,013.00	20,911.49	10,044.06
Nevada	30,000.00	10,000.00	10,000.00	10,000.00
New Hampshire	32,435.44	10,916.08	11,519.36	10,000.00
New Jersey	209,939.07	40,110.98	138,072.60	31,755.49
New Mexico	38,625.91	18,625.91	10,000.00	10,000.00
New York	678,257.50	121,227.66	454,140.48	102,889.36
North Carolina	203,006.11	136,121.34	39,621.76	27,263.01
North Dakota	46,727.59	26,727.59	10,000.00	10,000.00
Ohio	360,598.97	120,251.71	187,619.89	52,727.37
Oklahoma	129,955.53	76,343.25	35,777.75	17,834.53
Oregon	60,867.26	29,242.91	21,624.35	10,000.00
Pennsylvania	517,108.83	173,636.29	267,902.21	75,570.33
Rhode Island	46,574.47	10,000.00	26,574.47	10,000.00
South Carolina	108,593.19	75,133.83	18,957.72	14,501.64
South Dakota	45,410.21	25,410.21	10,000.00	10,000.00
Tennessee	163,011.35	98,975.43	41,778.64	22,257.28
Texas	350,978.47	183,600.31	118,412.35	48,965.81
Utah	35,254.88	12,829.83	12,425.05	10,000.00
Vermont	32,367.35	12,367.35	10,000.00	10,000.00
Virginia	149,686.37	90,824.39	38,421.93	20,440.05
Washington	93,421.12	42,669.95	37,498.43	13,252.74
West Virginia	107,923.45	71,674.47	21,730.78	14,518.20
Wisconsin	168,675.13	76,430.87	68,294.34	23,949.92
Wyoming	30,000.00	10,000.00	10,000.00	10,000.00

[1] Allotments based on returns of population, Sixteenth Census of the United States, 1940.

TABLE 8.—*Amounts expended for vocational education by type of training, by States and Territories, fiscal year ended June 30, 1941* [1]

State or Territory	Type of training					
	Total	Agricultural education	Trade and industrial education	Home economics education	Teacher training	Distributive education
1	2	3	4	5	6	7
Total	$19,001,445.61	$6,661,138.70	$5,587,070.92	$4,240,803.65	$1,804,313.66	$708,118.68
Alabama	554,586.24	271,965.47	87,684.06	135,856.98	41,476.90	17,602.83
Arizona	98,563.34	35,003.60	22,034.61	22,408.60	18,673.53	443.00
Arkansas	419,671.79	220,636.01	44,385.55	108,463.27	29,066.87	17,120.09
California	806,591.15	161,368.40	359,084.31	144,794.02	88,933.55	52,410.87
Colorado	180,621.56	63,775.75	50,895.71	40,487.14	20,000.00	5,462.96
Connecticut	193,899.10	23,527.93	103,534.25	37,949.62	24,325.51	4,561.79
Delaware	104,528.71	29,355.97	29,956.64	19,956.64	15,282.07	9,977.39
Florida	244,641.13	74,031.07	76,782.35	57,261.06	23,012.52	13,554.13
Georgia	603,581.21	287,841.87	94,570.07	150,595.45	45,587.49	24,986.33
Idaho	121,266.20	40,910.25	30,000.00	22,537.76	17,818.19	10,000.00
Illinois	991,482.72	234,922.12	477,195.46	180,334.85	60,179.60	38,850.69
Indiana	538,734.24	181,075.74	165,234.60	118,782.67	50,759.77	22,881.46
Iowa	394,582.49	183,041.84	58,195.24	111,910.35	38,729.13	2,705.93
Kansas	307,381.17	147,215.45	42,129.86	86,092.88	27,249.69	4,693.29
Kentucky	508,561.35	240,598.23	82,807.59	129,800.98	36,342.24	19,012.31
Louisiana	392,544.25	173,431.28	89,989.23	90,522.64	30,268.21	8,332.89
Maine	124,403.71	47,700.00	23,820.45	35,514.97	16,728.79	639.50
Maryland	233,604.30	63,373.57	94,202.52	46,904.63	23,433.13	5,690.45
Massachusetts	484,471.62	43,310.27	302,255.50	61,446.56	62,852.28	14,607.01
Michigan	722,706.21	182,700.13	286,879.79	138,928.26	75,897.88	38,300.15
Minnesota	435,986.16	176,495.17	121,719.80	97,060.13	37,427.86	3,283.20
Mississippi	469,530.96	261,883.07	42,130.21	119,356.49	31,501.63	14,659.56
Missouri	621,902.43	236,666.16	171,180.34	142,739.66	48,800.14	22,516.13
Montana	125,914.27	45,174.93	27,152.63	26,755.36	18,309.66	8,521.69
Nebraska	250,057.08	116,693.78	39,675.59	65,950.33	19,631.74	8,105.64
Nevada	66,889.93	16,840.01	17,113.26	19,083.48	13,853.18	----------
New Hampshire	82,893.26	19,709.79	27,258.33	20,028.50	15,896.64	----------
New Jersey	480,759.32	59,135.29	291,033.55	70,323.91	54,993.62	5,272.95
New Mexico	115,212.92	37,640.31	25,773.23	24,156.82	19,843.33	7,799.23
New York	[2]	----------	----------	----------	----------	----------
North Carolina	666,976.30	329,619.96	99,835.00	170,431.35	49,665.91	17,424.08
North Dakota	136,719.55	44,284.72	24,303.67	42,538.98	17,696.70	7,895.48
Ohio	962,323.14	244,702.04	391,342.43	184,343.31	97,275.27	44,660.09
Oklahoma	473,979.80	214,552.42	93,807.87	108,546.53	37,311.49	19,761.49
Oregon	168,953.64	53,559.58	48,956.20	36,437.86	20,000.00	10,000.00
Pennsylvania	1,341,008.31	278,749.15	618,558.89	259,019.05	150,960.35	33,720.87
Rhode Island	108,787.69	16,104.00	56,139.00	16,218.63	13,588.21	6,737.85
South Carolina	381,643.16	189,709.74	50,935.50	97,692.95	27,253.15	16,051.82
South Dakota	121,276.27	46,683.95	16,377.58	40,119.19	10,662.92	7,432.63
Tennessee	529,041.22	246,367.71	98,367.50	122,859.89	41,011.51	20,434.61
Texas	1,103,148.86	482,739.28	230,186.29	266,324.67	89,592.32	34,306.30
Utah	115,132.76	33,466.11	31,666.65	20,000.00	20,000.00	10,000.00
Vermont	100,746.22	32,892.14	25,285.21	21,035.02	17,712.90	3,820.95
Virginia	477,476.02	208,928.57	89,571.50	118,658.33	37,959.73	22,357.89
Washington	247,651.55	75,571.46	88,106.62	52,218.57	24,461.38	7,293.52
West Virginia	309,123.83	118,861.53	75,504.38	79,258.44	24,786.40	10,713.08
Wisconsin	513,179.91	186,298.80	141,250.71	112,558.06	46,065.54	27,006.80
Wyoming	109,785.45	30,000.00	28,000.00	22,000.00	19,785.45	10,000.00
District of Columbia	53,016.82	----------	19,207.93	19,959.15	7,909 68	5,940.06
Hawaii	100,020.99	30,020.99	28,000.00	22,000.00	20,000.00	----------
Puerto Rico	305,885.30	122,003.09	46,993.26	102,579.66	23,739.60	10,569.69

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

[2] Not including New York. The 1941 report from New York not received. In 1940 the expenditures were $1,515,296.54; for agricultural education, $204,305.99; for trade and industrial education, $961,511.46; for home economics education, $147,581.33; for teacher training, $151,190.29, and for distributive education, $50,707,47.

IV

VOCATIONAL REHABILITATION EXPANDED

THE COOPERATIVE program of vocational rehabilitation of the physically disabled reached its highest point of development since its inception in 1920. The States prepared for and placed in permanent employment a total of about 15,000, or an increase over the preceding year of 26 percent. There were material increases in the number of persons prepared for and placed in employment but who were still under observation at the close of the year. The number of disabled persons in the case load reached a total of 50,000.

Among the reasons for this expansion of the rehabilitation program are the following: First, the Federal and State funds for support of the work increased from $4,542,352 in 1940 to $5,051,376 in 1941; second, the liberalization of Federal policies governing the expenditures of joint funds made it possible for the States to serve larger numbers of persons; third, the rapid expansion of production for defense made it possible for many of the States to place their clients in defense and related fields of industrial production; and, finally, the employment by a number of the States of additional staff members enabled them not only to provide more adequate services to their applicants for rehabilitation but also to reach larger numbers who were in need of such service.

Administering Congressional Acts

Through the Vocational Rehabilitation Division, the U. S. Office of Education is responsible for administration of the following Acts of Congress:

Organic Rehabilitation Act (approved June 2, 1920, as amended) provides for cooperation by the Federal Government with the States in the promotion of vocational rehabilitation of persons disabled in industry or otherwise, and their return to civil employment.

Section 531 of the Federal Social Security Act, approved August 14, 1935, and amended August 10, 1939, amends the organic act. It authorizes appropriations for aid to the States on a permanent basis, and increases the authorization of Federal funds for vocational rehabilitation to $3,500,000 annually.

The act to extend the provisions of the organic act to the Territory of Hawaii (approved March 10, 1924).

The act to provide vocational rehabilitation of disabled residents of the District of Columbia (approved February 23, 1929).

The act authorizing the placing of blind persons as operators of vending stands in Federal buildings and enlarging the economic opportunities of the blind (approved June 20, 1936). Provides for designation of State agencies to license blind persons to operate vending stands in Federal and other buildings and the promotion of the employment of blind persons in private industry.

In this report it is not attempted to cover the work of the State boards for vocational rehabilitation, but rather to describe in brief the activities of the Rehabilitation Division of the U. S. Office of Education in administering the aforementioned acts of Congress.

Each year certain recurring responsibilities must be discharged by the Division, such as audits of all State financial and statistical reports, inspection of the work of State boards, study of new State plans or amendments to State plans, approval of appointments of State personnel made under State plans, and similar functions involved in the maintenance of cooperation with the States.

Audits of reports were made in all 48 States and in Hawaii and Puerto Rico. All States were visited by the Federal agents at least twice and in some cases three or more times during the year for the purpose of administration, supervision, and service.

Services to States

For purposes of administration the country has been divided into four regions, to each of which a Federal agent has been assigned. In addition to their audit and inspectional functions, these agents, at the request of State boards, rendered to rehabilitation departments certain types of service to assist them in further developing and improving their programs.

The following tabulation of assistance and the number of States in which such assistance was rendered represent the year's range of work of one regional agent. The other three agents rendered similar types of service in their respective regions.

Type of service	*Number of States*
Selection of new personnel	4
Training of new personnel	5
Preparation of State bulletin	1
Preparation of cooperative agreement with Compensation Commission	1
Preparation of amendments to State plan	1
Preparation of budgets	2
Development of case-load control	3
Establishment of facility for training in watch repair	1
Conduct of annual training conference of State staff	8
Reorganization or expansion of State program	9
Study of rehabilitation of tuberculous	1
Study of training of the deaf	1
Assistance to special agent of Federal staff in making comprehensive survey of State program	1
Assistance to special agent of Federal staff in study of case work	1

Type of service	Number of States
Inspection of case work	3
Discussion with State supervisor of findings of comprehensive survey of State program	1
Assistance to special agent of Federal staff in study of placement of blind	1
Participation in summer college course for rehabilitation and special education personnel (center)	1

Comprehensive surveys of rehabilitation programs in New York and Louisiana were made by special and regional agents of the Federal staff. Case work surveys in California and Tennessee were completed by members of the Federal staff. A special study of the cooperative program of placement of the blind in North Carolina was made by two agents of the staff of the division. The findings of these surveys were in each case discussed with the State officials and plans were made by them to put into effect the suggestions which were made for improvement of the work.

Technical Services

A variety of services to the States were rendered to meet specific requests. For example, instruction was given in Kentucky, South Carolina, and New York in the use, administration, scoring, and interpretation of psychological tests.

Several trade analyses for use in the rehabilitation training program in the States were made during the year by one of the special agents. These analyses were distributed to the cooperating States.

In Wisconsin and Minnesota programs of rehabilitation for homebound cases were initiated. These programs are being carried on in cooperation with the U. S. Office of Education as experimental research projects. A special agent made several visits to these States to assist them in planning for and developing these programs.

Assistance was given to many of the States both by the special and regional agents in the use of the standardized case-work forms which had been developed during the preceding year by the Rehabilitation Division of the Federal office.

One of the States was assisted in planning and initiating an experimental program in a large city area for determining the needs of applicants with hearing disabilities for hearing aids, the most suitable kinds of aids to be furnished, and the most satisfactory types of rehabilitation service to be rendered such cases.

Qualitative surveys for the purpose of evaluating the effectiveness of case-work processes were made in two States. In this connection certain criteria for evaluation of case-work techniques and procedures for qualitative surveys of case-work were developed.

Research, Documents, and Conferences

A manual for State rehabilitation case workers on the rehabilitation of the deaf and hard of hearing was prepared in the Rehabilitation Division. Also, the first draft of a manual for case workers on instructions for use and interpretation of the standard medical report form for visual disabilities was prepared.

A report on a research study of the postrehabilitation experiences over a period of 3 years of more than 6,000 persons rehabilitated in 1936 was completed.

The Rehabilitation Division called and conducted special training conferences for all rehabilitation workers in each of the four Federal regions. All the States were represented at these meetings, most of them sending their entire rehabilitation staffs. Each conference covered a week. Among discussion subjects were the following: Management of the case load, supervision of case-work procedures, techniques of placement, diagnosis and rehabilitation of the tuberculous, diagnosis and rehabilitation of the visually handicapped, diagnosis and rehabilitation of cardiacs, diagnosis and rehabilitation of the hearing handicapped, and rehabilitation problems in the defense program.

In addition to a number of minor documents, the following were issued by the Division during the fiscal year: Rehabilitation of the Deaf and Hard of Hearing: A manual for rehabilitation case workers (Misc. 2535); Instructions for Use and Interpretation of the Medical Report Form for Hearing Disabilities (Misc. 2519); Instructions for Use and Interpretation of Medical Report Form for Pulmonary Tuberculosis (Misc. 2328); Criteria of Satisfactoriness of Case Work Processes (Misc. 2561); and Techniques of Placement (Misc. 2587).

Service for the Blind

At the request of various public and private agencies, members of the staff of the Service for the Blind visited 37 of the States during the fiscal year. This service was given primarily for the purpose of presenting a national point of view to agency executives and staff members regarding effective means of promoting the economic welfare of the blind. While the service is primarily concerned with employment for the blind it was found that agency directors are eager to receive information in all fields directly or indirectly related to the placement of the blind in self-supporting employment.

In several of the States the Division was requested to give assistance in the preparation of suitable legislation to accomplish constructive services in the vocational adjustment of blind persons. In addition many of the States requested assistance in the formulation of policies and plans for the most effective use of their appropriations in locating jobs for blind persons in the fields of competitive industry and business.

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The pioneering effort in the District of Columbia is being continued. With the Rehabilitation Service as the licensing agency and the Washington Society for the Blind as a private administrative agency, the plan established in 1939 is being developed.

An executive has been employed by the Society. Details of daily administration have been assigned to the Society and the results of the dual arrangement are termed by many observers as most effective. Many agencies interested in work for the blind are watching this activity with keen interest and a number of them are adopting the local policies and methods for similar work in their own areas.

On June 30, 1941, there were 30 stands in operation, each having an average weekly sale of more than $12,000 and an average weekly income to each blind person of $55.26. The records show that these blind persons were either on public assistance relief rolls or were eligible for public assistance at the time of their employment. These operators have gladly relinquished public assistance and are now not only saving the Government more than $10,000 a year in direct assistance to the blind, as well as considerable saving in general relief to other members of the family, but many of them are also now paying income and property taxes.

There were 316 stands operating in Federal buildings at the close of the year. While reports are incomplete as to the number of stands in non-Federal buildings, it is estimated that at least 800 additional stands are now in operation in industries, private office buildings, and city, county, and State office buildings.

The Federal staff has assisted a number of agencies in designing new and attractive stands for many locations. Many of the agencies for the blind are using better business methods and have established higher standards in the operation of stands than heretofore.

Through arrangements made by the Federal staff with the Canadian National Institute for the Blind, Toronto, Canada, and the Vocational Rehabilitation Service of Indiana, a young blind man from Indiana was given training in placement work for blind persons and began this work with the Pennsylvania Institution for the Instruction of the Blind, Overbrook, Philadelphia, on September 1, 1940. He was given the responsibility of securing employment for the graduates of this institution. During the year, with the cooperation and further instruction of a Federal agent, three graduates of the school have been placed and employers have already promised jobs for at least six others. Of the three placed, one is a research engineer with a large radio company. One young man is assembling transformer cords, and a girl is a dictaphone operator in an industrial plant. Preliminary understanding of the plan by industrialists, labor unions, and commercial organizations was necessary to initiate this pioneering work in the Philadelphia area.

At the request of the New Jersey Commission for the Blind, a young blind man was given training with the Canadian National Institute for the Blind, and began his regular duties with the Commission on June 1, 1941.

At the request of the Texas Commission for the Blind, a partially sighted young man from that State was given 6 months of intensive training also with the Canadian National Institute for the Blind, ending June 15, 1941, and he will assume his duties as employment supervisor in Texas on September 1, 1941.

These arrangements with the Canadian National Institute for the Blind, Toronto, Canada, are extremely limited and the service has been given to these trainees without charge by the Institute or remuneration to that agency.

One week was spent by an agent of the Federal staff in Buffalo, N. Y., in cooperation with the Buffalo Association for the Blind. Calls were made on a number of industrialists and, as a result, the Association reports that eight blind persons are employed in six factories.

Two weeks were spent in the greater Philadelphia area. One of the largest radio manufacturers in the country and the Labor Union agreed to the principle of the employment of one blind worker for each 1,000 of the sighted group. The jobs are assigned to the agency for the blind in order that the agency may replace a blind worker at any time the individual is unsatisfactory or changes in processes require the removal of that individual. Between 9 and 20 blind persons will thus be given employment in competition with the sighted, and in addition to their normal incomes from such employment there will be savings in relief costs.

Surveys prove that thousands of capable blind people can be given employment at normal wages when funds are available to provide training for staff personnel who can be assigned to the task of promoting the idea to employers of labor.

District of Columbia Rehabilitation Service

Previous reports concerning the service of rehabilitation of physically disabled residents of the District of Columbia for which the Rehabilitation Division is responsible have generally been of a more or less descriptive character. The report for the year 1941 is given herewith in a statistical analysis of the many and varied types of procedures which must be carried out in the rehabilitation of a large group of persons in a city area:

Case production statistics	*Number of cases*
Open cases July 1, 1940 (including reported)	718
New cases reported during the year	650
Total cases on rolls during the year	1,368
Total cases closed during the year	674
Open cases June 30, 1941	694

Case service statistics

Case reporting by other agencies during the year:	Number of cases
U. S. Employees' Compensation Commission	27
Public Employment Office of the District of Columbia	35
District of Columbia Tuberculosis Association	83
Public Assistance Division of the Board of Public Welfare	112
Child Welfare Division of the Board of Public Welfare	16
District of Columbia Work Projects Administration	16
Crippled Children Division of Health Department	8
District of Columbia Public Schools	38
Cases themselves	175
Interested individual	90
Other—miscellaneous	50
Total cases reported	650

Case investigations—survey and diagnosis:	
Survey forms executed	931
Examinations procured	1,077
Physical restoration services procured	165
Appliance services provided or procured	155

Vocational training provided:	Number of trainees	Number of months
College or university	26	221
Commercial schools	80	246
Barber or beauty schools	5	14
Private trade schools	15	80
Public vocational schools	32	141
Employment training (all kinds)	97	373
Correspondence and tutorial	12	53
Total	267	1,128

Service	Number of cases	Cost to VRS	Cost to others (estimated)
Other preparation services provided:			
Maintenance	67	$30.00	$2,776
Travel	41	873.91	369
Training supplies	55	1,400.81	185
Placement equipment	4	244.06	1,500
Compensation adjustment	5	------	400
Wage and hour adjustment	5	------	------
Social service	46	------	3,000
Other financial aid	5	------	78

Placement services provided:	Number
Temporary or part-time jobs	154
Rehabilitation or permanent jobs	305

Supervision of training and other services:	
Number of supervisory contacts	13,054
In field	5,128
In office	7,926

V

5-YEAR SUMMARY OF FEDERAL FORUM PROJECT

MORE THAN two million and a half citizens throughout the Nation have participated in modern American town-meetings associated with the Federal Forum Project of the U. S. Office of Education during the past 5½ years. These forums, managed directly by the public education authorities of the localities and several States, received the counsel and financial assistance of the Federal Forum Project, which was originally launched under a special appropriation from the Emergency Relief Funds in January 1936 and terminated June 30, 1941.

The national forum movement has demonstrated the adaptability of a traditional democratic medium to the present crowded living conditions and social complexities. Since the greatest concern of the forums held within the past year has been national defense and its concurrent problems of home defense, a report of the forum character and development becomes especially timely and pertinent.

Federal forum records account for more than 23,000 forums with a total attendance of more than 2,500,000 people in the 5-year period. Initiated as an experiment in adult education for democracy, the project has undergone 3 distinct phases of development and emphasis, with each phase to some extent overlapping the other 2.

The first phase saw the development of 18 demonstration centers in as many States in 1936–37. The modern town-meeting was tried. Its techniques were dramatized. An old American institution for the general diffusion of knowledge was actively promoted by government as an "object of importance," the government, giving force to public opinion, followed George Washington's advice "that public opinion should be enlightened."

As reports of the demonstration centers began to come in, President Roosevelt said: "We need to have meeting places for the discussion of public questions, in the cities, hamlets, and on the farms throughout the length and breadth of the land."

The second phase was the logical outgrowth of the experimental period and responded to the demand for more generally spreading the forum services of the U. S. Office of Education. In spite of a greatly reduced budget for the year beginning July 1, 1937, perhaps the most unique of the techniques developed by the demonstration centers were carried into action in 20 Cooperative Forum Centers. During the

following year there were organized 15 Cooperative Forum Centers and 16 Forum Counseling Programs working with the State universities and State departments of education, while WPA workers were made available to 35 locally sponsored programs. By July 1940, the old town-meeting had been restored as part and parcel of the modern technological era.

The Federal Forum Project's third phase then began in the fall of 1940. The U. S. Commissioner of Education called upon the Nation's educators to lay special emphasis on the problems of national defense. Recognizing that America counts in its fold millions of foreign-language-speaking peoples, a large number of whom are easily reached by appeals from other nations, special consideration for forum discussions among these groups was urged. Community preparation for and celebration of citizenship induction were initiated.

Local forums during this past year strengthened the American people in their determination to defend themselves and their democratic way of life, by arming them with facts and the corroborative ideology for the war against the demoralizing propaganda of dictatorship. At the same time, through the forum, American citizens gained a valuable medium for information and analysis of national defense.

Demonstration Centers

The initial phase of the Federal Forum Project was a period of experimentation and scientific recording. The locations of demonstration centers were selected to represent, in as large a degree as possible, as many sections of the country and as many different kinds of communities as possible. The selections were made by a group of educational and civic leaders called into consultation by the Commissioner in the capacity of Federal Administrator of the forum program.

In carrying out the demonstration character of the program, the selection of areas was made to include three different types of forum centers. The largest number were fairly equally divided between urban centers, including cities with their adjoining suburbs, and the county-wide districts, inclusive of cities, town, and rural communities. A smaller number of projects were held in several county districts, linking the city and county educational agencies of more than one county in a forum enterprise designed to serve both urban and rural communities.

Since the essence of the forum program lies in its indigenous quality, with emphasis of method and subject at all times bearing upon questions of concern to the local population, the need for engaging community participation in the planning process was paramount. Answering this need to a great extent was the citizens' advisory committee, representing cross sections of community organizations. Such bodies worked closely with the program administrators, the directors, and the school boards.

One of the byproducts of the forum organization was the training through experience for the WPA workers engaged in the demonstration centers and also in many kinds of promotional activity. For the Forum Program, however, their chief contribution has been recognized as the building of records, which has been of value to hundreds of other communities as they inaugurated forum programs of their own.

Upon the intelligence and skill of leadership depends the success of the forums, and during the experiment much was learned in regard to qualifications of successful leaders. Selection was the responsibility of the local administrator, and was made in much the same way as any appointment to the school system.

Attendance records for the meetings showed the greatest following in the age group between 25 and 55. Of the total number, 58 percent were women, and of these the greater number were housewives. Most arresting, however, of the attendance statistics are those dealing with the educational background of the forum-goers. Fully 40 percent of those attending meetings had had college education, whereas but 7 percent of the adult population of the United States has had college education.

The character of attendance at meetings, as well as the size of the audience, was, of course, greatly influenced by the selection of subjects for discussion. How to choose these subjects was, at the outset, a question of particular importance to the demonstration centers. The advisory committee and the school boards gave the matter their careful consideration, but the public, even before the forums began, was also consulted. Newspaper stories were often accompanied by ballots through which community participation was sought. House-to-house canvassing, primarily promotional in its intent, was able to bring the administrator a sampling of public interest in discussion topics.

Once the forum meetings were under way, however, the management of the centers was in close touch with the interests of its clientele, and through general discussion, balloting, or other means was then in a position to determine the more popular subjects. "Civic education"—the broadly definitive term for the forum discussion material—was widely interpreted. Citizenship—social, economic, and political problems—was the emphasis. Subjects ran the gamut of American interests—religion,the Nation's health, civil liberties, advertising, birth control, pensions for the aged, the TVA, tariffs, taxes, race problems, and war.

Spreading the Forum to the Smaller Town

The major emphasis for the year 1937–38 was placed upon establishing town meetings in the smaller towns with populations ranging from 1,000 to 25,000. The primary objective of the Federal Forum Project

was to promulgate the plans by which several educational systems of limited resources might pool their funds to provide educational forums under qualified leadership. During the year 20 cooperative forum centers in 18 States were developed— each on the pattern of several school districts joining together to employ one full-time public discussion expert. This practice extended greatly the opportunities for lower cost.

In the cooperative centers established, the average attendance per meeting was larger than in the city and county projects operated the previous year. The cooperative center organizations ran for periods of either 9 or 12 weeks, and demonstrated that the smaller centers of population could have well-qualified forum leadership at a cost of approximately $25 per town meeting.

With an appropriation of $250,000 from WPA funds to the U. S. Office of Education—less than half of the amount it had the year before—2,466 meetings were organized, having a total attendance of 338,740. The Federal Project continued a pay roll of 13 nonrelief forum leaders during the year and employed a monthly average of 275 relief workers. In addition to the professional leadership and relief staffs for the Cooperative Centers, the Federal Forum Project made available WPA workers to 35 locally sponsored public-forum programs where professional leadership was financed locally or volunteered.

With stimulation by the Federal Forum Project, 36 State conferences on adult civic education through forums were organized by State departments of education in the spring of 1938.

During the next year, with an appropriation of $200,000, 15 Cooperative Forum Centers continued through the period between October 1938, and March 1939. Eighteen professional forum leaders served the 15 Cooperative Centers and WPA workers went to work, not only in these activities, but for 35 local school systems which operated locally financed public-forum programs.

With a supplemental allotment of $95,000 the Federal Forum Project began anew 16 State forum counseling programs for the period beginning April 1939, and ending that June.

The bulk of these extra funds went to 15 State departments of education. Each of these States employed a State forum counselor chosen by the chief State school officer for a period of 3½ months.

The counselor assisted a State forum committee as it surveyed needs and resources in the field of adult civic education; planned and conducted conferences of school officials to explore organizing school-managed adult public affairs education; advised school boards and officials about suiting forum programs to local conditions and resources; and assisted the State department in developing proposals for the improvement and enlargement of forum services for public education through State aid.

The new element in the Federal Forum Project for 1939 was the further expansion of the forum counseling program in 13 States, this year cooperating with the State universities as well as State departments of education.

The counselors established several centers where 20 to 30 communities employed full-time leaders. In addition, the counselors established State radio forums; developed resource files including names of speakers and panel discussants; promoted forum leadership training courses in universities and teachers' colleges; established visual-aid libraries; and prompted the publication of discussion pamphlets. Although the counselor's salary came from the Federal Forum Project, his travel and contingent expenses were paid by the cooperating university or State department of education.

Aside from the 13 forum counseling programs in 13 States, Federal Forum Project employed WPA workers to aid 32 locally sponsored and locally financed public-forum programs.

National Defense

The inauguration of the National Defense Program found the Federal Forum Project established in its administrative procedures. Forums organized as part of the experimental technique had made audiences and forum-wise community leaders eager to continue this type of meeting with variously financed plans of their own. The urgency of issues presented an impetus toward reorganization, and the paragraphs which follow, especially those dealing with the work of the forum counselors, present testimony to the grip which the forum idea has on the minds of the American educators and the general public.

During the fiscal year 1941, 11 State forum counseling programs operated in 11 States. Except for minor administrative expenses in the Office and the expenses of conducting a Nation-wide survey of existing forums, the $250,000 allotment went for the most part to the counseling programs established in the offices of either State departments of education or extension divisions of State universities. These funds also paid the WPA employees who worked for 25 locally sponsored and financed forums organized by public-school systems.

The emphasis that was given to national defense during this year's work can best be explained through the accomplishments of sample counsel programs. In reporting on a few of these no effort is made to cover the whole Federal program. The instances cited are simply examples of work in many States and localities conducted in connection with the Federal Forum Project.

The Holyoke, Mass., forums conducted a series of 15 forums from October 22 to February 18. The subjects included: "Facts about our Inter-American Relations," "Education in a World of Force,"

"Japanese Hegemony in the Far East," "Social Security in the American Defense Program," "The War Department's Plan for Military Industrial Preparedness." Situated in the heart of the Holyoke industrial area, the forum movement there embraced the cooperation of industrial groups.

The Georgia public forums, sponsored by the State Department of Education, organized 170 Negro and 136 white forums in the 7-month period beginning October 1, 1940. The total attendance in this period was 32,544. There were regular radio programs in the State every month. An example of the national defense emphasis given is exemplified by the titles for the April programs: "The South and the World Crisis," "Democracy and Selective Service," and "The Task Beyond the War."

The California State forum counselor reported that in the fall semester alone 84 communities conducted under public-school supervision 630 meetings, 481 of which dealt with international relations, current affairs, democracy, and national defense. The State's new *Directory of Public Forums* for the whole year lists 139 organized forum centers in 111 cities and towns. Aside from its general activities in the organization of forums and on the advice of the Federal Forum Project Administrator, discussion groups were organized among new voters in the State. With the guidance of the State forum counselor, the California Adult Education Workshop to train discussion leadership has become an annual summer activity. Approximately 75 percent of all 1940–41 programs that were submitted by local public-school administrators and forum directors to the State forum counselor had a definite relationship to the National Defense Program and the relationship of the United States to the world at large.

Besides conducting regular weekly forum broadcasts, organizing new citizen groups for discussion, conducting special citizen induction programs, and disseminating recorded discussions to radio stations throughout the State, the Forum Counseling Service, with offices in the Extension Division of the University of Wisconsin, took a leading role in organizing a Wisconsin Public Affairs Institute on National Defense in Action on May 16 and 17. Its purpose was: "To stimulate cooperative effort in meeting the problems of total defense in its relation to local communities by making available accurate, first-hand information and by providing opportunity for thorough, critical, and objective discussion of vital issues facing the American democratic way of life."

The Federal Forum Project in San Antonio, Tex., during the month of April alone conducted 9 radio discussions, provided 107 speakers for 153 meetings with a total attendance of 26,581. "Our greatest increase in forum activity and in attendance this year," reports the

Forum Director, C. E. Troutz, "has been among the so-called foreign element, largely Latin Americans. They have responded to our educational programs with enthusiasm. . . . The forum management feels that the ground has just been broken for the greatest advancement our Latin-American element has ever made and that the beginning of an era of much better understanding the good will along the border is now in its inception."

In general summary, the permanent results from 5 years of Federal forum experimentation and demonstration are:

1. Every State has been encouraged to experiment with various means for organizing and operating public affairs forums as a part of the public educational program for adults as well as youth.
2. Thousands of cities and counties have been given experience with school-managed forums and discussion groups.
3. It has been demonstrated that our traditional American policy which places the organization and management of public education near to the people in their States and local communities insures their use for educational purposes.
4. Public affairs forums, especially where the States and localities have now begun to give them active financial support, bid fair to become a permanent part of the fabric of American life and education.

VI

CCC EDUCATION SERVED YOUTH AND DEFENSE

THE Civilian Conservation Corps realigned its social objectives and intensified its training program to serve more effectively the needs of national defense and the needs of its members. The necessity for the Nation to prepare itself for total defense precipitated a demand for semiskilled and skilled workers in key defense industries and in the military services. Large numbers of young men, who during previous years had been unemployed, were employed during the year in the defense industries or in the military services or enrolled in defense courses in the vocational training schools of their home communities.

Analysis of Junior Enrollees

The Corps enrolled a much younger group of men, largely from rural areas, with a lower educational level and less work experience than in previous years. The trend in the type of juniors enrolled is indicated in the following table:

Item	July 1939	January 1940	July 1940	February–April 1941
1	2	3	4	5
	RURAL-URBAN DISTRIBUTION			
Number of juniors enrolled	63,386	64,218	98,062	51,631
Percent living in urban areas	59.6	54.4	45.7	37.7
Percent living in rural areas	40.4	45.6	54.3	62.3
Age group	AGE DISTRIBUTION			
17	33.6	34.0	38.5	51.6
18–20	54.3	52.5	50.4	41.8
21 and over	12.1	13.5	11.3	6.5
Years of schooling	YEARS OF SCHOOLING COMPLETED			
0–3	2.0	2.7	3.9	6.4
4–7	22.1	26.2	29.8	39.4
8	19.9	23.0	18.5	19.6
9–11	37.1	37.0	32.8	29.1
12	17.7	10.1	13.9	4.5
13 and over	.8	.5	.8	.4
Months unemployed	LENGTH OF UNEMPLOYMENT PRIOR TO SELECTION			
Never employed	49.4	63.5	73.2	74.5
More than 19	3.7	2.6	1.9	1.4
16 to 19	2.1	1.1	.8	.6
12 to 15	5.1	2.9	2.1	1.1
8 to 11	5.0	2.1	2.6	1.7
4 to 7	10.6	8.4	5.7	5.6
Less than 4	21.8	18.6	13.3	13.5

Administrative Actions

In order to meet the needs of the Nation and of the enrollees, the CCC intensified certain phases of the training program which had been carried on during the 8 years of its previous existence and cooperated with the vocational schools throughout the country in providing for its members defense training courses authorized by Congress under Public, No. 812, Seventy-sixth Congress, third session. A number of steps were taken by the Corps during the year to accomplish this change.

The War Department issued a letter on October 7, 1940, to Corps Area Commanders pointing out that the need for training citizens for national defense had become greatly intensified and that the CCC, because of the character of its organization and personnel, was particularly well adapted to carry on certain specific training functions which would contribute both directly and indirectly to the national defense. The letter stated that special emphasis should be placed on the following three fields of training during the year: Training for service operations of direct military value, such as clerical work, auto mechanics, cooking and baking, radio operation, mapping and map reading, etc.; training for employment in industrial production, aircraft maintenance, blueprint reading, forging and blacksmithing, welding, etc.; and, finally, training for food production in agriculture in such subjects as gardening, poultry raising, and food processing.

During this period, the Civilian Conservation Corps cooperated with the U. S. Office of Education in seeking to integrate its training program with that of the regular vocational schools throughout the country. As a consequence of a ruling that CCC enrollees were eligible for enrollment in programs organized under Subdivision (4) of Public, No. 812, a number of the camps immediately began to set up general pre-employment courses in auto mechanics, metal work, woodworking and electricity, and specific preemployment preparatory courses for such occupations as welding, aircraft sheet metal work, and radio service and repair.

Because defense training courses required a larger amount of time than the enrollees were able to devote during their leisure time, the CCC Director, early in 1941, approved a proposal authorizing that as much as 5 hours per week might be taken from the work time of enrollees to permit their participation in organized vocational training and subjects related thereto.

Then on May 26, 1941, the Director approved a new statement of a CCC training plan in order to accomplish more effectively the objectives of the defense training program. In addition to listing the objectives of the CCC and the methods and procedures by which these objectives should be accomplished, two committees were established within the framework of the Corps to coordinate the efforts of the

CCC cooperating agencies. A professional committee, consisting of the Director of CCC Camp Education (chairman) and the Supervisors of Project Training of the Interior and Agriculture Departments, was established to draw up and submit to the appropriate administrative authority recommendations of a professional nature deemed necessary to carry on the training program. An administrative committee, consisting of the Advisory Council representatives of the War, Interior, and Agriculture Departments, was established to consider and act upon matters presented to it by the professional committee and other questions of a general nature.

Authority was granted to the War Department to transfer qualified veteran enrollees to junior companies to act as instructors. Opportunity was given to young men living in rural areas to attend defense training courses in CCC camps when there were no local facilities available for carrying on such courses in the rural communities.

The CCC educational and training program was carried on in four different ways: First, through training in connection with the regular work to which the men are assigned in camp; secondly, through training carried on in special CCC schools in cooking, baking, radio operation, auto mechanics, and clerical work; thirdly, through leisure-time vocational training courses carried on either in the camps or in nearby schools; and, finally, through the general educational program including elementary, high-school, and college training, as well as health, safety training, leader and teacher training, and avocational activities.

Job Training

There is a broad list of specialties in which the enrollees receive work experience in connection with the jobs they perform while they are in the CCC. Some of these jobs bear directly on defense. For example, there is a direct relation between truck driving and tractor operation in the CCC to mechanized cavalry units in the Army and to truck driving in private industry. Likewise, a similar relationship exists between telephone line work in the CCC and the work of the Signal Corps. Road construction, timber felling, soil conservation, and drainage projects correspond to some of the work of the Engineer Corps. Clerical work, cooking and baking, mess management, and short-wave radio operation are directly related to similar jobs in the military service. The training and experience in leadership which CCC leaders and assistant leaders receive often lead to noncommission ratings in the military service and to foremen jobs in industry. Many CCC jobs, such as welding, auto mechanics, and operation of tractors and other heavy equipment lead directly to occupations which are vital to defense industries.

Full-time Training Centers

Because of the need for more advanced schools in cooking, baking, mess management, clerical work, radio operation, auto mechanics, and

subalterns, the CCC has established 176 special schools to train enrollees for these jobs. Under the present policy qualified enrollees are selected and trained in the subaltern schools and are later assigned to camps as subalterns or company commanders. The estimated annual enrollment in the various types of training is as follows:

Advanced training in auto mechanics	3,200
Cooking and baking at cooks' and bakers' schools	6,500
Radio operation at district radio schools	2,500
Subaltern schools	685
Clerical schools	750

Leisure-time Vocational Courses

During the leisure time of the men, the camps provide vocational training courses in subjects in which the men cannot be trained through the medium of their regular camp jobs. During the past year much of this training has been carried on in cooperation with the State Departments of Vocational Education and vocational schools. During the year, 268,378 enrollees completed units of these courses successfully. The following table indicates the specific types of training carried on:

Enrollment in vocational courses

Units completed during year	Number of—		Units completed during year	Number of—	
	Men enrolled	Successful completions		Men enrolled	Successful completions
Agricultural training	30,085	21,709	Trade and industrial training—Continued.		
Conservation courses	49,454	36,421	Engineering	2,390	1,682
Commercial training	45,904	30,702	Mapping	325	245
Food service	21,734	16,320	Masonry	2,168	1,499
Heavy equipment operation:			Mechanical drawing	3,439	2,310
Motor-vehicle operation	42,062	27,648	Mechanics	5,945	3,881
Tractor operation	3,286	2,182	Metal work	4,877	3,270
Unclassified	4,426	3,084	Painting	1,163	927
Total	49,774	32,914	Photography	6,222	4,079
			Plumbing	434	297
Trade and industrial training:			Printing	413	285
Aeronautics	1,559	963	Radio	10,833	6,720
Auto mechanics	48,651	32,952	Road construction	422	344
Blacksmithing	6,032	4,245	Saw filing	285	230
Blasting	3,866	2,586	Sign making	361	261
Blueprint reading	5,251	3,480	Surveying	7,755	5,410
Building construction	758	536	Telephone line construction	2,846	1,914
Care and use of tools	908	698	Welding	9,163	6,357
Carpentry	21,580	15,417	Woodworking	20,615	14,069
Concrete construction	3,112	2,043	Total	181,123	123,186
Construction, general	471	361			
Diesel engines	1,573	1,022	Miscellaneous courses	8,150	5,507
Drafting	241	153			
Electricity	7,465	4,970	Grand total	386,224	266,759

The defense courses carried on in cooperation with the State Departments of Vocational Education and local schools and authorized under Public, No. 812 provided vocational training for 39,437 men during the year in 828 camps. The U. S. Office of Education classified CCC enrollees as being out-of-school rural or nonrural youth not

otherwise provided for and, as a consequence, the use of funds for the operation of defense courses in the camps was authorized under Subdivision (4) of Public, No. 812. The following table shows the number of men enrolled in these courses by subjects. It is to be noted that the majority of CCC enrollees took the general pre-employment courses, that is, operation, care and repair of motor vehicles, metal work, woodworking, and elementary electricity; a much smaller number of enrollees took the specific pre-employment courses.

Enrollment in Defense Training Courses

Course	*Enrollment*
Motor vehicles	11, 962
Metal work	7, 840
Woodworking	10, 467
Electricity	6, 268
Radio	1, 035
Aviation mechanics	401
Cooking and baking	207
Welding	630
Miscellaneous	627
Total	39, 437

General Educational Program

The general educational program which the CCC had carried on during the previous years was continued with greater emphasis on remedial training for the increased number of illiterate enrollees. Slightly more than 5 percent of the enrollees were classified as illiterate during 1941 as compared with an average of approximately 4 percent during previous years. An average of 11,697 illiterate enrollees were taught to read and write during the year. An average of 92,147 men, or 34 percent of the total strength of the Corps, had not completed the elementary grades. Reports indicated that during an average month, of the 92,147 men on the elementary level, 41,811, or 45 percent, had taken elementary courses, and 6,107 men had secured elementary school diplomas. There were 132,221 men on the high-school level, which approximated 48 percent of the total number of men in the camps. Of this group 37,705 (28.5 percent) took high-school courses and 766 completed their high-school work and secured high-school diplomas while in the camps. On the college level there were 35,025 men, 26 percent of whom, or 9,060, studied courses of college grade. Sixteen men secured college diplomas or degrees during the year.

In addition to the academic and vocational training, an average of 157,453 took administrative courses; that is, health; life saving; and foremen, teacher, and leader training.

It is also to be noted that 39,242 men, or 14 percent of the total enrollment strength of the Corps, engaged in avocational activities during the year.

The Corps issued Unit, Educational, and Proficiency Certificates upon the successful completion of a prescribed amount of educational work. During the year, 559,935 Unit Certificates, 18,731 Educational Certificates, and 27,728 Proficiency Certificates were issued.

Placement of Junior Enrollees

The number of junior enrollees discharged to accept employment increased greatly, the total amounting to 57,581 men as compared with 38,225 during the previous year. This increase is due to two factors: First, the increased opportunities in outside employment, and, second, the more effective training program which was provided in the camps during the year.

The following figures shows the number of men discharged to accept employment by months:

1940						1941					
July	August	September	October	November	December	January	February	March	April	May	June
3,243	3,818	4,103	3,816	4,255	3,409	3,611	4,149	5,409	5,803	8,486	7,479

Employers have placed great stress not so much on the skills which CCC trained men possess as upon the good work habits and attitudes which they acquire, the fact that they are in excellent physical condition, and that they have learned to submit to discipline and to get along with others. All of this is brought about by the camp situation itself, and its effects are heightened by good administration and the establishment of an effective guidance program in the camps.

The good health and physical hardihood of the men are developed by healthful living conditions, toughening work, regular habits of living, daily calisthenics, and careful medical and dental attention, including immunization against epidemic diseases.

The success of the Corps in inculcating good work habits and attitudes in its members is brought about by holding the men to high production standards both in terms of quality and quantity of work produced. In order to achieve this, camp officials must organize and supervise the work activities of the men with great care.

The regular activities of camp life provide a splendid opportunity for developing the ability to live and work and play together and for promoting high standards of moral conduct.

Program in Veteran Companies

The educational activities carried on in the veteran companies differ substantially from those operating in the junior camps. The average age of the veterans is 49 years. Sixty-three percent of the

veterans are married and 18 percent of them have had their families living within 25 miles of their camps. A study of the occupational backgrounds of these men made during the year revealed that there were 228 occupations ranging from common-labor jobs to skilled trades, such as machinists and electricians, and finally, to professional positions such as lawyers, teachers, and dentists.

Unlike the juniors, more than half of the veterans, 57 percent, were from urban areas, 21 percent from farms, and 22 percent from rural nonfarm areas. About half of them, 49 percent, had not completed grade school; 29 percent had completed the elementary grades, but had no high-school training; 14 percent had had from 1 to 3 years of high school; 5 percent had completed high school; and 3 percent had attended college for 1 to 4 years.

The development of an effective training program for veteran enrollees is dependent on such factors as the needs of their families, their emotional habits and attitudes, their general intelligence, previous education, and the skills they have acquired in their work. The basic problem is one of bolstering the morale and developing a renewed ambition in order to restore faith in themselves.

The attempts which were initiated in the previous year to secure the assistance of various organizations interested in the veterans were continued during the fiscal year 1941. Contacts were made with veteran organizations, the Veterans' Placement Service and the Veterans' Administration, which resulted in a series of conferences throughout the country, concerning the guidance, training, and placement of the CCC veteran.

It is encouraging that due to the improved training and placement program, as well as improved business conditions, the placement of veterans in private employment is on the increase. During the fiscal year, 5,710 veterans, 13.9 percent of those in the Corps, were discharged to accept employment. This figure does not include 12,475 other veterans who left the Corps during the year, many of whom have since secured employment.

VII

RADIO AND INFORMATION SERVICES

EDUCATIONAL RADIO

THE YEAR ended June 30, 1941, marked a considerable increase in the U. S. Office of Education's efforts to meet the demands of educators, radio station managers, and civic leaders in the swiftly enlarging field of education by radio. Increased interest in educational FM (frequency modulation) stations, colleges and universities adding and expanding courses in radio, enlarged "schools of the air," greater use of radio transcriptions as scientific aids to learning, more comprehensively organized radio workshops in high schools, colleges, and universities, promotion of organized adult radio listening groups, and the purchase of transcription play-back machines and central radio-sound systems by educational institutions are but a few indications of the rapid advancement in this important social frontier.

Script Exchange Service

To promote the more effective use of radio for educational purposes by educational and civic groups the Educational Radio Script Exchange was organized in 1936. During the past year more than 16,000 educational and civic groups and radio stations were serviced by the Exchange, as compared with approximately 12,000 during the previous fiscal year. To meet the increasing demands for the Script Exchange Service, a supplement to the Fourth Edition Catalog was issued in November 1940. The supplement lists 233 scripts in addition to the more than 500 scripts included in the catalog.

In connection with the servicing of 16,808 requests for assistance received in the Exchange during the past fiscal year, the following mimeographed materials were distributed:

Type of material	*For the 1941 fiscal year*	*Grand total (1936–41)*
Radio manuals	2, 700	17, 785
Radio glossaries	1, 800	15, 505
Handbooks of sound effects	2, 030	8, 855
Radio bibliographies	1, 354	5, 479
College radio courses	596	2, 521
Catalogs	2, 875	7, 044
Supplements to catalog	1, 552	1, 552
Scripts circulated on loan	34, 085	278, 492

Educational Transcription Service for Schools

A survey recently conducted by the Office indicated that more than 2,700 junior and senior high schools in the United States, Puerto Rico, Hawaii, and the Philippine Islands are equipped to play radio transcriptions at 33⅓ r. p. m. These schools represent a potential listening audience of more than 2,000,000 students. This information bears testimony to the fact that the past 2 years have marked a significant increase in the use of educational recordings by schools as scientific aids to learning. The Transcription Service for Schools was organized in 1938. The first project to be carried out was the recording of the *Americans All—Immigrants All* programs which were presented on the air with the cooperation of the Columbia Broadcasting System and the Service Bureau for Intercultural Education. While music records, playable on phonographs, have been used in schools for years, there was need to experiment with the use of the 16-inch 33⅓ r. p. m. transcription to ascertain various problems involved in the application of such recordings to the teaching process. A special teachers' manual was prepared to accompany the recordings. This project proved to be a pioneering effort which has stimulated greater interest in the schools' use of 33⅓ r. p. m. recordings. At the close of the fiscal year 2,459 recorded programs had been sold at cost.

Summary indicating the number of junior and senior high schools in each State and Territory which reported either 33 1/3 r. p. m. portable play-back machines, central sound systems, or both

State	Schools	Enrollment	Portable play-back machines	Central sound systems	Both types
1	2	3	4	5	6
Alabama	34	20,617	25	16	6
Arizona	10	3,030	10	2	2
Arkansas	16	11,569	14	4	2
California	232	301,263	222	30	23
Colorado	30	18,360	25	6	1
Connecticut	24	25,455	20	9	4
Delaware	6	4,472	6	0	0
Florida	34	29,962	29	9	4
Georgia	36	29,426	31	7	2
Idaho	23	11,706	21	4	2
Illinois	120	53,030	107	20	7
Indiana	78	45,989	70	14	6
Iowa	66	29,461	64	7	5
Kansas	63	39,557	49	17	3
Kentucky	37	24,882	30	9	2
Louisiana	34	22,332	25	15	6
Maine	18	6,432	14	5	1
Maryland	16	9,174	12	5	1
Massachusetts	63	59,769	59	12	8
Michigan	148	137,023	124	40	15
Minnesota	87	52,841	73	25	12
Mississippi	18	10,495	12	9	3
Missouri	57	34,306	54	8	4
Montana	30	13,492	23	10	4
Nebraska	34	14,647	34	2	2
Nevada	1	220	1	0	0
New Hampshire	5	3,590	4	2	1
New Jersey	61	67,181	58	7	5
New Mexico	13	5,630	11	2	0
New York	226	237,005	173	80	28

Summary indicating the number of junior and senior high schools in each State and Territory which reported either 33 1/3 r. p. m. portable play-back machines, central sound systems or both—Continued

State	Schools	Enrollment	Portable play-back machines	Central sound systems	Both types
1	2	3	4	5	6
North Carolina	71	50,178	60	15	4
North Dakota	11	16,502	10	2	1
Ohio	205	262,038	153	87	35
Oklahoma	49	44,173	43	11	5
Oregon	46	25,164	36	14	5
Pennsylvania	197	167,487	166	48	18
Rhode Island	5	3,535	5	1	1
South Carolina	30	31,525	18	16	3
South Dakota	21	9,995	20	1	0
Tennessee	28	17,933	22	6	0
Texas	130	81,544	94	54	1
Utah	38	23,073	38	5	5
Vermont	8	4,746	8	0	0
Virginia	52	29,565	40	16	4
Washington	66	42,091	52	19	5
West Virginia	47	26,593	38	12	2
Wisconsin	91	58,276	81	31	21
Wyoming	10	5,634	8	5	3
District of Columbia	9	12,261	7	2	0
Puerto Rico	2	1,054	2	0	0
Hawaii	8	14,720	7	4	3
Philippines	1	497	1	0	0
Total	2,745	2,251,500	2,309	725	289

While the general need for the transcription service has been to promote the use of educational recordings as supplementary aids to classroom instruction, an immediate need for the service has arisen during the past year from the potentialities of the transcription in connection with national defense activities in schools and colleges.

School programs are being redirected, modified, and changed to meet the needs of national defense. The transcription can play an important part in assisting schools to achieve many of their defense objectives. Several Government agencies, such as the Office for Emergency Management, the U. S. Treasury Department, the U. S. Department of Justice, the U. S. Public Health Service, and the Library of Congress, have contributed transcriptions to the Exchange pertaining to various phases of the defense program for use in schools. The transcriptions are distributed to schools on a loan basis and are helping to serve the defense needs of the Nation.

Federal Radio Education Committee

In 1935 the Federal Communications Commission created the Federal Radio Education Committee for the purpose of eliminating controversy and misunderstanding between educators and broadcasters, and to help promote active cooperation between the two groups. The committee has contributed valuable aid to the development of education by radio. During the past year the FREC prepared 12 monthly issues of the *FREC Service Bulletin* containing pertinent information on developments in educational radio. The

Bulletin is distributed to leaders in radio and education throughout the country. Also, a syllabus for a college course on radio for teachers, supervisors, and school administrators was added to the list of publications which have been issued by the FREC. The following members of the FREC Executive Committee provide the Office with valuable advice concerning the constantly increasing relationships between broadcasters and educators:

John Elmer, President, Baltimore Broadcasting Corporation.
Sterling Fisher, Director of Education and Radio Talks, Columbia Broadcasting System.
Willard E. Givens, Executive Secretary, National Education Association.
Gerald D. Gross, Assistant Chief Engineer, Federal Communications Commission.
Rev. George Johnson, Head, Department of Education, Catholic University of America, and Director of the Department of Education, National Catholic Welfare Conference.
Harold B. McCarty, Director, Station WHA, University of Wisconsin, and Representative of the National Association of Broadcasters.
Neville Miller, President, National Association of Broadcasters.
Walter G. Preston, Jr., Assistant to the Vice President in Charge of Programs, National Broadcasting Company.
Levering Tyson, President, Muhlenberg College.

Survey of College and University Courses in Radio

Each year the U. S. Office of Education, with the assistance of the Federal Radio Education Committee, prepares a revised edition of a directory of radio courses offered by colleges and universities. This directory is exceedingly useful to persons who seek particular kinds of radio training. The results of the 1940–41 survey show a considerable increase in the number of college courses being offered as compared with information received in 1939–40. During this period the number of courses in various fields of radio offered by institutions of higher learning has almost doubled.

	Number of colleges and universities reporting courses	
Title of course	*1940–41*	*1939–40*
Technical course	248	139
Radio drama and radio speech	230	34
General course in radio	120	137
Script writing	101	53
Program planning and production	97	51
Education by radio	49	18
Radio announcing	49	25
Radio advertising	40	13
Radio newscasting	34	35
Television	24	8
Radio music	23	9
Radio station management	7	8
Radio law	3	7
Sociological aspects of radio	3	1
Total	1,028	538

Appropriation for Radio

During the past fiscal year a request was made in the budget of the U. S. Office of Education for an appropriation with which to strengthen the facilities of the Radio Service. Congress granted the Office $16,400 for the purpose of bolstering the services of the Script Exchange and for establishing more adequate facilities in the fields of educational radio information and research and technical advisory service.

INFORMATION SERVICES

Defense Job Training Chart

To help citizens to know the Government-sponsored courses that they could take to fit them for defense work a Defense Job Training chart was prepared with the cooperation of many Government agencies. This chart is a guide to training opportunities for more than 3,000,000 persons. After a basic free distribution of 62,000 copies to schools, colleges, and major post offices, the chart was made available by purchase from the Superintendent of Documents, who reported a total of 9,238 copies sold by June 30. The Social Security Board, WPA, Department of Agriculture, and other agencies placed bulk orders. A total of 135,000 copies (including free and sales stock) was published and distributed at the Government Printing Office.

March of Education

During the depression emergency in 1935, the U. S. Office of Education launched a news letter for quick, economical communication with school officials. With another emergency upon us it was decided to revive this news letter. Counting college presidents, school superintendents, and high-school principals, this news letter was distributed to more than 35,000 key educational officials. *March of Education* was issued four times during the 1941 fiscal year.

Central Photographic Service

A central photographic service was established as a part of the Information Service. More than 2,000 prints (the bulk concerning defense training) were collected, indexed, and mounted. Practically all of these were contributed by school systems throughout the country. Prints sent out on request during the year totaled 914. They have been used by magazines, both educational and general, in printed reports, at budget hearings, in exhibits, and in numerous other ways. Many school systems and colleges are engaging competent cameramen to record their activities and therefore it can be expected that gifts of prints to the Office will enable it to have a national file that will provide a cross section of American education.

Answers to Inquiries

During the year the Information Service received and answered 29,003 mail inquiries, most of which were for publications. Congressional inquiries totaled 976. Orders for publications totaling 7,308

and amounting to $3,498.99 came to the Office and were forwarded to the Superintendent of Documents.

Distribution of Publications

During the year the Office put into the hands of users nearly 1,000,000 documents. Of the total number, more than one-fourth were purchased through the Superintendent of Documents. Free copies went largely to libraries or to school administrators where use would not be limited to one person. Income to the Treasury for sale of U. S. Office of Education publications by the Superintendent of Documents during the year totaled $29,384.60.

Mailing Lists

To be able to put the right publication into the right hands, the U. S. Office of Education maintains 415 mailing lists totaling about 210,000 names. During the year 26 new lists were added. New addresses were added at the rate of about 250 per month. Much time was also given to the task of keeping established mailing lists up to date.

Promotional Work

It is the policy of the Office to encourage sales of publications through the Superintendent of Documents. Purchases will be made only if buyers receive notice of publications. During the year the distribution section wrote, designed, and distributed 16 folders and circular letters to educational and citizen groups most likely to want the publications. Checks at the Government Printing Office indicated positive results.

Exhibit Service

The Office receives numerous requests for exhibits presenting publications and services. Fourteen exhibits were prepared and installed at such meetings as the annual conventions of the National Education Association, the American Association of School Administrators, the American Vocational Association, the American Library Association, and the Catholic Education Association. In addition, publications for displays at conferences and lists of publications for free distribution have been sent to numerous State and local organizations.

During the year 50 releases were written and issued. These were reproduced in hundreds of periodicals as well as newspapers, and they stimulated the sale of Office publications. Many important decisions on policies and regulations relating to the defense training programs were given immediate and widespread circulation through the news releases issued.

Press Service

More than 39,000 clippings received from Press Intelligence Service of the Office of Government Reports were sorted, analyzed, and distributed to the Office staff. Books of clippings on the defense training programs organized by States provide a useful running history of this defense activity.

VIII

PUBLICATION SERVICES

THE FINISHED products growing out of surveys, studies, demonstrations, and other activities of the U. S. Office of Education are printed and processed documents ranging in scope of subject matter from nursery schools to adult education and in size of volumes from a few to several hundred pages. There were 2,248 separate orders during the year for printing and processing work, exclusive of processing work that was done in a defense training unit.

Cooperation and Conferences

In efforts to present publications that are encouragingly readable and attractive as well as concise and accurate, more than 320 editorial conferences were held with authors and others concerned during the year.

Staff members of the Editorial Division cooperated in various capacities with other agencies, such as serving as chairman of an Educational Press Association Committee, presenting reports before an American Library Association group, and other educational and social service conferences. The art section in the division also served widely in preparation of exhibits, charts, and related graphic material.

Official Journal

School Life, official journal of the U. S. Office of Education, brought in to the U. S. Treasury from paid subscriptions a total of $7,965.56. The journal published statements to educators from the Commissioner having to do with defense and other vital educational needs; reports and analyses on: Defense activities, curriculum, enrollments, certification requirements for teachers, programs for exceptional children, community organization, education in England, Wales, and Scotland, nursery schools, radio, C. C. C. education, vocational education, nutrition, family life education, citizenship education, Survey of Higher Education of Negroes, foreign student credentials, suggestions for securing teaching positions, health education, rural youth, inter-American relationships, school facilities, city boards of education, public-school personnel and their salaries, teaching of Spanish and Portuguese, industrial arts, State departments of education, and others. Regular departments included Educational News,

Vocational Summary, New Government Aids for Teachers, and the Educators Bulletin Board. SCHOOL LIFE is in its 24th year of publication.

Annual Educational Directory

The Office of Education's *Annual Educational Directory* was again issued in four parts: Part I, State and County School Officers; Part II, City School Officers; Part III, Colleges and Universities; and Part IV, Educational Associations and Directories. This directory shows increasingly wide usefulness. Its listings include many thousands of names and addresses for State, county, and city public-school officials; college and university administrative personnel; and educational associations of national and State scope.

New Publications

During the year the following publications (exclusive of processed material, questionnaires, forms, and similar documents) of the U. S. Office of Education came from the press. In addition to these were the 10 issues of SCHOOL LIFE (October through July).

List of U. S. Office of Education publications which came from the press during the fiscal year 1941

Adult Education: Good References. (Bibliography No. 64.) Martha R. McCabe. 18 p. Free.

Annual Report of the U. S. Commissioner of Education, 1940. John W. Studebaker. 105 p. 20 cents.

Bibliography of Research Studies in Education, 1938–39. (Bulletin 1940, No. 5.) Ruth A. Gray. 411 p. 35 cents.

Choose a Book About Things To Be Conserved. (Leaflet No. 60.) Helen K. Mackintosh and Effie G. Bathurst. 19 p., illus. 5 cents.

Collegiate Accreditation by Agencies Within States. (Bulletin 1940, No. 3.) Fred J. Kelly. 219 p. 25 cents.

Conservation Excursions. (Bulletin 1939, No. 13.) Effie G. Bathurst. 106 p., illus. 15 cents.

Curriculum Content in Conservation for Elementary Schools. (Bulletin 1939, No. 14.) Effie G. Bathurst. 79 p., illus. 15 cents.

Education and Service Conditions of Teachers in Scandinavia, The Netherlands, and Finland. (Bulletin 1940, No. 9.) Alina M. Lindegren. 149 p., illus. 20 cents.

Education in the Union of Soviet Socialist Republics and in Imperial Russia. (Leaflet No. 28.) Severin K. Turosienski. 16 p. 5 cents.

Educational Directory, 1941 (Bulletin 1941, No. 1.) Issued in four parts:

I. State and County School Officers. 51 p. 10 cents.
II. City School Officers. 52 p. 10 cents.
III. Colleges and Universities, Including All Institutions of Higher Education. 129 p. 15 cents.
IV. Educational Associations and Directories. 78 p. 10 cents.

Expressions on Education by Builders of American Democracy. (Bulletin 1940, No. 10.) Edith A. Wright. 90 p., illus. 20 cents.

Federal Laws and Rulings Administered by Federal Security Agency through U. S. Office of Education. (Pamphlet No. 91.) Division of Higher Education. 16 p. 5 cents.

Financial Aids for College Students. (Bulletin 1940, No. 11.) Fred J. Kelly and Ella B. Ratcliffe. 35 p. 10 cents.

Financing of Schools as a Function of State Departments of Education. (Bulletin 1940, No. 6, Mono. No. 3.) Timon Covert. 34 p. 10 cents.

Fiscal Control Over State Higher Education. (Bulletin 1940, No. 8.) John H. McNeely. 49 p. 10 cents.

Index to School Life, vol. 25, October 1939–July 1940. 12 p. Free.

Know Your Community. (Leaflet No. 57.) Bess Goodykoontz. 35 p. 10 cents.

Know Your School Library. (Leaflet No. 56.) Nora E. Beust. 16 p. 5 cents.

Know Your State Educational Program. (Leaflet No. 55.) Walter S. Deffenbaugh. 26 p. 5 cents.

Laws Affecting School Libraries. (Bulletin 1940, No. 7.) Edith A. Lathrop and Ward W. Keesecker. 136 p. 20 cents.

Organization and Administration of School Health Work. (Bulletin 1939, No. 12.) John W. Studebaker and Fred Moore. 67 p. 15 cents.

Placement Services in Colleges and Universities. (Bulletin 1940, No. 12.) Lula B. Anderson. 39 p. 10 cents.

Practices and Concepts Relating to City Boards of Education. (Biennial Survey, vol. I, ch. VII.) Walter S. Deffenbaugh. 27 p. 5 cents.

School Hygiene and Physical Education. (Biennial Survey, vol. I, ch. VI.) James F. Rogers, M. D. 27 p. 5 cents.

Statistics of City School Systems, 1937–38. (Bulletin 1940, No. 2, ch. III.) Lester B. Herlihy, Walter S. Deffenbaugh, and Timon Covert. 358 p. 35 cents.

Statistics of Public High Schools, 1937–38. (Bulletin 1940, No. 2, ch. V.) David T. Blose and Carl A. Jessen. 92 p., illus. 15 cents.

Statistics of State School Systems, 1937–38. (Bulletin 1940, No. 2, ch. II.) David T. Blose and Henry F. Alves. 172 p. 20 cents.

Supervisory Programs for the Education of Exceptional Children. (Bulletin 1940, No. 6, Mono. No. 10.) Elise H. Martens. 92 p. 25 cents.

Teaching Conservation in Elementary Schools. (Bulletin 1938, No. 14.) Effie G. Bathurst. 125 p., illus. 20 cents.

Trends in Industrial Arts. (Pamphlet No. 93.) Maris M. Proffitt. 20 p. 5 cents.

Veterinary Medicine. (Leaflet No. 18, Rev.) Walter J. Greenleaf. 15 p. 5 cents.

Education and National Defense Series

Democracy in the Summer Camp. (Pamphlet No. 23.) Bernard S. Mason. 20 p., illus. 15 cents.

Education Under Dictatorships and in Democracies. (Pamphlet No. 15.) James F. Abel. 19 p., illus. 15 cents.

Home Nursing Courses in High Schools. (Pamphlet No. 9.) Rall I. Grigsby. 18 p., illus. 15 cents.

What the Schools Can Do. (Pamphlet No. 4.) Staff Committee. 22 p., illus. 15 cents.

Vocational

Bricklaying—An Analysis of the Trade. (Bulletin No. 208.) George A. McGarvey. 238 p., illus. 40 cents.

Conserving Farm Lands. (Bulletin No. 201.) Tom Dale and William A. Ross. 104 p., illus. 30 cents.

Distributive Education—Organization and Administration. (Bulletin No. 211.) Kenneth B. Haas. 50 p., illus. 10 cents.

Educational Objectives in Vocational Agriculture. (Monograph No. 21.) Prepared under direction of John A. Linke. 14 p. 5 cents.

Farm-Family Living. (Monograph No. 22.) Dudley M. Clements. 11 p. 5 cents.

Guidance Programs for Rural High Schools. (Bulletin No. 203.) Paul W. Chapman. 58 p. 10 cents.

Occupational Information and Guidance—Organization and Administration. (Bulletin No. 204.) Layton S. Hawkins, Harry A. Jager, and Giles M. Ruch. 181 p. 25 cents.

Working Your Way Through College. (Bulletin No. 210.) Walter J. Greenleaf. 175 p. 20 cents.

List of Occupations—Approved by the Office of Production Management for Vocational Training Courses for Defense Workers. U. S. Office of Education and Social Security Board. 204 p. Free.

Vocational Rehabilitation

Restoring the Handicapped to Useful Employment. 11 p. 5 cents.

Civilian Conservation Corps

Camp Life Arithmetic Workbook No. 1. 61 p. 20 cents.

Camp Life Arithmetic Workbook No. 2. 102 p. 25 cents.

Camp Life Arithmetic Workbook No. 3. 117 p. 30 cents.

Camp Life Arithmetic Workbook No. 4. 111 p. 30 cents.

Camp Life Reader and Workbook—Language Usage Series No. 3. 120 p. 25 cents.

Reprints

In addition to the foregoing publications and to meet a continuing public demand, the following Office publications were reprinted:

C. C. C. Camp Life Reader and Workbook No. 1, Language Usage Series No. 1. 63 p. 15 cents.

C. C. C. Camp Life Reader and Workbook No. 2, Language Usage Series No. 2. 119 p. 25 cents.

Elementary Education, 1930–36. (Bulletin 1937, No. 2, vol. I, ch. I.) Bess Goodykoontz. 32 p., illus. 10 cents.

Essentials in Home and School Cooperation. (Leaflet No. 35.) Ellen C. Lombard. 9 p. 5 cents.

Landscaping the Farmstead. (Vocational Division Bulletin No. 189.) William A. Ross. 88 p., illus. 15 cents.

Larger Units for Educational Administration. (Pamphlet No. 45.) Timon Covert. 43 p. 5 cents.

Light Frame House Construction. (Vocational Division Bulletin No. 145.) 216 p., illus. 40 cents.

List of Publications of the U. S. Bureau of Education, 1867–1910. (Bulletin 1910, No. 3.) 57 p. 10 cents.

Minimum Essentials of the Individual Inventory in Guidance. (Vocational Division Bulletin No. 202.) Giles M. Ruch and David Segel. 83 p. 15 cents.

Professional Library Education. (Bulletin 1937, No. 23.) Nora E. Beust. 75 p., illus. 15 cents.

State Provisions for Equalizing the Cost of Public Education. (Bulletin 1936, No. 4.) Timon Covert. 49 p. 10 cents.

Statistics of Special Schools and Classes for Exceptional Children. (Reprint from Bulletin 1940, No. 2, ch. III.) 21 p. 5 cents.

Survey of Courses of Study and Other Curriculum Materials Published Since 1934. (Bulletin 1937, No. 31.) Bernice E. Leary. 185 p. 20 cents.

Teachers' Problems with Exceptional Children: II Gifted Children. (Pamphlet No. 41.) Elise H. Martens. 44 p. 10 cents.

The Fire Alarm System. (Vocational Division Bulletin No. 207.) Frank Cushman and H. A. Friede. 77 p., illus. 15 cents.

U. S. Government Publications on Health, Physical Education, and Recreation. (Bibliography No. 61.) Stella T. Sebern. 6 p. Free.

Requests for reprints of articles which appeared in SCHOOL LIFE were received by the Office from numerous educational organizations and groups, as a result of which, the following reprints were made:

Blossom Hill. M. LaVinia Warner. 4 p.

CCC articles in Volume 25. Howard W. Oxley. 20 p.

Education in Inter-Americanism. John W. Studebaker. 1 p.

Education of Girls in an Industrial Society. Maris M. Proffitt. 2 p.

Educational Radio Script Exchange. Gordon Studebaker. 4 p.

Four Communities Pioneer. Edna P. Amidon, and others. 21 p.

Good Books—Good Friends. Nora E. Beust. 4 p.

Grade Enrollment in the Public Schools. Emery M. Foster. 2 p.

Importance of Education for Family Life at Various School Levels. Bess Goodykoontz. 4 p.

Industrial Arts—A Foundation for Mechanized-warfare Training. Maris M. Proffitt. 2 p.

Local School Units Project: Its Contributions. Andrew H. Gibbs. 2 p.

Minimum Certification Requirements for Teachers. Ben. W. Frazier. 4 p.

Negroes:
- Elementary Education of Negroes. Ambrose Caliver. 3 p.
- Secondary Schools for Negroes. 3 p.
- Collegiate Education of Negroes. 4 p.
- Adult Education of Negroes. 2 p.
- Problems of Vocational Guidance of Negroes. 2 p.

New Government Aids for Teachers. Margaret F. Ryan. 24 p.

Nutrition Education Throughout the School Program. James F. Rogers, M. D., and others. 4 p.

Our Adventures with Children:
- I. Too Much Mothering. Ellen C. Lombard. 2 p.
- II. Developing the Inquiring Mind. 1 p.
- III. Son is Defiant. 2 p.
- IV. Good Teachers Sometimes Make Mistakes. 1 p.
- V. Teaching Patriotism in Home and School. 2 p.
- VI. Cooperation of Parents—An Asset to School Administration. 2 p.
- VII. Schools Plan Cooperative Project for Homes. 1 p.

Physical Education, 1839–1939. James F. Rogers, M. D. 1 p.

Practical Citizenship Teaching in the Elementary School. Helen K. Mackintosh. 4 p.

Professional Growth and Defense. John Lund. 2 p.

Radio in Schools and Colleges. Leonard Power. 4 p.

School Bus Transportation. Andrew H. Gibbs. 4 p.

State Supervisory Programs for Exceptional Children. Elise H. Martens. 4 p.

Suggestions for Securing Teaching Positions. Ben. W. Frazier. 4 p.

Survey Reports and Current Bulletins of Interest to Teachers of Young Children. Mary D. Davis. 4 p.

Teaching Aids for Teachers. Mary D. Davis. 4 p.

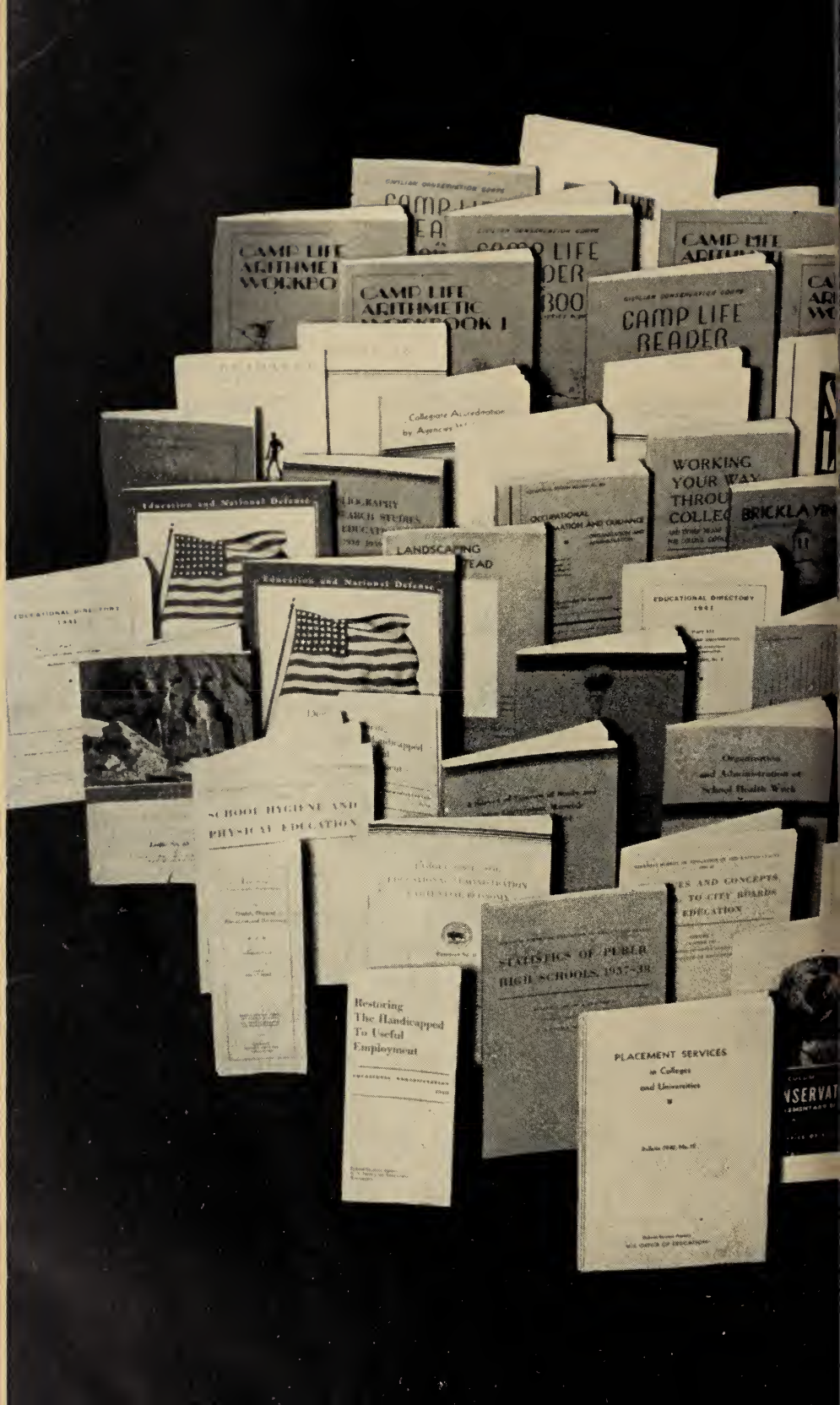
Tolerance. John W. Studebaker. 2 p.

Vocational Education in Review. J. C. Wright. 4 p.

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Publications of the U. S. Office of Education may be obtained through purchase at nominal cost from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Write to the U. S. Office of Education, Federal Security Agency, Washington, D. C., for lists of publications or for any other information having to do with its fields of service.


CAMP LIFE READER
Education and National Defense
Education and National Defense
SCHOOL HYGIENE AND PHYSICAL EDUCATION
Restoring The Handicapped To Useful Employment
STATISTICS OF PUBLIC HIGH SCHOOLS, 1937-38
PLACEMENT SERVICES in Colleges and Universities
EDUCATIONAL DIRECTORY 1941
Organization and Administration of School Health Work

ANNUAL REPORTS

of the United States Office of Education

1941-42
1942-43

FEDERAL SECURITY AGENCY

ANNUAL REPORTS

of the United States Office of Education

FOR THE FISCAL YEARS

1941-42

1942-43

FEDERAL SECURITY AGENCY . . . . . PAUL V. MCNUTT, *Administrator*
U. S. OFFICE OF EDUCATION . JOHN W. STUDEBAKER, *Commissioner*

UNITED STATES
GOVERNMENT PRINTING OFFICE
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LETTER OF TRANSMITTAL

FEDERAL SECURITY AGENCY,
U. S. OFFICE OF EDUCATION,
Washington, D. C., November 1, 1943.

SIR:

I have the honor to submit herewith my report embracing the activities of the U. S. Office of Education for the fiscal years ending June 30, 1942, and June 30, 1943.

Respectfully,

John W. Studebaker

U. S. Commissioner of Education.

The Honorable PAUL V. MCNUTT,
Federal Security Administrator.

FOREWORD

This report covers some of the more important activities of the U. S. Office of Education for the biennium which began July 1, 1941, and ended June 30, 1943. It is a compendium and summary of the more detailed reports prepared by appropriate administrative officials for the various divisions and services of the U. S. Office of Education.

In the report will be found not only a record of the official performance of duty by the staff of the Federal education office, but also a reflection of the achievements of organized education as it has successfully met the exigencies of total war.

War must be conducted by the Nation. Under national leadership, it must be waged by all of the people. Hence, perhaps the most important contribution of the schools and colleges to the national war effort has been their contribution in continuing to build the firm intellectual and spiritual foundations of American democracy; the love of country; the knowledge of our history and traditions which bind us together as a Nation. By instilling in the oncoming generations of American youth a deep appreciation of our democratic heritage and of its cost in sacrifice, the schools have contributed much to the morale of fighting America. Faith and fortitude—these make up morale; a morale based on understanding and shot through with moral idealism; a morale which motivates all sacrificial action in the common cause.

To the schools in wartime the U. S. Office of Education has sought to give effective leadership and direction as they have sought to make their essential contribution to the winning of the war. That contribution of the schools in wartime is one of which the Nation may justly be proud. In spite of a growing shortage of teachers, in spite of the decimation of student enrollments in secondary schools and colleges, in spite of financial stringencies, the schools and colleges of America have carried on.

Let it not be forgotten that organized education's contribution to the strengthening of our war effort began long before Pearl Harbor. Today some 25 percent of the members of the Army are high-school graduates, as compared with 4 percent in first World War. Without the qualities of trained intelligence, resourcefulness, and adaptability which are the products of our schools and colleges, democracy's hosts could never have been so speedily trained in all of the intricate

specialties of modern warfare. Without the underpinning of technical competence and skill possessed by millions of adults trained in vocational and technical pursuits we should hardly have been able so rapidly to mobilize our whole economy in support of the war effort.

In addition to these long-term contributions of education, the direct and immediate contributions of the schools and colleges have been stupendous. Since July 1940 more than 6 million persons were given special training by schools and colleges for employment in war production industries and in agriculture. The outcome of this mechanized war is dependent upon our ability to outproduce as well as to outfight the Axis nations. The ability to produce depends directly upon the vocational and technical knowledges and skills possessed by the Nation's labor force. Our schools have trained at least 20 percent of the workers now employed in the Nation's war plants.

Or consider the contribution of the schools to the preinduction and the postinduction training of young men and women for the armed forces. Preinduction training rests back upon and includes a broad and strong foundation of basic general education. In the words of Lieutenant General Somervell, "Preinduction training and postinduction training are parts of the same essential process. You are concerned with the whole boy; we are concerned with the whole soldier. They are one and the same person. The future soldier has vital needs which should be met prior to his induction. Job skills, physical fitness, sound basic education—these are needs common to all soldiers."[1]

During the biennium high schools have provided boys with a general orientation to the armed forces; have given them guidance and some preliminary training looking toward military specializations; have provided special courses such as war aims and problems, aeronautics, Army clerical procedures, military motor vehicle driving, radio code operation, etc.; have adapted courses in physics and the natural sciences, physical and health education to meet preinduction training needs. Girls, too, have been given occupational information and guidance concerning the essential part which women can play in the war effort. Hundreds of colleges have turned their facilities and their faculties to the postinduction training of young men and women for the armed forces.

In addition to war production vocational training and to preinduction and postinduction training programs, mention must be made also

[1] Education for the Army. Lt. Gen. Brehon Somervell, Commanding General, Army Service Forces, Journal of the National Education Association, October 1943, page 185.

of the contribution of the organized educational agencies of the Nation in directing the energies of nearly 30,000,000 children and youth in participation in a wide variety of community service activities in support of the war effort. For example, during the 1943 fiscal year the schools were responsible for the sale of more than $300,000,000 worth of war savings stamps and bonds; they got in the scrap to a total of more than 1,500,000 tons; they made thousands of garments for the Red Cross; sponsored 1,000,000 school and home Victory gardens; produced 600,000 approved, precisely scaled models of military aircraft for the armed forces; collected thousands of tons of waste paper and fats; preserved countless quarts of home-grown fruits and vegetables; and in numerous other ways manned their battle stations on the home front.

In addition to their professional services, more than a million teachers and school administrators have made their personal contributions along with other citizens—in civilian defense activities, in handling rationing registrations, in providing extended school services to children of mothers employed in war industries.

In concluding this foreword I cannot forego mentioning the increasing interest in and attention to postwar planning by schools and colleges. No one can doubt that the end of this war will find us with a huge backlog of unsolved problems, foreign and domestic. The solution of these problems will make such demands upon the intelligence, practical understanding, and idealism of our generation as history has never before posed. How shall we provide full employment to every man willing and able to work? How shall we build interracial and intercultural understanding and good will? How shall the peace be organized so as to banish from the world the periodic orgies of carnage and destruction which threaten to destroy our civilization? How else than through education!

That is why we must be concerned even in the midst of war, not alone to maintain but actually to improve the efficiency of education. That is why we must plan now to eradicate and to prevent adult illiteracy; to establish the right to minimum educational opportunities for all American children and youth. We must plan now to utilize the newer equipment, the teaching aids which science has provided in the form of radio, recordings, sound films, and other auditory and visual aids. We must plan more fully to utilize the great natural laboratories of civic and vocational life through various forms of apprenticeship and supervised work experience. We must plan now to provide educational opportunities for returning soldiers and sailors and demobilized war workers. We must plan now for organized opportunities in adult education for all our citizens.

To all those persons who have glimpsed the possibilities and the responsibilities of education in the new world now being born out of war's travail, I make grateful acknowledgment in submitting this report. Especially am I indebted to those colleagues of mine in the Office of Education and in the teaching profession generally who, having caught the vision of education's part in building a future of security, peace, and good will, are laboring untiringly to make that vision a reality.

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

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Training Workers for Defense and War Production

Pearl Harbor may be said to stand figuratively as a bench mark in the mobilization of the Nation's resources, both of matériel and of manpower for the prosecution of the war against our Axis enemies. It also stands as a bench mark in the program of vocational training for defense workers. After December 7, 1941, this program was transmuted into a program for training workers for war production.

Appropriations

As a result of accelerated rates of enrollment following Pearl Harbor, a deficiency appropriation of 9½ million dollars became necessary and was made by Congress on June 19, 1942, as Public Law 616, Seventy-seventh Congress, second session. This deficiency appropriation supplemented the regular appropriation of $116,122,000 provided for the training of defense workers under Public Law 146, Seventy-seventh Congress, first session, approved July 1, 1941. This was followed on July 2, 1942, by a regular appropriation of 94 million dollars under Public Law 647, Seventy-seventh Congress, second session. The wording of this law followed the pattern of previous legislation, authorizing war production training programs.

To supply an anticipated deficiency in the appropriation under law 647, an additional appropriation of 10 million dollars was made under Public Law 11, Seventy-eighth Congress, first session, approved March 18, 1943.

An equipment appropriation of 10 million dollars was also available in the fiscal year 1943 under Public Law 463, Seventy-seventh Congress, second session. Public Law 528, Seventy-seventh Congress, second session, approved April 20, 1942, amended Public Law 146, Seventy-seventh Congress, first session, to permit the use of the appropriation for preemployment, refresher, and supplementary courses "in private vocational schools (regardless of tax liability) and in other private facilities where equipment for training is available."

Training Programs of Less-Than-College Grade

Types of Courses

In general, two types of courses were authorized and have been provided during the biennium:

1. *Preemployment* courses which offer induction training to persons who are currently unemployed or who are otherwise available for full-time employment in a unit-skilled job in war industry, the emphasis being placed on training for a specific payroll job.

2. *Supplementary* courses which provide instruction to workers who are already employed in war industry for the purpose of aiding such workers to assume jobs of greater skill and responsibility. In an increasing number of instances, trainees are classified as supplementary when they are receiving wages from an employer and are assigned to full-time attendance in a vocational school prior to the time they are actually put to work on a specific job.

Enrollments, Fiscal Year 1942

Total enrollments in preemployment training courses during the 1942 fiscal year numbered 1,051,346. The courses having the greatest number of trainees in rank order and percentage of cumulative total enrollment were: Aviation services, 28.5 percent; machine shop, 27.4 percent; ship and boatbuilding, 15.6 percent; and welding, 10.4 percent.

Table 1.—*Enrollments in preemployment and supplementary courses July 1, 1942, to June 30, 1943, inclusive*

Item	Total	Preemployment	Supplementary
In training, July 1, 1942	345,743	191,898	153,845
New enrollments during year	2,303,604	984,744	1,318,860
Total receiving training during year	2,649,347	1,176,642	1,472,705
Number in training, June 30, 1943	198,443	65,644	132,799
Number terminating training during year	2,450,904	1,110,998	1,339,906

A total of 1,010,610 enrollments in supplementary courses were reported during the fiscal year 1942. Courses in Aviation Services accounted for the largest number of trainees, 26.4 percent; machine shop next with 16.1 percent; ship and boatbuilding, 13.9 percent.

Enrollments, Fiscal Year 1943

During the fiscal year 1943 enrollments totaled 1,176,642 in preemployment courses and 1,472,705 in supplementary courses. (See table 1). Preemployment enrollments were at their peak during the first quarter of the 1943 fiscal year. Thereafter they registered a steady decline, due in part to the increasing number of trainees who were paid by employers during their full-time attendance in a vocational school for preemployment training and consequently were reported as enrollments in supplementary courses. These supplementary course enrollments showed an upward trend throughout the year. Preemployment courses having the greatest number of trainees enrolled in order of rank and percentage of cumulative enrollment

were: Machine shop, 29.5 percent; aircraft, 25.7 percent; shipbuilding, 15.7 percent; and welding, 10.4 percent (See table 2).

Aircraft courses accounted for the largest number of supplementary trainees with 26.0 percent of cumulative total enrollments; shipbuilding was second with 16.6 percent; and machine shop third with 12.2 percent.

Table 2.—*Enrollment in preemployment and supplementary courses, by type of course and special groups of trainees, July 1, 1940, to June 30, 1943, inclusive*

Item	Preemployment		Supplementary	
	Cumulative from July 1, 1940, through June 30, 1943	Cumulative from July 1, 1942, through June 30, 1943	Cumulative from July 1, 1940, through June 30, 1943	Cumulative from July 1, 1942, through June 30, 1943
1	2	3	4	5
All courses	2,377,836	1,176,642	2,677,968	1,472,705
Automotive services	59,870	9,413	66,518	7,966
Aircraft services	611,899	280,895	696,597	395,845
Electrical services	49,382	15,497	44,167	12,880
Forging	6,913	2,021	1,814	980
Foundry	18,626	6,426	5,802	1,930
Machine shop	698,980	358,492	327,632	127,486
Radio services	55,527	37,039	122,388	95,671
Sheet metalwork	71,916	27,090	21,303	3,471
Shipbuilding	373,473	235,133	444,588	311,792
Welding	247,793	127,030	155,961	55,402
Other	183,457	77,606	791,198	459,282
Female	493,308	409,278	353,999	337,666
Negro	170,969	113,041	54,519	37,261
WPA	339,111	117,453	----------	----------
NYA defense program	328,489	178,536	----------	----------

Training Women War Production Workers

Industry has accepted women as workers in constantly increasing numbers throughout the biennium. This more liberal policy is reflected in enrollments of women in war production training courses. During the fiscal year 1943, approximately 40 percent of the preemployment trainees were women; and the proportion of women enrolled in supplementary courses increased to slightly less than 30 percent in the spring of 1943. Women were enrolled in every type of course offered except supplementary courses in forging and blacksmithing. The largest numbers were enrolled in aircraft and machine shop practice. Of the new trainees in gas and arc ship-welding and ship-cutting 17.7 percent were women.

Special Studies

During 1942 an exhaustive study of training facilities and their utilization was made and embodied in a 443-page report.

During 1943 a special study of the characteristics of preemployment and supplementary trainees, with special emphasis upon their employment histories, was undertaken. The first phase of this sur-

vey, a sample study of preemployment trainees from 43 training centers in 15 States, has been completed, and a report thereof is in process of publication.

Production and Training

Training in skills by producing parts or what is commonly referred to in schools as training-on-production is one of the techniques used in many of the war production centers. Work on production jobs has been found to develop marketable skills rapidly.

Training on production in the vocational schools takes three forms: Production of tools and small machines for school use, production of parts for Government use, and production of parts for private war contractors.

Schools conduct production training in accordance with uniform standards developed by the Office of Education with the active counsel of representatives of organized labor and management groups. Production work for military establishments is confined to schools nearby in order to provide for proper inspection and coordination. The trainees are selected and compensated by the Government establishment in accordance with civil service regulations. Trainees on production work for private contractors are employed by the contractor on the same basis as other employees.

Instructor Training for War Production Courses

Relative stabilization of the program of war production training, particularly in the area of administrative procedures, has cleared the way for a shift of emphasis from organization to supervision of instruction.

The program of instructional improvement has embraced the following activities of staff members: (1) Thirteen regional conferences, in two series, involving all State supervisors responsible for instruction in war production training; (2) conference reports on each of the two series which were sent to all conferees and made available to supervisors and directors who have utilized them in their local supervisory and instructor training programs; (3) assistance to individual States in planning State programs of instructional improvement and in conducting conferences and training sessions for State and local supervisors of instruction; and (4) assistance to individual States in planning and giving instructor training for special units of the armed forces, such as the U. S. Signal Corps School at the Georgia School of Technology, and the one for war production industries such as Boeing Aircraft at Seattle, Wash.

Foreman Training

The rapid expansion of aircraft construction, shipbuilding, manufacturing of machine tools, munitions, and other essential war indus-

tries created a serious problem in plant management. Some industries increased their personnel many times within a few months, thus creating an unprecedented need for leadmen, supervisors, assistant foremen, and foremen. There was no time for the normal development of foremen through the usual procedure of developing from a workman to leadman to supervisor and so on upward. The result was an increase in the demands by management for foreman training. State boards for vocational education have for about 25 years conducted as an essential part of their trade and industrial programs a foreman-and-instructor-training service. The U. S. Office of Education has cooperated with the State boards for vocational education in this matter and has contributed to the program by developing special methods and techniques for use in this field.

Since the demands for foreman-and-instructor-training services have increased beyond the ability of the vocational education personnel of many States to render this service, the U. S. Office of Education provided a small staff of foreman-and-instructor-training specialists to assist them in the matter. Upon request, these specialists are available to State boards for vocational education to assist them in preparing personnel to carry on the training of instructors, supervisors, and conference leaders for the war production training program. It has been impossible to meet all demands for this service; consequently this office has confined its efforts to those cases where immediate and pressing training needs existed.

In addition to assisting State boards for vocational education, numerous conferences were held with local Government officials, Army and Navy officers, industrial management, and supervisory personnel for the purpose of analyzing production procedures, determining training needs, and cooperating with management in outlining supervisory training programs involving methods and techniques used by conference leaders and foremen to break in new workers and upgrade others.

More than 2,000 persons were given actual foreman and instructor training, and through numerous conferences the machinery was set up for training many more. Agents of the U. S. Office of Education assisted at Army and Navy centers in particular. Instructors and supervisory personnel were trained for air-depot training and Navy ground-school instructing. They helped in the compilation of training manuals and program outlines; devised courses of study; analyzed jobs, shop methods, and procedures; and selected schools for training. Similar assistance was given to both public and private shipbuilding yards, aircraft factories, machine-tool factories, and munitions plants throughout the country.

Through the State boards for vocational education it was possible to give follow-up training on the job to a large percent of those previously trained. This follow-up training consisted of checking the work of individuals and groups on methods and techniques covered in the original training conferences.

Instructional Materials

At the close of the fiscal year 1943 the States had completed or had in preparation 126 instructional monographs covering important occupational training for aircraft manufacturing, air service command, glider instruction, shipbuilding, electrical work, sheet metalwork, light manufacturing, and other similar subjects.

Advisory and training services were provided during the biennium to certain departments of the Army and Navy, to the Labor Department, and to other governmental agencies.

Advisory Committees

One of the most important devices utilized to bring the training program on all levels—Federal, State, and local—in line with practical manpower problems has been that of the advisory committee. Federal regulations specify that such committees be composed of an equal number of representatives of management and labor. Other interested groups are represented on the committees by consultants and by separate craft committees. The functions of both the State and local advisory committees are to provide counsel and advice concerning such matters as: (1) Determination of the possibilities of training for various jobs from the standpoint of instructors, equipment, and space; (2) organization of necessary craft committees; (3) public relations; (4) instructional material; (5) selection of equipment; (6) production work in school shops; and (7) publicity.

The consultant on employer-employee relations in the Office of Education has devoted a great deal of time to the improvement of advisory committee relationships in the war production training program. In this work, he has had the benefit of guidance and assistance from a small working committee composed of two representatives of the American Federation of Labor and two representatives of the Congress of Industrial Organizations.

On the basis of reports reaching the Office of Education it is estimated that more than 1,100 advisory committees are organized and functioning.

Cooperation With Other Agencies

U. S. Employment Service.—Gearing war training programs to employment needs has brought a close working relationship with the U. S. Employment Service. Since the beginning of the program in

July 1940, the U. S. Office of Education has assigned a full-time liaison officer at the Federal level to work with that agency.

When the U. S. Employment Service was transferred from the Federal Security Agency to the War Manpower Commission, certain governmental training services were coordinated by the U. S. Office of Education representative working through the Bureau of Training in the War Manpower Commission. The Councils of Administrators (consisting of representatives from the vocational schools, the National Youth Administration, and the U. S. Employment Service) which functioned during the past fiscal year were expanded to include representatives of the Apprenticeship Training Service and Training Within Industry Service. The name of these councils was changed to training councils, and their duties included coordination of all types of war training at the local, State, and Federal level in conformance with War Manpower Commission labor policies and the laws, rules, and regulations under which the various training services operate.

Shortages of trainees have emphasized the increasing importance of cooperation between the U. S. Office of Education and the U. S. Employment Service in the development of recruiting methods. One group of referrals to war training classes in which there has been a definite up-swing during the biennium has been high-school seniors. Courses for high-school students are set up with the endorsement of the employment service and the trainees are referred to employment immediately upon completion of the course.

During the biennium the U. S. Office of Education, in cooperation with the U. S. Employment Service, prepared and issued the second edition of "War Production Occupations for Vocational Training." This edition contains 655 occupations which were selected and approved by the War Manpower Commission for vocational instruction when the need for training is established. Also issued was a supplement to the list which included occupations in the mining, logging, and transportation industries.

Cooperation With the Armed Forces

On June 30, 1942, training that was formerly provided to military units without cost to them was placed on a reimbursable basis. During the fiscal year 1943 the armed forces, having expanded their training facilities, gradually adopted the policy of relying on their own training facilities to teach various trade specialties to military personnel.

The Signal Corps preservice civilian-training program for training men and women as workers in the radio and electrical fields was inaugurated in 1941. The objective of the program was to provide

mechanics and technicians to service and maintain radio and allied equipment. Training was open to both men and women of civilian status who were paid through civil service. Training was divided into two units, namely: *Mechanic Learner—Radio*, and *Junior Repairman Trainee—Radio.* In addition to regular civilian trainees a number of men classified 1–A were enlisted in the Signal Corps Reserve and assigned to public schools for training under these two programs. This group constituted the Signal Corps enlisted reserve.

Enrollment in all Signal Corps classes reached a peak of 27,587 in November 1942. In September 1942, the enrollment of civilians was halted and on December 5, 1942, the Presidential ban on enlistments stopped enrollment in the reserve. After November 1942, the number in training decreased to 24,312 in January and 15,962 in March 1943, continuing downward as training was completed.

In May 1943 at the request of the Signal Corps, a course was set up to train men and women as inspectors in radio and allied lines to serve in depots or industrial plants.

The U. S. Office of Education has cooperated with the Air Service Command in developing over-all training for air depots and subdepots. The commanding officer of each air depot was granted the assistance of a maximum of three cooperating vocational schools which gave 3 months' preliminary training to civilian mechanic learners recruited through civil service. Approximately 60,000 persons have been given training under this set-up.

Other schools throughout the country cooperated in the organization and conduct of supplementary classes for the air depots, and about 60,000 persons have received this training.

The U. S. Office of Education representative directed the work of developing and printing about 150 different instruction manuals.

Two persons from the U. S. Office of Education at the present time are rendering full-time assistance to cooperating schools in their aircraft training problems.

Cooperation With the Office of Defense Transportation

In an effort to meet the maintenance requirements of 1,040,000 trucks used in agricultural activities, 2,900,000 operated by industry and trade, and 900,000 fleet trucks, the Motor Vehicle Division of the Office of Defense Transportation requested the War Department and the U. S. Office of Education to assist them in planning a training program to meet the manpower needs of that industry. The shortage of skilled maintenance workers arose out of: (1) Increased maintenance work due to lack of new equipment and (2) increased labor turn-over caused by military separations and higher wages elsewhere.

The important divisions of the industry to be served in the vocational schools by this specialized training program are: Common and

private carriers, bus operators, truck and car dealers, parts jobbers and wholesalers, independent and contract garages, oil companies or distributors, and tire repair shops.

New occupations have been formally added to the approved list of occupations. To date, war production courses are training men and women to be auto mechanics' helpers, motor tune-up specialists, carburetor and ignition technicians, frame and body specialists, parts clerks, traffic and rate clerks, tire repairers, motor rebuilders, and truck and bus lubricators.

Cooperation With the U. S. Bureau of Prisons

Under the joint agreement established between the U. S. Office of Education, the U. S. Employment Service, and the Bureau of Prisons, the U. S. Office of Education agreed to assist Federal prison authorities in reorganizing their institutional training program to prepare prisoners, prior to release, for employment in war industry. About 15 programs have been set up.

Cooperation With Other Agencies

Other agencies with which the U. S. Office of Education has cooperated in the fiscal year 1943 are the Work Projects Administration, the Civil Service Commission, the Office of the Coordinator of Inter-American Affairs, and the Federal Housing Authority.

The WPA began to liquidate in January 1943 resulting in a steady decline in WPA referrals until that organization went out of existence on June 30, 1943.

Working relationships with the Civil Service Commission at the Federal level have continued during the year with the Commission requesting courses in stenography and several other shortage occupations in Government service.

At the request of the Office of the Coordinator of Inter-American Affairs, the vocational war production training program assisted in the recruitment of vocational teachers for Brazil to aid the development of a war training and long-term vocational training program. Technical assistance was also given to that office in the development of vocational training programs in other South American and Latin American countries.

A series of teacher-training conferences was held for Federal Housing Administration officials to enable their personnel to cope more effectively with the training needs of that agency.

Rural War Production Training Program

Public Law 146, Seventy-seventh Congress, First Session, appropriated 15 million dollars for the continuation of the training program for out-of-school youth. During the fiscal year 1942 enrollments totaled 308,745 in four types of courses, as follows: (1) Operation,

care, and repair of tractors, trucks, and automobiles (including both gas and Diesel engines). (2) Metalwork, including simple welds, tempering, drilling, shaping, and machinery repair. (3) Woodwork. (4) Elementary electricity, including operation, care, and repair of electrical equipment.

In the beginning it was expected that the OSY program would be conducted for the purpose of qualifying out-of-school unemployed surplus rural youth to enter industrial occupations. During 1942, however, there was a shift of emphasis to the care and construction of farm machinery and equipment necessary to help farmers produce commodities in the *Food for Victory* program.

With the beginning of the fiscal year 1943, the program came to be known as the Rural War Production Training Program and its administration was made the responsibility of the Agricultural Education Service of the U. S. Office of Education. An appropriation of 15 million dollars was provided under Public Law 647, Seventy-seventh Congress, second session, to be used for the training of out-of-school persons who had attained the age of 17 years. Thus courses were thrown open to enrollment by older farmers who were interested in developing the needed skills which would enable them to repair their farm machinery, construct farm equipment, and increase the production of essential foods and fibers. During 1943 a total of 20 courses were approved by the chairman of the War Manpower Commission, including the following, in addition to those provided in 1942: Repair, operation, and construction of farm machinery and equipment; increasing the production of milk, poultry, eggs, pork, beef, mutton, wool, soybeans, peanuts, commercial vegetables, sugar, hemp, fruits and nuts, vegetable seeds; as well as courses in the production, conservation, and processing of food for farm families and the training of farm workers.

Classes were held in farm shops, general repair shops, implement dealers' service shops, local garages, local blacksmith shops; in classrooms of departments of vocational agriculture, one-room rural schools, community halls, churches, farm homes. Classes were taught by such persons as teachers of vocational agriculture, expert poultry dairymen, herdsmen, commodity specialists, teachers of vocational home economics, and other qualified persons. A total of 64,958 classes with an aggregate enrollment of 754,913 were reported for the fiscal year 1943, a substantial increase over 1942 enrollments. Most popular were courses in production, conservation, and processing of food for farm families and in the repair, operation, and construction of farm machinery and equipment.

Many farm-work training programs were operated in cooperation with colleges and universities. Cooperative relationships were established with the State Employment Office, the State officials of the

Farm Security Administration, and the administrative officials of State colleges and universities.

Education and Training of NYA Project Workers

Public, No. 812, Seventy-sixth Congress, third session, appropriated $7,500,000 for the cost of vocational courses and related or other necessary instruction for young persons employed on work projects of the National Youth Administration. Public Law 146, Seventy-seventh Congress, first session appropriated an additional $10,000,000. All courses were discontinued on June 30, 1942, when Congress made no further appropriations.

The program had four primary objectives: (1) To prepare youth for useful employment in a specific occupation in order that they might assume financial responsibility for themselves; (2) to provide related or other necessary training pertaining to specific defense activities; (3) to prepare youth for a happier and more satisfying life, including citizenship, good health, proper work habits, wholesome recreation, and home responsibilities; and (4) to enable youth to contribute to defense, particularly civilian defense.

These four purposes are reflected in the following titles of typical courses offered project workers:

Blueprint reading
Construction
Power sewing machine operation
Quantity food preparation
Welding
Home management
Training hospital workers
Radio code
Radio construction
Radio repair
Health and safety
Consumer buying
Citizenship
Spelling
Recreation
Home care of the sick
Typing
Shorthand
Training cafeteria workers
Training waitresses
Training for school lunch service
Machine tool operation
General homemaking
Office practice
Filing
Use of office machines
English
Shop mathematics

During the year and a half of the operation of this program 729,780 NYA enrollees were given training. Of this total 349,488 (47.9 percent) were girls and women and 110,619 (15.2 percent) were Negroes. During the final year, 1941-42, the percents of girls and women and of Negroes rose slightly—to 50.1 and 16.6 percent, respectively.

Engineering, Science, and Management War Training

Authorization and Appropriations

Public Law 146, 77th Congress, 1st session, continued the authorization and appropriation for work begun in the Engineering Defense Training Program of the previous year. Under the enlarged pro-

gram, colleges granting degrees in chemistry, physics, and business administration, as well as those granting engineering degrees, became eligible to provide defense training courses. The need for training courses proved greater than anticipated and on April 28, 1942, Congress made a deficiency appropriation of $3,000,000 additional.

The Engineering, Science, and Management War Training Program of 1943, usually abbreviated ESMWT, was authorized by Public Law 647, Seventy-seventh Congress, second session, approved July 2, 1942, with an appropriation of $30,000,000 to pay the cost of short college-grade courses to meet the shortage of engineers, chemists, physicists, and production supervisors in fields essential to the national defense.

Enrollments

Of the total enrollment during the 1943 fiscal year of 596,000, about 444,000 were in courses planned to meet the shortage of engineers, 14,000 in courses for chemists, 12,000 in courses for physicists, and 126,000 in courses for production supervisors. A study of enrollment trends since the inauguration of the EDT Program 1941 indicates that the steady increase in active enrollment which occurred throughout 1941 and 1942 was not continued at the same rate during the latter half of 1943. It appears that the volume of college-level training has about reached its peak, but has not yet started to decline.

Table 3.—*Cumulative female enrollment in ESMWT courses reported by institutions, by specific type of course from July 1, 1942, through June 30, 1943*

Type of course	*Enrollment*	*Percent of total female enrollment*
Engineering drawing and descriptive geometry	24,818	19.3
Accounting	14,627	11.4
Personnel administration and labor relations	11,613	9.1
Inspection and testing	8,022	6.3
Communications	5,879	4.6
Aeronautical engineering structures	5,240	4.1
Surveying and mapping	4,323	3.4
Fundamentals of engineering	4,262	3.3
Mathematics	4,207	3.3
Industrial organization and management	3,698	3.1
All others	41,379	32.1
Total	128,068	100.0

Training of Women

The percentage of female enrollees in active courses increased during the fiscal year 1943 from approximately 16 percent in the beginning to about 23 percent at the end. Institutions reported

difficulty in finding women who had the interest in and the mathematical foundation necessary for technical training at the college level. It appears that relatively few high-school girls have been receiving training in mathematics and science. To meet the situation special courses were designed for women which included sufficient mathematics for purposes of the particular course.

Sampling surveys conducted during the 1943 fiscal year point to the conclusion that the proportion of trainees, women especially, who are being paid by employers while attending ESMWT courses is rising substantially.

Another interesting sidelight on the training of women is to be gained by an analysis of the courses with the highest proportions of women to men in their enrollments. Such an analysis is presented in table 4 which follows.

Table 4.—*Female enrollment and percent female enrollment in selected courses from July 1, 1942, through June 30, 1943*

Type of course	*Female enrollment*	*Female enrollment percent*
Office management	3,044	54.4
Analytical chemistry	3,670	52.1
Fundamentals of engineering	4,262	42.8
Aeronautical engineering inspection and testing	3,404	42.3
Surveying and mapping	4,323	42.2
Engineering drawing and descriptive geometry	24,818	41.6
Mechanical engineering inspection and testing	8,022	41.5
Subject matter of mathematics and physics courses	2,467	39.5
Accounting	14,627	39.1
Fundamentals of chemistry	944	37.3

Training of Negroes

Members of minority groups in the Nation's population have been admitted to ESMWT classes whenever they could meet the prerequisites for the courses. The training of Negroes in particular, however, has been slow to develop in large volume. Constituting less than 1 percent of the total in the EDT program, Negro enrollment rose slowly to about 1½ percent in ESMWT. Although the percentage increase was small, the numbers of Negroes enrolled was substantial, reaching a cumulative total of more than 14,000 by June 30, 1943.

Two factors seem to outweigh all others in accounting for the small proportion of Negroes among ESMWT enrollments. First, it is believed that 14,000 represents a fair proportion of the total number of Negroes qualified and available for instruction of college grade. And, second, employment of Negroes in professional, technical, and subprofessional positions, particularly in Southern States, has presented complications which may have deterred their training.

Tables 5 and 6 contain information of interest in a review of the participation of Negroes in ESMWT courses.

Table 5.—*Cumulative Negro enrolllment in ESMWT courses reported by institutions by specific types of courses from July 1, 1942, through June 30, 1943*

Types of course	*Enrollment*	*Percent of total Negro enrollment*
Engineering drawing and descriptive geometry	1,593	15.4
Communications	1,558	15.0
Analytical chemistry	820	9.9
Personnel administration and labor relations	574	6.5
Accounting	487	4.7
Mathematics	394	3.8
Industrial organization and management	383	3.7
Power generation and transmission	300	2.9
Safety	296	2.3
Surveying and mapping	239	2.3
All others	3,579	34.9
Total	10,323	100.0

Table 6.—*Cumulative Negro enrollment in ESMWT courses reported by institutions, by State, from July 1, 1942, through June 30, 1943*

State	*Enrollment*	*Percent of total Negro enrollment*
Texas	1,759	17.0
Virginia	1,421	13.8
North Carolina	949	9.2
Pennsylvania	830	8.0
Illinois	636	6.2
Ohio	517	5.0
Alabama	494	4.8
District of Columbia	486	4.7
Georgia	345	3.4
Michigan	317	3.1
All others	2,569	24.8
Total	10,323	100.0

Training of Men Not Eligible for Induction Into Armed Forces

No discrimination because of age has been practiced in ESMWT or preceding programs. Great and continuous drafts of the Nation's manpower for military service, however, have created a demand in industry for men beyond military service age, and this trend has been reflected in ESMWT enrollments.

While the data reported by participating institutions do not make possible the segregation of enrollments according to age, estimates and judicious opinions confirm the belief that the median age of male enrollees has risen markedly since the beginning of 1942. In addition, many of the institutions report that the mature, responsible attitude

of the older men and their lengthy experience acquired in nonwar industries have made them a group of exceptional value for many exacting positions.

Relationship of ESMWT to the Regular College Program

The ESMWT program was designed not to interfere with any of the regular college programs of courses leading to degrees. The need for fully trained people with broad background obtained through 4 years or more of study was great and it would seem that this need would continue throughout the war and the reconstruction period.

Students enrolled in regular college degree programs were expressly excluded from ESMWT courses, except those who were in their last semester of regular college work and would be immediately available for placement in critical industry. Such students were permitted to take ESMWT courses, if they were not to be used for college credit, and were in addition to, not in substitution for, their regular courses. The only exception was the granting of credit for a course in ultra-high frequency techniques, requested by the Army and Navy, which certain seniors were allowed to substitute for part of the regular curriculum because of the most urgent need for this training.

Relationship of ESMWT to Vocational Training

One of the problems of ESMWT was that of planning courses to avoid overlapping with the Training-Within-Industry and vocational training programs. It was undesirable to leave an area of no-man's land between the vocational and college levels of training, but duplication of effort and the confusion arising from several agencies training in closely related fields had to be avoided if maximum success were to be attained. One of the functions of the staff of the ESMWT Washington office was to see that all the courses offered were of college grade, and that necessary training below this level was left to other agencies which had been set up to provide it.

Relationship of ESMWT to Industry

The ESMWT program, in many respects, was related to the various training programs which had been organized and operated previously by industries within their own establishments. It was, again, not the purpose of the ESMWT program to take over or replace successfully operating programs. The unprecedented absorption of inexperienced workers into industry, however, created a training need which was greater than industry could organize to meet without diverting experienced personnel from production for that purpose. A second important factor in the training problem arose because many small firms, engaged in subcontracting work on Army and Navy orders, were almost entirely without adequately trained technical staffs and lacked the extensive training facilities which large industries

had been able to establish on their own initiative. The need for training was further increased by the springing up of industries to meet wartime needs in areas where no trained labor supply existed. In many instances, it was necessary for these industries to build and equip entirely new plants and to anticipate their needs for technically trained and supervisory personnel. This was a problem for which the industries concerned were unprepared, because of their lack of experience in the work which they were undertaking. In such circumstances, ESMWT was able to render great assistance, sometimes setting up the required training courses at the time the foundations for the plant were laid.

Not only did industry have a part in selecting courses and planning course content, but many men of expert technical knowledge who were employed in industry were engaged to teach ESMWT courses under the educational supervision of college faculty members.

Future of ESMWT

As to the coming year, the Congress of the United States has reaffirmed its confidence in this war-training effort by enacting Public Law 135, which makes available the sum of $25,000,000 to meet the cost of ESMWT courses during the fiscal year 1943–44. Provisions of this Act permit the continuation of training of the scope and nature offered in the ESMWT program of 1941–42 and the ESMWT program of 1942–43.

Tentative expressions of intention from participating institutions indicate that almost without exception the 214 colleges and universities which conducted ESMWT courses in 1942–43 will continue to do so in 1943–44, even though the Army and Navy training programs have thrown heavy burdens upon the facilities of these institutions. Thus, it is anticipated that instruction will continue in more than 1,000 towns and cities throughout the 48 States to train an estimated additional half-million men and women by July 1944.

Although war production is expected to approach the peak of its manpower requirements this year, no marked decline in the need for ESMWT courses is anticipated. Several factors influence this conviction. First, it must be realized that changes in the utilization of American colleges and universities, together with the reduction of the selective service age limit, will result in materially curtailing the supply of graduate engineers, chemists, physicists, and business management majors for other than military service. Industry must suffer further depletions of professional and technical staffs, in numbers yet to be determined, to meet the manpower needs of the armed forces. Finally, the practice of upgrading, through which employees are advanced to more responsible positions as vacancies require, will further deplete the supply of qualified technicians at the lower levels.

Visual Aids for War Training

During the fiscal year of 1943, the U. S. Office of Education, through its Division of Visual Aids for War Training, continued the development of visual aids specifically designed to assist instructors in expediting the training of war workers.

Under an appropriation of $1,000,000 by Congress, the Division started the planning, development, and production of 150 visual aids units. Each of these visual aids units consists of a sound motion picture, 10 to 17 minutes in length; a silent filmstrip; and an accompanying instructor's manual. This Development of a "visual aids unit" with motion picture, still picture, and textual material complementing and supplementing each other to provide a compact and effective instructional unit, marks a pioneering development in the total field of visual aids.

The 150 visual aids units were planned and developed by the Office of Education Committee. These men, with their varying backgrounds of experience representing all phases of the war training program of the Office of Education, made certain that the production program was a well-balanced one in terms of the various occupations to be covered and that the most critical war training needs were served. The titles developed by the Committee were approved by the chairman of the War Manpower Commission and the actual production of the visual aids units was undertaken by 22 commercial producers. These were located in Beverly Hills, Chicago, Dallas, Detroit, Hollywood, Kansas City, New Orleans, New York, Oak Park, Philadelphia, Pittsburgh, St. Paul, and San Francisco.

To provide the direct and immediate supervision necessary to assure the technical accuracy and teaching effectiveness of the finished films, local advisory committees were appointed by the State training authorities in the States of California, Texas, Louisiana, Wisconsin, Ohio, Illinois, New York, Pennsylvania, Connecticut, Rhode Island, Vermont, Massachusetts, Minnesota, Missouri, Kansas, and Michigan. Many colleges and universities, branches of the armed forces, city school systems, private trade schools, professional societies, and manufacturing organizations cooperated in the planning and production.

The 150 visual aids units in production are divided as follows:

30 shipbuilding skills
25 aircraft work
6 processing optical glass
5 maintenance of farm machinery
20 supervisory training
49 machine shop work
5 on various aspects of welding
10 specialized problems of engineering

The distribution of the completed films has been handled through a commercial organization experienced in the distribution of 16-mm motion pictures awarded a contract by the Procurement Division,

Treasury Department, on a competitive bid basis. Prints of the motion pictures have been sold outright at a price sufficient to pay for the cost of distribution and yet low enough to make them available to all organizations interested in war training.

The Congress, in making an appropriation for the fiscal year 1944, placed the project on a liquidating basis by providing that prints shall be sold at a price sufficient to pay back the cost of production.

During the fiscal year of 1943 approximately 28,000 prints of the original 48 titles (produced during the fiscal year of 1942) were sold. Approximately 18,000 of the total were purchased by schools and industries. This figure also includes prints purchased by the governments of India, South Africa, Canada, New Zealand, Australia, England, Mexico, and Brazil. The National Film Board of Canada developed versions of 30 of these films with the commentary in French for use with their French-speaking provinces. Approximately 10,000 prints are being used by the armed forces of the United States.

Estimates on file with the division indicate that the prints now in use by the schools and industries have been used with more than 3 million war trainees. Reports from directors of training in vocational schools and industries indicate that the films speed up training between 25 and 50 percent, make for more effective and complete training, and lessen the amount of scrap produced by the new workers. The effectiveness of the films thus far has led to a constantly increasing demand for additional prints and for new subjects.

The division has secured the release by the Army and Navy of a considerable number of sound motion pictures and film strips which are nonconfidential in character but which cover subjects of study in the public schools. These were released through the contractual distributor of the Office of Education, and more than 1,200 prints were sold to schools giving preinduction and preflight training.

In cooperation with the Civilian Preinduction Training Branch, Industrial Personnel Division, Headquarters, Army Service Forces, War Department, the Division of Visual Aids compiled a selected list of visual aids generally available and applicable in preinduction and preflight courses. The list was evaluated by instructors familiar with visual aids, selected from all parts of the country, and the final evaluated list was published as a "Bibliography of Visual Aids for Preinduction Training" by the producers of the visual materials listed.

At the present time the Division is planning the production of approximately 300 additional visual-aid units under the appropriation granted by Congress for the fiscal year of 1944. These, taken in conjunction with the previous productions, will make available to the schools a basic and integrated series of visual materials for vocational and engineering courses.

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General Services to Education

ALTHOUGH STAFF MEMBERS serving in their specialized fields are attempting still to carry on responsibilities which are theirs in normal times such as collecting and disseminating statistics and information about schools and school systems, their activities have been largely redirected (1) to emphasize those phases of school programs directly contributing to the war and post-war needs; and (2) to render service through programs which have become necessary as a result of war conditions.

At both the elementary and secondary levels, programs of the first type include consumer education, price controls and rationing, health and physical fitness, nutrition, and the school lunch. Programs of the second type include provisions for evacuation of school children in case of air raids, services for children of working mothers before and after school hours, provision of school facilities in congested war areas, control of the upward trend of juvenile delinquency growing out of the increased employment of mothers of young children, and consideration of needs of elementary and secondary school children in the post-war world.

Many of these wartime activities are carried on in cooperation with other Government agencies. In some cases the activities are made possible through funds made available by those agencies.

Extended School Services

On August 12, 1942, the chairman of the War Manpower Commission issued directive IX in which it was stated that "existing and anticipated requirements for workers in essential activities render necessary the employment of large numbers of women, that among such women may be found many mothers of young children, that no woman responsible for the care of young children should be encouraged or compelled to seek employment which deprives her children of her essential care until after all other sources of labor supply have been exhausted, but that if such women are employed, adequate provision for the care of such children will facilitate their employment."

On August 28, 1942, the President allocated $400,000 to the Office of Defense Health and Welfare Services for the promotion and coordination of programs for the care of children of working mothers.

The Office of Education with the funds available to it from this grant, appointed nine field consultants on extended school services

with headquarters in the several regions of the Office of Defense Health and Welfare Services (now the Office of Community War Services). The field consultants provided advisory and supervisory service to State departments of education.

State departments of education in 33 States, the District of Columbia, and Hawaii submitted State plans for a program of extended school services which were approved by the Office of Education and the Office of Defense Health and Welfare Services. Grants to these States totaled $153,143.32. Such grants enabled the States to employ specialized personnel whose duty it was to work with communities affected by the impact of war industries in setting up programs for the care of children of working mothers.

Funds for the project were discontinued on June 30, 1943, and work at the Federal level was necessarily suspended.

School Facilities in War Areas

Under the provisions of Public Law 137 (Lanham Act) Federal financial assistance was made available for community facilities, including the construction and maintenance and operation of school facilities. During the biennium applications for Federal funds were submitted by local school administrative units to the regional offices of the Federal Works Agency. The regional directors forwarded the applications to the Washington office of the Federal Works Agency for final review and audit. Applications involving school needs were submitted to the U. S. Office of Education for certification as the basis for final approval or disapproval of the project by FWA. In 1942 funds were granted, for the first time under the Lanham Act, to establish nursery schools and before-and-after-school supervisory programs for children of mothers whose employment was essential to the war effort.

Consultative services were furnished by the U. S. Office of Education to State departments of education and to local school administrative units to assist them in the processing of applications under Public Law 137. Funds for the employment of the 23 specialists were transferred to the Federal Security Agency by the Federal Works Agency.

The field representatives, in making surveys of the need in local school districts, were always accompanied by representatives of the State departments of education. Their reports and recommendations were transmitted to the office in Washington and formed the basis for "Certificates of Necessity" issued by the Office to the Federal Works Agency.

During the biennium approximately 900 original Certificates of Necessity were issued by the Office to the Federal Works Agency,

setting forth the need for school plant facilities. During the biennium, periodic checks to verify need were made by the field representatives of the Office, in cooperation with State and local school authorities, and 530 Changes in Previous Action or Confirmation of Previous Action were issued by the Office of Education to the Federal Works Agency. Approximately 815 Certificates of Necessity were issued for applications filed by local school officials for Federal assistance in providing regular school services in war areas. Approximately 525 Certificates of Necessity were issued by this Office to the Federal Works Agency relative to the need for nursery schools and before-and-after-school services for children of working mothers.

The War Production Board requested recommendations of need in regard to school plant facilities, financed wholly by local funds, in approximately 400 communities. In the majority of cases the need was occasioned by loss of school plant facilities in the community by fire or condemnation proceedings. Statements of Need were issued by the U. S. Office of Education to the War Production Board for the 400 applications for preference ratings for materials.

School Transportation in Wartime

The Office of Education has cooperated with the Office of Defense Transportation, State departments of education, and other interested agencies in the conservation program as it involves school transportation in wartime. Since the fall of 1942, one staff member whose appointment was made possible by funds supplied by ODT has given full time to this work. The following accomplishments may be reported:

1. Representatives of the U. S. Office of Education met representatives of State departments of education in 13 regional meetings.
2. Procedures for the reorganization of school bus routes effected an estimated 30 percent reduction in school bus mileage.
3. State departments of education developed plans for a program of training for school bus drivers.
4. Plans for State surveys of school bus equipment needs and surpluses were developed.
5. Plans for a program of summer maintenance were worked out.

Evacuation of Civilians

As a member of the Joint Committee on Evacuation set up by the Office of Civilian Defense, the Assistant Commissioner has participated in the work of planning for evacuation and reception care of civilians in case of air raids. Two bulletins were prepared by the committee, one on Policies and Principles, the other, Planning for Evacuation and Reception Care.

In accordance with recommendations of the joint committee the Office of Education appointed three field consultants to serve as its representatives in OCD regions I, II, and III and to work with State departments of education in the Eastern Seaboard States in the formulation of State plans and operating programs. The three consultants, members of State departments of education of the States of Massachusetts, New York, and Maryland, served without compensation.

Physical Fitness

Towards the close of the 1942 fiscal year the Office of Defense Health and Welfare Services transferred to the Office of Education the school and college section of its Division of Physical Fitness. The new staff of two specialists took up their duties during the summer. Working conferences of national leaders in health and physical education at the Office of Education resulted in three manuals on physical fitness: *Physical Fitness Through Physical Education for the Victory Corps*, *Physical Fitness for Students in Colleges and Universities*, *and Physical Fitness Through Health Education for the Victory Corps*, the latter prepared under the direction of the specialist in health education. Before publication, these manuscripts were reviewed and approved by Army and Navy Department staff members. Following the preparation of the manuals the staff sponsored and participated in nine regional institutes for the purpose of introducing and interpreting the physical fitness program. These institutes were in turn followed by attendance and participation of members of the staff in State conventions and conferences for which service many requests were received.

Japanese Student Relocation

The spring of 1942 saw the wholesale evacuation by the Army of persons of Japanese ancestry from the Pacific coast area, with the consequent problems of providing educational facilities for them. The Assistant Commissioner served as liaison officer with the National Japanese American Student Relocation Council to assist Japanese students to be placed in schools and colleges, and cooperated with the War Relocation Authority in planning for education programs for children of elementary and secondary schools.

During the 1943 fiscal year a member of the Office of Education staff was on loan to the War Relocation Authority on a reimbursable basis to serve as educational adviser in developing programs for elementary and secondary school children in the centers.

Salvage Programs

The Office worked with the War Production Board in securing the cooperation of schools in various salvage programs. This involved determining what activities it was advisable and feasible to ask the

schools to undertake in connection with the salvage program, securing the cooperation of State and city superintendents, and preparing and distributing informational material for carrying on salvage work in schools.

Employment of Children

The Office cooperated with the Children's Bureau in studying labor problems involving children and in planning regulations that should govern employment both during the school year and the vacation period. This work resulted in the issuance of statements recommending certain regulations that should obtain in the employment of children and in school attendance.

War Savings in the Schools

During the biennium the Office continued its cooperation with the War Savings Staff of the Treasury Department in the furtherance of its Schools at War Program in the public schools.

Rationing Registrations

The Office of Education has continued to cooperate with the Office of Price Administration in planning the program of rationing registrations conducted by schools. During the biennium such programs were planned and the cooperation of public schools secured for the rationing of gasoline, fuel oil, and other commodities covered by rationing regulations. This necessitated not only planning the school program with the OPA but also securing the cooperation of State departments of education and the furnishing of information and directions to local school superintendents.

Program Planning in Education

The first of the series of leaflets, Planning Schools for Tomorrow—The Issues Involved, planned during the preceding year, came from the press and was distributed during the first half of the 1943 fiscal year.

Members of an Office of Education Committee on Educational Planning cooperated with the National Resources Planning Board in the preparation of memoranda concerned with planning. At the request of the Board's urban unit a circular was prepared and mimeographed designed for the use of its representatives in advising with State and local planning boards and committees. Because of the demand for material on planning, the original manuscript was revised and published by the Office of Education as the second in the series on Planning Schools for Tomorrow as leaflet No. 66, Some Considerations in Educational Planning for Urban Communities.

A mimeographed circular Post-War Planning for Education in Other Countries, gives an account of activities of national and official agencies in foreign countries.

Other projects under way include (*a*) preparation of a study guide on post-war planning in education for the use of service clubs and other groups, and (*b*) a series of memoranda concerned with the post-war educational needs of children as a unit in an interdepartmental project now under way under the general direction of the Director of Research of the Federal Security Agency.

Research and Publication

During the past 2 years the research program of the Office has been directed mainly to the preparation of manuscripts for which there is a definite wartime need. Three particularly important series of publications have been issued: (1) *Education and National Defense*, a series of 24 pamphlets designed to help schools and colleges to recognize and to meet the various situations which the defense and war programs precipitated; (2) *School Children and the War*, a series of seven leaflets prepared as a part of the Office's program of promoting before-and-after-school services for children of working mothers; (3) *Physical Fitness*, a series of three manuals on health and physical fitness for high schools and colleges, prepared with the advice and help of both school and military authorities. Other publications are in such fields as consumer education, the school lunch, health services, planning in education, and inter-American educational relations. Also, the statistical chapters of the Biennial Survey of Education which supply basic figures in education essential to Army and Navy and other war agencies as well as to school personnel, continued to be prepared.

Industrial Arts

The work in industrial arts during the biennium was concerned with problems arising out of war needs and conditions. Information was compiled on the various kinds of industrial arts shops found in public schools—general shops, special shops, etc.; the kinds of activities carried on in the shops; and the administrative organization for instruction. Information was also collected and compiled on the special contributions industrial arts shops and teachers are making to war-related activities. This information shows that various organizations have been served by industrial arts departments through the production of materials needed by those agencies in their war work. For example, industrial arts departments have very generally made equipment for use by the Red Cross; games for such organizations as the USO; and auxiliary equipment for use during the hospitalization of service men.

Cooperation has been extended to the War Production Board in determining priority rights for industrial arts shops for tools and equipment. Assistance has been given the War Production Board in

the development of regulations to govern the quantity of instructional materials granted and their distribution to schools. Cooperative service was continued in further planning for model aircraft construction by public schools for use of the military forces. Information was also collected and disseminated on glider construction as conducted in some high-school industrial arts departments.

Tests and Measurements

The Office of Education issued the Victory Corps Aeronautics Aptitude Test, a prognostic test for aeronautics and science classes in the high school. Fourteen cities collaborated in the establishment of norms for the test and in furnishing data on which the validity of the test could be ascertained. The test, which is distributed by the Superintendent of Documents, has been used by hundreds of high schools.

During the past year, experimental work in seven cities was carried on with another test, The Scientific Aptitude Test, a prognostic test for science and mathematics.

The National Committee on Cumulative Records held a conference in New York City in the fall of 1942 at which time the manuscripts on this subject which had been developed by the members of the committee were reviewed and plans made for their revision.

American School Systems

Wartime Programs

The emphasis upon wartime activities in the schools has continued to absorb much of the time and attention of the staff of the American School Systems Division.

As a consequence of this emphasis, the products of the division's work are to be found more in assistance given to war programs of various kinds than in studies prepared and published. For example, two specialists in State school administration gave much time to supervision and direction of office and field personnel dealing with school facilities in defense areas and with school transportation. Considerable time of the specialist in elementary education was given to the Inter-American Demonstration Center Project. Other specialists gave major portions of their time to the salvage drive in schools and to the extended school program for children of working mothers.

Studies

Among major studies conducted by the American School Systems Division during the biennium were the following: Two chapters for the *Biennial Survey of Education*—the text interpreting the city school statistics for the biennium ending June 30, 1940, and the sur-

vey of educational legislation for the years 1939 and 1940; a study of *Supervision of Parent Education as a Function of State Departments of Education; What Democracy Means*—a monograph on the social sciences in the elementary school; a second report on *What the Federal Government is Doing for Children;* two publications on aviation education—*Preaviation Cadet Training in High Schools* and *Preflight Aeronautics in Secondary Schools* (these two were developed with the assistance of representatives of the U. S. Army, the U. S. Navy, and the Civil Aeronautics Administration); *America Builds a School System*—a publication planned and written by the students and English instructor in the School of Education of Kent State University, in cooperation with the Office of Education; reports on State plans for school support and on Federal expenditures for education, 1941 and 1942; *Education for Freedom—as Provided by State Laws*, an analysis of State laws designed to promote education in the schools concerning the ideals and principles of American democracy; a mimeographed summary of *State Provisions Relating to Military Training in Public Schools During School Time;* a release on *State Legislative Action in 1943 for the Extended School Services in Wartime;* a publication entitled *Our Armed Forces*, intended to supply for high-school pupils up-to-date authentic information regarding our armed forces; a study of nursery schools and private kindergartens for children below the age of 6 years, of summer programs, and of initial community efforts to survey community and city-wide needs of children.

Comparative Education

Except for some adjustments and change of emphasis due to war demands, the main functions of the Comparative Education Division were continued throughout the biennium. In connection with their recruitment of personnel, various Government departments and agencies engaged in national defense work called for information about education in other countries, necessary as a basis for considering the employment of applicants who received at least a part of their training in countries outside of the United States. Organizations within the Government interested in post-war planning also wished to know about education and particular types of schools in areas in which they may be called to serve.

As in previous years since the outbreak of the war official reports and publications, though somewhat delayed, continued to come from the various sections of the British Commonwealth of Nations and from the countries of the western hemisphere. Information about the status of education in other countries of the world was fragmentary and scattered.

The Far East

During the year 1943 a specialist on the Far East was added to the Division. Through his efforts the work in the area of the Far East was expanded, particularly with reference to the promotion of intercultural relations through schools and colleges.

In cooperation with the Division of Cultural Relations, the Department of State, and the China Institute, three Chinese teachers were made available to public schools as consultants on Chinese studies.

In connection with the work on the Far East the following listed multigraphed studies were issued: Studies on the Far East at Universities and Colleges in the United States; An Annotated List of Available Units, Courses of Study, and Other Curriculum Materials.

Counseling Service for Foreign Students

Requests for the evaluation of foreign student credentials for 1943 totaled 687 cases. Students came from 63 countries. In terms of large world areas, 334 cases came from 24 European countries; 123 from the British Empire; 185 from Latin America; 21 from the Near East; and 24 from the Far East.

Formal translations in connection with the evaluation of credentials were made by members of the division from 25 different languages into English.

Special Problems

Intercultural Education

War has emphasized the neglect which has too often characterized education among minority groups, national and racial. Within such groups are many non-English-speaking adults and children, underprivileged economically as well as educationally, who fail particularly to understand war and postwar objectives and sacrifices contributory to victory. Serious school problems are involved such as those of teaching English to foreign-speaking children, of health and sanitation, of attendance and retardation. In this field the Office has cooperated with governmental and nongovernmental agencies and services in the preparation of articles, the review and distribution of material, and, among other activities, has prepared bibliographies for general distribution on several phases of intercultural education as well as special reference lists on request.

Negro Education

In the special service to Negro education, three projects have been under way: Preparation of a final and summary volume of the Survey of the Higher Education of Negroes, a study which has been under way for the past 3 years; preparation of the special statistical report

on the education of Negroes made in collaboration with the Statistical Division; and a new study undertaken during the year 1943 concerned with the opportunities offered teachers by higher institutions of learning for the study of racial and minority groups.

Rural Education

Members of the staff cooperated with the Public Health Service in reviewing and making suggestions concerning bulletins in the field of rural education, with the Department of Agriculture in services concerned with school lunches, and with the Children's Bureau in connection with studies of the education of children of agricultural laborers; prepared material on the development of the Victory Corps objectives in small high schools; prepared a plan for preflight aviation training in small high schools.

School Lunches and Gardening

Considerable responsibility for the Office's activities in encouraging and promoting school gardens, in advising with schools concerning the establishment and conduct of school lunch programs, especially concerning their educational value, was assigned to a member of the staff of the Division.

Correspondence Courses

The importance of correspondence courses in enriching the curriculum of small high schools is emphasized by the need of such schools to participate in special war training programs. A conference of workers in this field, called by the Commissioner to consider ways in which correspondence courses could contribute to the objectives of the High-School Victory Corps, was arranged by a member of the staff of this division. A pamphlet on *Correspondence Study in High-School-Wartime Programs* and two articles relating to such courses were prepared by the specialist in charge.

Education of Exceptional Children

Much of the work for exceptional children during the past biennium has been in cooperation with other agencies. The Office is preparing a report of significant developments and problems relating to training schools for juvenile delinquents in cooperation with the National Association of Training Schools. Assistance is being given to the American Association on Mental Deficiency in carrying on a study of the wartime occupations in which mentally deficient persons are now engaged. Delinquency as a serious wartime problem with which schools are concerned has received considerable attention. A study of 65 cities was made to investigate conditions and preventive practices in school systems.

Other Wartime Projects

Cooperation with other divisions of the Office and other Government agencies on wartime projects involved preparation of material for publication as well as service on advisory committees. Examples are: Cooperation with the OCD in the preparation of three wartime manuals; with the NRPB in the preparation of planning materials; membership on advisory committees with several Government agencies; supervision of the preparation of a series of leaflets on "School Children and the War."

Statistics

The work of the Statistical Division during the biennium was directed (1) to the collection and compilation of basic educational data for the United States as a whole and (2) to special studies necessitated by war conditions.

Much time of the division was spent in preparing special data, at the request of other Government agencies to assist them in formulating and carrying out their programs.

To supply special information on the effect of the war on the schools for various war agencies, as well as for the general public, a survey was made as of October 15, 1942, of the effect of the war on the 8,000 public-school systems and the 1,700 colleges. A limited number of copies were published in an abridged form, as Circulars No. 217 and No. 218, advance material having appeared in *Education for Victory* as it became available from the tabulations. Special tabulations on staff, enrollments, and graduates from the biennial report for 1941–42 were combined with estimates based on the October 15, 1942, college survey and data from the unpublished biennial survey for 1939–40, to show what had happened to the colleges since 1940. This made available a minimum of data for 1941–42 and 1942–43 in the form of a 4-page circular, No. 216.

The reports from 36 States, in the spring and summer of 1942, showed that approximately 5,000 new school buildings and additions would be needed in the post-war period. These reports and a summary were prepared for publication. It was estimated that these partial school needs would cost approximately $500,000,000.

The regular periodic work of the Statistical Division for the 1943 fiscal year consisted of collecting data for the *Biennial Survey of Education in the United States, 1940–42*, for the school year that ended in June 1942.

The three annual studies, *Statistics of Land-Grant Colleges*, *College Income and Expenditures*, and *Expenditures Per Pupil in City School Systems* were made, but publication was confined to short summaries or delayed for lack of funds.

The quadrennial compilation of all data available on the education of Negroes from the biennial studies, was combined with a brief 10-year review of progress in Negro education from 1930 to 1940, and published in an abridged form as Circular 215, Parts I and II.

The Library

The role of the Office of Education Library in wartime is not far removed from its role in normal times, if due allowance be made for the change of emphasis. The research facilities of the library as well as the current material on all phases of education have been in constant use by those engaged in war-connected activities. The reference division has daily given 10 hours of advisory and reference service, with telephone calls for information increasing by nearly one-third over 1942, and loans to Government agencies increasing proportionately.

Special Projects

The educational publishers continue their generosity in supplying, for display in the reading room, current textbooks dealing with such timely subjects as instruction in military maps and aerial photographs, army medicine, science of weather, radio communication, practical navigation and tool designing. As these books are of special interest to those planning technical courses for war-related jobs, they have been processed by the catalog division as rapidly as possible.

Early in 1943 the library cooperated with the specialist in Far Eastern affairs in securing from publishers the latest books on China. These have been made available for examination by those promoting a knowledge of our Far Eastern ally.

The Civilian Conservation Corps, which was discontinued on June 30, 1942, turned over to the library for permanent preservation its special collection of books selected for a camp library, together with its surplus stock of manuals and workbooks prepared for use in the camps.

Space

In 1943 many readjustments were made by the education library in order to release space to the Interior Department's law library of 100,000 volumes.

Because of the reduction of space assigned to the education library it was found necessary to return to the American Home Economics Association its collection of historical publications which had been loaned to the Office of Education for research purposes.

Statistics:	1942	1943
Volumes cataloged	8,637	6,434
Books loaned	7,422	6,922
Theses loaned	661	559
Interlibrary loans	1,434	1,813
Reading-room attendance	10,205	10,741
Books used in reading room	27,229	22,462

An inventory taken at the close of the 1943 fiscal year shows the library to contain approximately 300,000 books and pamphlets, divided as follows:

Cataloged books and pamphlets	150,000
College catalogs, U. S.[1]	60,000
Textbooks[1]	25,000
Theses[1]	4,000
Foreign publications[1]	35,000
Periodicals—Unbound volumes[1]	2,000
Miscellaneous (in process of cataloging)	2,500
College journals—LH[1]	500
Vocational education publications[1]	3,000
Curriculum materials, college publications filed with college catalogs, reference books, and special collections on China, etc	18,000
Total	300,000

[1] Uncataloged.

Information Exchange on Education in Wartime

Early in 1943 the information exchange, which had previously functioned as an independent unit, was transferred to the library.

During the biennium, the information exchange loaned 18,000 packets, the largest number of orders coming from New York, followed by California, Pennsylvania, Alabama, and Texas. Thirty-seven packets were prepared with the cooperation of specialists in the Office. In addition, 12 packets were completely revised and 14 discarded because of obsolete materials or lessened demand. There are now approximately 75 different packets available for loan, the most popular being *Inter-American Friendship*, *Nutrition*, *The Far East*, *Health*, and *The Role of Schools in Wartime*.

The five principal classes of borrowers are listed in order of requests received: Secondary school teachers, school administrators, librarians, college faculty, and elementary school teachers. It is gratifying to report an increase in the number of teachers in rural and village schools using the facilities of the information exchange. These teachers write that they have inadequate library service and no funds with which to purchase pamphlets, pictures, and maps which would be useful in their work. This service seems to fill a real need in these areas.

Library Service

During the biennium, the Library Service Division devoted much time to war-related activities. On the one hand, it rendered service to war agencies in connection with programs requiring library facilities, and on the other it aided national library organizations and State and local library units with their war activities. The division also had the responsibility of carrying on an extensive exhibit project of Latin American teaching materials.

Work With the War Agencies

In the case of the war agencies, close relations were maintained with the Office of War Information, especially with its Library Liaison Unit headed by a chief on reimbursable detail from the Office of Education. In cooperation with that unit, the division worked on the problem of adequate distribution of Government documents to libraries.

The Division helped the War Production Board by furnishing statistics regarding the needs of libraries for book paper, supplies, and equipment. It also provided information about the possibility of substitutes for library supplies and equipment which involve critical materials.

The National Resources Planning Board called upon the unit to give official advice from the Federal standpoint on the post-war library standards developed by the American Library Association. An extensive memorandum on the matter was prepared by the Library Service Division for the consultant at the National Resources Planning Board, who was charged with handling the problem.

Representing Libraries at the National Level

Both alone and in cooperation with the American Library Association, the division worked on the problem of priorities, tires, gasoline, and other supplies for libraries. Gasoline and tire regulations threatened to suspend bookmobile service in many rural and suburban localities, the only library service available in numerous cases. The division did considerable work in connection with public library requests for inclusion under the provisions of the Community Facilities Act.

Statistical Studies

Some time was given also to research and statistical studies. The tabulations and manuscript on the Nation-wide compilation of college and university libraries were completed. Work was started on the collection of comprehensive public-school library statistics, the first such gathering since 1934–35. Some work was continued on the State library agency study.

War-related Information for Libraries

To meet a demand from schools and libraries for prompt notices about new war-related publications, in addition to those issued by the Office of Education, the division prepared for each issue of *Education for Victory* an annotated list of such material. During the fiscal year 1943 a total of 278 entries from 65 different Government units were listed.

Inter-American Educational Relations

The activities of the Division of Inter-American Educational Relations, established in 1943, continued to expand during the 1943 fiscal year. Funds for the major part of the division's work are received through the Interdepartmental Committee on Cooperation with the American Republics, but these funds were supplemented somewhat by the transfer of other funds for special projects to the division from the Office of the Coordinator of Inter-American Affairs.

Exchange of Persons Under the Buenos Aires Convention

In December 1942 fellowships for United States students under the provisions of the Convention for the Promotion of Inter-American Cultural Relations were discontinued for the duration of the war because of the need for the services of our young men and women within this country and in the Armed Forces. However, students from the American republics which have ratified the convention continue to come to the United States for study under the terms of that Convention.

During the period covered by the report, graduate students from the following American republics have come to study in our colleges and universities: Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Guatemala, Haiti, Nicaragua, Mexico, Panama, Paraguay, Peru, and Venezuela.

Promotion of Language Study

The division has added to its staff an associate specialist in the teaching of Spanish and is cooperating with other Government agencies and private institutions, as well as with the governments of some of the other American republics in developing an interest in the study of the languages used in the American republics and in training teachers and developing materials for this work.

A collection of classroom materials suitable for teachers in the other American republics who are teaching English as a foreign language has been made, and a close cooperation between these teachers and the Office is developing.

In the English language teaching program nine teachers from the United States were sent to Haiti on a cooperative project worked

out between the Department of State, the Office of the Coordinator of Inter-American Affairs, and the Office of Education.

Other teachers of English from this country have been sent to Latin America as individuals to teach in private schools and in the cultural institutes in some of the leading cities of the other republics. This program was also carried out in cooperation with the Department of State and the Office of the Coordinator of Inter-American Affairs. The work of this division has largely consisted of the selecting of qualified persons to teach our language abroad and in securing the needed materials for their classes.

General Exchange of Teachers Between the United States and the Other American Republics

The division has cooperated also with other United States Government agencies and foreign governments and institutions in bringing teachers from the other republics to this country for a period of training, in arranging opportunities for teachers sent here by other governments, and in recommending American teachers to foreign schools.

An illustration of this type of activity is the project through which five teachers from the elementary and secondary schools of Paraguay came to the United States under the auspices of the division for a period of 8 months' training. These teachers spent one semester in studying at a teacher-training institution and since that time have been engaged in assisting in workshops devoted to inter-American affairs and have now gone to public-school systems to which they will be attached for a period of several months.

Pan American Clubs

During the 1943 fiscal year the division added one staff member to assist in the development of the Pan American club work both in the United States and in the other republics. The most active club centers, including the headquarters of the three largest "national leagues" located in New York, Miami, Fla., and Dallas, Tex., have been visited. The Pan American club section of the division is rendering as much assistance as possible to individual clubs and is also making steady progress in developing relationships between the sponsors of clubs in this country and the teachers who have charge of similar work in the other republics.

Information Service

One section of the division is engaged in meeting the requests for information about the different American republics which come from our own schools and teachers, as well as teachers in the other republics. An average of approximately 1,500 requests for information

and material come each month from teachers in the United States and about 100 requests per month come from Latin America.

2,050 packets of materials on the other American republics have been prepared and are loaned for a brief period of time to schools in the United States. A large number of packets dealing with all phases of education in the United States have been sent in answer to requests from Latin America. In this way our culture, our school practices, and some information regarding our school materials, are made known to the educators of Latin America.

Summer Consultant Program

The division has been able to cooperate with numerous educational institutions in the United States in the development of conferences, institutes, and summer workshops on inter-American affairs. Funds for this program were transferred by the Office of the Coordinator of Inter-American Affairs and enabled the division to supply specialists on inter-American affairs, paying their transportation to the conferences and their salaries.

Visitors From the Other American Republics

During the course of the fiscal year 1943 approximately 200 visiting educators and students from the other American republics have received assistance from the division. The assistance has taken the form of the planning of study programs, the arranging of itineraries, letters of introduction to specialists in the visitor's particular field of interest, and the supplying of government publications and other materials desired by the visitor.

Latin American Exhibit Project

The Library Service Division continued to replenish and circulate the 150 exhibits of materials on the other American republics, prepared in 1942 with the aid of a grant from the Office of the Coordinator of Inter-American Affairs. It also prepared 10 new exhibits devoted to the arts and crafts. These exhibits consisted of books, pamphlets, bibliographies, maps, panels of photographs, phonograph records, handicraft, and other materials designed to bring about a better understanding of our neighbors to the South on the part of our teachers, librarians, and children. An accompanying manual offered suggestions to teachers regarding the effective use of exhibits.

Inter-American Demonstration Center Project

This project, which operated from January to June 1942 and again from January to June 1943, in the American School Systems Division emphasized the development of a better understanding of the other American republics in elementary and secondary schools and teacher-training institutions. The first year was devoted to organization of

the 30 centers; the second year represented an extension of activities to include more significant content at all school levels, increased community interest, and emphasis through activities of State departments of education and teacher-training institutions. In many instances centers stimulated the interest of other schools in the sections of the country where they were located.

High-School Victory Corps

How Developed

In the spring of 1942, when it became apparent that Congress would probably lower the draft to include young men 18 years of age, educators throughout the United States realized that the high schools must reconsider their programs for training youth. Boys who normally would go to college or enter a wide variety of occupations would soon be destined for one common immediate future—military service. Girls could be expected to go into war industries and other fields far removed from their normal destinies. This question of what the high schools should do in the way of adapting curricular and extracurricular activities to wartime necessities was placed before the U. S. Office of Education Wartime Commission, composed of educational leaders broadly representative of all fields of American education.

After studying the problem and conferring with officials in charge of Federal War Agency programs, the wartime commission announced that "opportunities should be provided through the schools for all in-school young people to participate in organized war effort." Applying this policy to the high schools in particular, the commission recommended "the establishment in each secondary school of a school-wide organization consisting of all pupils who are engaged in war services or are preparing for participation in the war effort. Membership in this organization would be open to all members of the school engaged in war services, such as civilian defense activities, war savings programs, salvage campaigns, food production and conservation movements, and to all enrolled in courses preparatory to service in war production and in the armed forces. Special emphasis should be given at this time to those organizations designed to provide preparation for the air forces and the related supporting services."

The commission also recommended that "to promote and meet the immediate needs of the armed forces, a policy committee to advise the Commissioner of Education be established, with membership to include representatives of the Army, Navy, Civil Aeronautics Administration, and the Wartime Commission."

In pursuance of this latter recommendation, the Federal Security Administrator invited certain Federal agencies and national education associations to appoint representatives to a committee. The policy committee which was thus formed worked through the summer months in association with Office of Education staff members. On August 30, 1942, the product of their joint thinking was placed before the meeting of chief State school officers or their representatives held in the U. S. Office of Education. This session unanimously approved the committee's proposal for the Nation-wide adoption of the High-School Victory Corps program as a means of carrying out the earlier policy recommendations for "the establishment in each secondary school of a school-wide organization consisting of all pupils who are engaged in war services or are preparing for participation in the war effort."

On September 25, 1942, simultaneous announcements in the State capitals and in Washington over a Nation-wide radio program launched the High-School Victory Corps.

Objectives, Aims, and Organization

Two objectives were set forth for the High-School Victory Corps program: (1) The training of youth for the war service that will come after they leave school and (2) the active participation of youth in the community's war effort while they are yet in school.

It was expected that the first objective would receive most attention. More than anything else the Victory Corps program calls for emphasis on training. Community service is recognized to be important, but the dominant obligation of the high-school student obviously is to prepare himself for the war tasks he will be called upon to perform when he leaves high school.

In line with these objectives, the National Policy Committee for the High-School Victory Corps identified eight important wartime aims for the high school. They were: (1) Guidance into critical services and occupations; (2) wartime citizenship; (3) physical fitness; (4) military drill; (5) competence in science and mathematics; (6) preflight training in aeronautics; (7) preinduction training for the Armed Forces and preparatory training for critical occupations; (8) community service.

Realizing that local high-school peacetime organization would probably not be adequate to secure the conversions necessary to satisfy war needs, the policy committee recommended a general membership for which requirements were quite simple: Participation in physical fitness, appropriate school courses, and participation in community wartime service. In most High-School Victory Corps programs, general membership is open to all high-school students. For students within 2 years of graduation, or leaving school, the policy committee recom-

mended more specialized training. Such students obviously should identify as early as possible the particular phase of war work in which they believe they can make the largest possible contribution. Having done this, they should prepare themselves intensively for their future work in the armed forces or on the home front. To facilitate this process, formation of five divisions was recommended: A Land Service Division for boys going into the army ground forces; an Air Service Division for boys going into the Army or Navy air forces; a Sea Service Division for boys going into all naval services other than the air force; a Production Service Division for boys and girls who expect to enter war industries and vocational agriculture; and the Community Service Division for those students who expect to become doctors, teachers, nurses, or participants in other home-front occupations.

For students in each of these divisions, the *High-School Victory Corps Manual* made suggestions for courses to be followed. The most common recommendation for the three divisions concerned with the armed forces was increased attention to mathematics and science. Physical education and health education were, of course, urged for all students. These recommendations left a large measure of choice to the student to take basic and special courses peculiar to his needs.

The *Victory Corps Manual*, having recommended the general structure and purposes of the Victory Corps, immediately created a demand from school officials for more specific and practical suggestions for adaptation of programs to meet war needs. Staff members of the U. S. Office of Education were delegated to work with representatives of the armed services and other wartime agencies and also with educational leaders to develop additional manuals and materials to aid teachers of particular subjects. Following are some of the major statements and recommendations developed during the year. It should be pointed out that some of these statements were developed by the armed forces or other groups and issued in cooperation with the High-School Victory Corps Policy Committee and staff:

Guidance

The *Guidance Manual for the High-School Victory Corps* presents detailed recommendations for adaptation of high-school guidance programs to war needs. It is supplemented by the educational experience summary card developed jointly by the U. S. Office of Education and the War Department. This card was devised to provide a thoroughgoing record of the education and experience of students leaving high school. Some 3,000,000 copies were printed by the War Department and distributed by the Office of Education through the State departments of education to high schools throughout the Nation. Students are expected to bring educational experi-

ence summary cards to Army reception centers and U. S. Employment Service offices. A regular service of suggestions for guidance officers is available in the High-School Victory Corps section of *Education for Victory.*

Physical Fitness

The rigors of military life required both intensification and revision of physical training and health education programs in the high schools. To give direction to these changes, two committees, each composed of appropriate representatives of Federal agencies and education and medical experts, were brought together by the U. S. Office of Education. The products of these committees were two pamphlets: *Physical Fitness Through Physical Education for the Victory Corps* and *Physical Fitness Through Health Education for the Victory Corps.*

Science and Mathematics

Because modern war rests on technology, both the Army and Navy ask increased attention to science and mathematics. To aid school administrators and teachers, a brief statement developed by mathematics and science teachers in cooperation with military authorities was printed in *Education for Victory.*

Preflight Training in Aeronautics

With Army and Navy air forces scheduled to take approximately 40 percent of the boys leaving high school, the importance of special attention to aviation became obvious. Working with the Army and Navy, the Office of Education issued two charts—*26 Job Opportunities in the U. S. Army Air Forces* and *Jobs in Naval Aviation.* Other publications containing recommendations in this field were given wide distribution in the schools. These publications were developed in cooperation with the Civil Aeronautics Administration as well as with the military air services.

Wartime Citizenship

Early in the year a statement on the cooperation of social studies teachers with the Victory Corps was printed in *Education for Victory.* A more extensive document prepared by the National Council of Social Studies was sent to all State Victory Corps directors.

Preinduction Training for Critical Occupations

Recognizing the importance of preinduction training, the War Department organized the Civilian Preinduction Training Branch which has cooperated closely with the High-School Victory Corps. This unit developed in cooperation with the U. S. Office of Education a number of suggested course outlines. These were distributed by the Office of Education to all the high schools in the country.

Community Service

Working with the Office of Civilian Defense and other organizations, the Office of Education prepared and issued *Community War Services and the Victory Corps.* This pamphlet not only suggested policies for full participation of the high school in community war services, such as war bond drives, hospital work, air-raid defense services and similar activities, but it also gave numerous examples of specific activities engaged in by high schools throughout the Nation. In addition, the Office through *Child-Care Training Through the Victory Corps* suggested means by which high-school students could help in war industry centers.

Agricultural Training

As the draft drained workers from the farms, and industry called them to the factories, a crisis developed in agricultural labor. Foreseeing this, the U. S. Office of Education, in cooperation with the Department of Agriculture and the Children's Bureau, developed a recommended program for the Victory Farm Volunteers. Published in *Education for Victory*, this program suggested that training for farm work and farm employment during the summer months were proper objectives of the High-School Victory Corps.

Communication Arts

Representatives of teachers of music, drama, and other school services communicated with the Office of Education urging that specific suggestions for their cooperation in the Victory Corps program be issued. As a result of these requests, 11 national educational organizations concerned with the communication arts at the secondary school level were invited to name representatives to a committee charged with developing a manual of recommendations. Fields represented on this committee were: English, speech, dramatics, journalism, art, graphic arts, music, libraries, visual education, foreign languages, and radio. After conferring with representatives of various Federal war agencies, the committee prepared the manuscript for *The Communication Arts and the High-School Victory Corps.*

Correspondence Courses

Many of the preinduction courses recommended are obviously beyond the resources of the thousands of small high schools in the rural sections of the United States. In such schools, students can take these courses only through correspondence. For this reason the Office of Education developed a publication suggesting sources of courses and means of conducting instruction by correspondence. Issued originally in *Education for Victory*, this pamphlet has been reprinted for general distribution to all high schools.

Special Section

To provide other and briefer materials needed by school executives, the Office of Education has published each 2 weeks a special High-School Victory Corps section in *Education for Victory*. This official periodical is distributed to all high-school principals, superintendents, and other school officers. This Victory Corps department has not only been a means of exchanging ideas of promising high-school programs throughout the country, but has also presented important material supplied by various Federal war agencies in need of cooperation from our secondary schools.

State Department of Education Cooperation

At the suggestion of the U. S. Commissioner of Education, State departments of education throughout the United States named Victory Corps directors for the respective States. These appointees gave leadership to State programs for conversion of secondary school programs in line with recommended national policies. High-school wartime problems were considered at hundreds of meetings called by State superintendents and Victory Corps directors. Special documents particularizing the recommendations were developed in numerous States. To assist the State Victory Corps directors, the U. S. Office of Education prepared and periodically distributed a Victory Corps news letter reporting current Federal war cooperation needs and developments in the High-School Victory Corps program in general.

Results of the High-School Victory Corps Program

Because total war requires total cooperation of society, the high school obviously cannot be exempt. On the other hand, the U. S. Government cannot issue war orders to high schools under the control of local and State authorities. Therefore, in education, as in many other phases of our national life, the Federal Government, charged with prosecuting a war, must mobilize national power by requesting cooperation. The High-School Victory Corps in 9 months became an effective chain of cooperation assuring the Federal Government of intelligent help from 6,500,000 high-school students and 330,000 teachers in all phases of the war effort.

No comprehensive studies have been made by the U. S. Office of Education to determine the extent of secondary school cooperation through the High-School Victory Corps program. However, it is estimated that by July 1943, more than 70 percent of high schools of the country voluntarily adopted this program for comprehensive mobilization of their resources for the war.

Adult and Civic Education

Early in the biennium the Office of Education developed an organization plan for mobilizing the resources and facilities of schools,

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colleges, and libraries for service to youth in school and to the public generally, designed to promote understanding of the problems of the war and the peace.

Two committees were set up to give general guidance to its development. These were a National Advisory Committee, consisting of representatives of public and private colleges, school systems, national professional organizations, and students; and a U. S. Office of Education Policy Committee.

Acting on the advice of these committees, a publication was prepared entitled *School and College Civilian Morale Service—How to Participate* outlining in detail what were the needs to be served and the activities which schools, State departments of education, public libraries, and colleges and universities could undertake to meet these needs. Fifty thousand copies of this pamphlet were distributed to 1,800 colleges and universities, 12,000 public libraries, 26,000 high-school principals, 10,000 school administrators, all adult educational councils, all State departments of education, and hundreds of civic organizations.

With a staff which never included more than three people at a time, the following services were undertaken:

1. State departments of education were asked to assign a member of their staffs to the job of promoting discussion programs among schools and through adult education facilities. This was done in 44 States and 5 Territories.

2. A detailed memorandum was sent to all school superintendents suggesting ways of organizing, conducting, and facilitating "freedom forums" for the discussion of war problems by youth and adults. In many communities, according to correspondence, this was done. In some cases every high school was organized to sponsor weekly discussion programs for adults.

3. A number of carefully selected large colleges and universities were asked to serve as "key centers of information and training," and 144 accepted this designation.

The key centers were asked to be responsible for the development of various information services and for the mobilization of volunteer efforts of students and faculty members in this program.

In the absence of field workers, and even of facilities for adequate correspondence, it is not known precisely to what extent the key centers developed their programs. However, on the basis of 75 replies to a questionnaire, in 1942, all were operating war information centers; 53 had developed faculty-student committees to provide volunteer counseling service; 21 had organized mobile displays of war information materials at conferences or institutes; 34 had produced or assisted producers of radio programs; 59 had had occasion to answer

written requests for information; 57 had listed members of their faculty and 36 had listed members of the student body as speakers or leaders of discussion available to outside organizations; 21 had held one or more leadership training institutes; 34 had lent packets of material on special problems to discussion leaders and speakers; 18 had prepared discussion outlines; 34 had distributed bibliographies; 38 had developed an advisory service for local librarians, teachers, etc.; 40 had organized and conducted round tables, forums, discussion groups, or lecture courses open to the public on one or more important problems involving some aspect of the war; 33 had established curriculum committees whose function it is to suggest ways and means of relating the study and discussion of problems arising from the war to formal classes and extracurricular groups in the college.

4. To provide Government materials for the war information centers at the key centers, the Office of Education made arrangements with several agencies to send publications regularly (notably the Office of Government Reports, later the Office of War Information) and has itself sent packets about once a month of its own publications and miscellaneous documents which it has been able to solicit free for the purpose.

In addition, it arranged with approximately 50 private publishers of pamphlet materials—research organizations, university presses, and organizations such as the Foreign Policy Association, the Institute of Pacific Affairs, the Commission to Study the Organization of Peace, etc.—to send exhibit copies of all materials relating to "problems of winning the war and the peace."

5. Two issues of a printed bulletin were circulated to all schools, colleges, and libraries—total circulation, 50,000 copies of each. Each issue of *Education for Victory*, official journal of the U. S. Office of Education, contained a section devoted to reports and news items in connection with this program.

6. A pamphlet entitled *What the War Means to Us* (a teaching guide) was published in cooperation with nine publishers of classroom periodicals. This discussion pamphlet was sent to all superintendents of schools, high-school principals, teachers of social studies, libraries, and centers of information in the colleges. It provided the basis for thousands of special discussion series conducted largely under public-school auspices for students and adults. The pamphlet was followed up by a series of articles and supplementary materials published in each of the school periodicals.

The Congress did not provide funds for the foregoing Adult and Civic Education Services in the U. S. Office of Education beyond June 30, 1943.

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Higher Education

THE PURPOSES AND PROGRAMS of the Division of Higher Education during the biennium were directed for the most part toward meeting problems and performing tasks associated with the war effort of the Federal Government and of the institutions of higher education. In the performance of these tasks, divisional staff members assisted in broadening public understanding and appreciation of Federal wartime laws and regulations affecting education; informed the colleges and schools concerning adjustments needed to meet wartime demands; brought together and disseminated the results of the experiences of the institutions in meeting wartime problems; participated in conferences, consultations, and proceedings of Federal agencies engaged in vital aspects of the war effort; informed Federal agencies concerning the facilities for service and the operating needs of the institutions; and performed related services. At the same time the Division, although operating with a severely limited staff, continued to perform at least the more essential functions that constitute its legal and traditional obligations both in times of war and peace.

Adjustment of College Curricula and Courses To Meet Wartime Needs

As one way of assisting the institutions of higher education to render an effective and vital wartime service, the Office of Education Wartime Commission appointed a committee in 1942 to take charge of the preparation of a series of reports on the adjustment of the content of the college curriculum to wartime conditions and needs. The committee requested the national association of college teachers in each of the principal fields of study in the arts and sciences to appoint a subcommittee to prepare a report for that field. The associations responded generously. A total of 18 reports have been prepared, 15 of which have been distributed to the colleges and universities.

Soon after the Nation entered the war many colleges and universities began to supplement their programs of instruction with courses of obvious utility in preparation for direct wartime service for civilians. In order to give assistance to institutions desiring it, the division, after consultations with the leading Federal agencies concerned, prepared and distributed a statement indicating ways in which colleges might help to meet shortages of trained personnel.

The statement contained job descriptions for a number of occupations and suggested curricula for training.

In view of the needs of groups of citizens who desire to know more about countries, peoples, governments, and problems the world around, the Office prepared and distributed a statement indicating how institutions of higher education might make a contribution to wartime adult education. It contained descriptions of courses for adults offered by various institutions, most of them in the fields of geography, history, and government. Another statement which suggested numerous war-related subjects and topics of instruction needed by teachers was also prepared and sent to all summer session directors.

To meet the demand for preinduction training in colleges and universities, the division and the War Department cooperated in the preparation of outlines of content for instruction based upon Army needs. An extension outline was completed for physics and mailed to the institutions. This outline is being widely used. An outline has also been prepared for surveying.

Teacher Shortages and Other Teacher Personnel Problems

An outstanding educational problem of the biennium was the increasingly serious shortage of teachers. The division gave constant attention to this problem in research, conferences, consultations, correspondence, and field work. In cooperation with the Statistical Division, a brief Nation-wide study of pupil enrollments, teacher shortages, and related topics in which more than one-third of the country's city and county superintendents cooperated, revealed that 7,500 classrooms were closed in October 1942 and that the number was increasing rapidly. A study in which practically all of the chief State school officers cooperated was also initiated. Preliminary returns indicate that more than 38,000 war emergency teachers' permits or certificates were issued during 1942–43.

Newspapers and periodicals throughout the country assisted in making known the facts about the shortage and the means used to remedy it. Stirred to action by the growing seriousness of the situation, nearly half of the State legislatures passed laws during the year which increased the amounts of State funds granted for teachers' salaries. Compilations of lists of national, State, and other teacher-placement offices and related materials were distributed by the division to teachers who requested information about vacancies.

As teacher shortages increase, despite every effort, it has become clear that the institutions which prepare teachers are failing, with existing sources of support, to maintain their regular services in the face of the powerful adverse forces released by the war effort. Selective Service, employment in war industry, and similar causes resulted

in 2 years in the loss of one-third of the prospective teachers enrolled in the colleges. The new emergency teachers pressed into service are so numerous, so poorly prepared, and so widely dispersed that the teacher-education institutions face an almost hopeless task in bringing their qualifications up to reasonable standards. Accordingly, the division, in cooperation with various consultants from national educational organizations, prepared proposals that were approved by the Office of Education and the War Manpower Commission, and transmitted them to the Bureau of the Budget for consideration. In brief, these proposals provide for the payment to colleges and universities of $3,700,000 for the cost of short courses of college grade, including part-time (mostly evening) refresher courses to be taught by class instruction and correspondence and summer session courses. These proposals were under consideration by the Bureau of the Budget at the end of 1943, in conjunction with the proposals for Federal aid to college students elsewhere mentioned; and were later approved by the Bureau and transmitted to Congress.

Staff Personnel Problems; Losses of Students

An investigation, in which 62 percent of the institutions of higher education participated, showed a 7 percent decrease in 1 year in the number of staff members. It also revealed shortages of college teachers in several war-related fields, such as medicine, engineering, chemistry, physics, mathematics, and physical education. Small surpluses of teachers in a few fields, such as English, history, and modern languages were also discovered. Methods for the redistribution of college teachers were proposed, such as staff retraining, transfer, and, in extreme cases, Selective Service deferment.

A 21 percent decrease in student enrollments during the biennium was revealed, with strong indications that the decrease would continue. Losses of students in many institutions not having contracts for the training of men for the Armed Forces, especially losses in small liberal arts colleges which depend heavily upon student fees for their support, are so severe that permanent damage to the institutions is threatened. The closing or merging during 1943 of 39 small institutions, chiefly junior colleges, indicates what could happen to larger and stronger institutions during a long war. Conferences of representatives of college organizations and of individual colleges were therefore called by the division, and recommendations were made for the alleviation of the growing difficulties caused by losses of students. Special investigations of this problem also were made or sponsored by the division, and the recommendations made the basis of proposals for Federal aid for training students in fields important in the war effort and in the supporting civilian economy.

U. S. Office of Education Wartime Commission

The U. S. Office of Education Wartime Commission, established in December 1941, continued its meetings until the fall of 1942. The membership of the Commission consisted of 58 persons, 9 of whom were members of the staff of the Office of Education. The others represented many of the principal educational interests of the country, both public and private, and included many well-known educational leaders. The Commissioner of Education was chairman of the commission.

The organization of the commission included two major divisional committees—on higher education and State and local school administration, respectively. Thirty or more subcommittees made most of the investigations and prepared the preliminary reports.

A primary purpose of the commission was to facilitate the wartime contacts of Government agencies with schools and colleges and to make such contacts more effective. The commission forwarded the adjustment of educational institutions to war needs; informed governmental agencies concerning the services the schools could best render; and reported the possible effects upon the schools and colleges of proposed policies and programs of the Federal agencies.

Numerous reports were released by the commission, some of which were of considerable influence in determining the direction of early wartime actions and policies of governmental and of educational agencies. The commission worked with especial vigor for accelerated programs of training, adaptations in the curricula and courses of the schools and colleges, performance of new war duties by the schools, and extension of Federal action to enlarge certain educational services needed in the war effort.

The investigations initiated by the commission were conducted for the most part by staff members regularly employed by other organizations. Some of these investigations have been continued by such organizations. A number of the members of the commission have continued to assist the Office of Education and other Federal agencies throughout the year as individuals, or in small groups called together for consultation and work on special problems.

Student War Loans Program

In July 1942 the U. S. Office of Education began the administration of a 5 million dollar appropriation for loans to students in certain professional and technical fields considered essential to the war effort.

Congress had appropriated these funds to meet a special situation occasioned by the adoption of accelerated programs in higher educational institutions. These programs, which require students to attend summer sessions, place a heavy financial burden upon the average

student, since he is not only obliged to meet additional charges for tuition and maintenance but is simultaneously being deprived of his customary summer earnings. It is obvious that the primary purpose of accelerating professional preparation would have been jeopardized if a considerable number of students had been compelled to leave college because of economic reasons.

The specific professional and technical fields in which the loans were made available are those where a critical shortage of trained manpower was foreseen—engineering, physics, chemistry, medicine (including veterinary), dentistry, and pharmacy. The law requires that the prospective borrower must be enrolled in an accelerated program of a degree-granting institution, must be within 24 months of securing his professional degree, and must be in need of financial assistance. As a further condition of receiving the loan, the student must agree to remain in the accelerated program and to accept upon graduation—subject to his obligations to the armed forces—such assignment to employment or service as may be made by agencies designated by the chairman of the War Manpower Commission.

A student war loan may be used to pay tuition and fees, and to meet the costs of maintenance up to $25 a month, with the further provision that not more than $500 may be borrowed in any 12-month period. Simple interest is charged at the rate of 2½ percent a year, and the loan is to be repaid in 4 annual instalments beginning 1 year after the borrower leaves the institution.

If the student has his academic program interrupted by his induction under the Selective Service Act, or in the event of permanent disability or death, the loan is cancelled. In case the borrower enters the armed forces voluntarily, he is entitled to have the repayment of principal and interest deferred until after his discharge from service.

The procedure for approving student applications and making the individual loans has been largely delegated to the participating colleges and universities, each of which has been allotted funds in accordance with its formal request submitted to the Office of Education.

The head of each participating institution has appointed an institutional representative who is responsible for the detailed administration of the program on his campus. Considerable discretion has been left to these local representatives in order that regional and institutional differences may be adequately respected.

During the fiscal year ending June 30, 1943, 348 colleges and universities were authorized to grant loans under the student war loans program. The following table indicates the number of students who received loans in each of the fields, the number of institutions making the loans in those fields, and the total amounts advanced.

Table 7.—*Number of student borrowers, of institutions making loans, and amount advanced, by accelerated field*

Accelerated field	Number of student borrowers	Number of institutions making loans	Amount advanced
Physics	264	107	$57,728.86
Engineering	4,066	123	934,248.61
Chemistry	835	177	202,894.74
Medicine	3,867	69	1,163,754.03
Veterinary	394	12	107,022.29
Dentistry	1,217	33	362,955.51
Pharmacy	438	48	112,697.60
Total	11,081	569	2,941,301.64

Of the total amount, the sum of $2,046,901.19 (69.6 percent) was advanced to pay tuition and fees, and the balance of $894,400.45 (30.4 percent) to assist students in defraying the cost of maintenance.

Table 8 shows the average size of the loans made in each accelerated field and the average for all fields covered by the program.

Table 8.—*Average loan, by accelerated field*

Accelerated field	*Average loan*
Physics	$218.67
Engineering	299.77
Chemistry	242.99
Medicine	300.94
Veterinary Medicine	271.63
Dentistry	257.24
Pharmacy	257.19
Average for all fields	265.44

Although the field of engineering has the greatest number of borrowers, it will be noted that the largest amount of money advanced and the largest per capita loans are in the field of medicine. This is attributable not only to the greater cost of medical tuition but to the fact that usually less profitable opportunities for part-time employment are available to medical students, and to the further fact that the protracted period of graduate study necessary in this field has exhausted every alternative resource of many of these students. The great majority of the 3,818 medical borrowers would have been wholly unable to continue accelerated study in 1943 without the assistance of the student war loans.

Of the 11,081 students to whom loans were granted during the year, 3,414 have been separated from the institution in which they were studying. Table 9 shows the distribution of these separations, as of June 30, 1943.

Table 9.—*Separations from institutions, by cause*

Inducted by selective service before graduation	60
Entered service voluntarily before graduation	1,636
Graduated and in military service	529
Graduated and placed in essential employment	1,027
Graduated but not yet placed	84
Authorized withdrawal for illness, etc	57
Withdrawal outside terms of agreement (scholastic failure, etc.)	19
Died	2
Total	3,414

Since the law provides for cancellation of the loan of a borrower who is inducted under selective service before the completion of his curriculum, it is interesting to note that only 60 students were thus inducted before the end of the fiscal year. On the other hand, a large number of borrowers resigned from various reserve units in order to enter upon active duty in the newly oganized Army specialized training program or the Navy V–12 program, and those students account for the size of the second category listed in table 9.

Because of rapidly changing wartime conditions which were affecting higher educational institutions at the end of the year, the Congress felt justified in providing for only a limited continuation of the student war loans program during the fiscal year 1944. The unexpended 1943 balance of slightly more than 2 million dollars was reappropriated, with the provision that the loans should be available only to those students who received loans during the fiscal year 1943.

Interpretation of Federal Wartime Programs Affecting Higher Education

As the chief educational agency of the Federal Government, the Office of Education is called upon to interpret and explain many Federal wartime policies and regulations that affect higher institutions, teachers, and educational agencies generally. It is also called upon to transmit to the proper Federal agencies any helpful reactions from educational organizations and leaders. The Division of Higher Education had a full share in such activities because of the great importance of the colleges and universities in the training of manpower for the Armed Forces, for war production, and for essential civilian activities. Thus the changing regulations governing selective service as applied to public-school teachers, college staff members, and students; job stabilization and wage stabilization as applied to teachers; changes in curricula and courses; Federal agencies and teacher placement; and similar matters were subjects of constant attention. Office correspondence and conferences with field workers in education, with governmental officers, and with others increased greatly during the biennium, largely because of the special demands

of the war. Conferences were held with representatives of one or more units of most of the departments and agencies of the Government on various educational problems and with officers of various national educational and lay organizations as well.

Effects of Government Financing Upon Colleges and Universities

The effects of Government financing upon institutions of higher education were studied by a member of the staff especially appointed for the purpose. Forty-three colleges and universities were visited, and the representatives of important organizations interviewed. Because of limitations of time and funds, no comprehensive study was attempted, but considerable information was collected upon (1) the situations, favorable or unfavorable, that have arisen because of Federal aid; (2) the solutions to problems arising from such aid or lack of it that have been attempted, realized, or envisioned as possibilities; and (3) the effect on other programs which might, either directly or indirectly, involve Federal aid. Valuable reactions were received from scores of college officers which were summarized and are kept on record at the Office of Education.

Information on Accreditation of Institutions of Higher Education

To serve as a guide to the Army and the Navy especially in their selection of colleges and universities for participation in the Army specialized training program and the Navy college training program, the Division of Higher Education, early in 1943, issued a circular listing all institutions of higher education accredited by any recognized accrediting agency. This is a continuation of the service the division has rendered the armed forces since the beginning of the emergency in 1941. The revised accredited lists, together with the data published in the annual Educational Directory, keep the Army and the Navy, as well as other departments of the Government which have need for such information, currently advised of the status of accreditation of higher educational institutions. Recently a new need for this type of service has arisen—that of the Veterans' Administration in putting into operation its educational rehabilitation program for war veterans.

Contributions to Education for Victory

The division has made regular contributions to the biweekly magazine *Education for Victory*, the channel through which the Office makes known the educational activities of the Government and of the schools and colleges in the war effort. During the biennium, particular endeavor has been made to publish current information on all of the Army and Navy programs that call for cooperation with, or use of, the institutions of higher education by the armed

forces. The activities of other departments of the Government concerned with higher education, most of the reports of the wartime commission, and the wartime activities of colleges and universities were likewise given place in the publication.

National Survey of the Higher Education of Negroes

The investigational aspects of this survey, which was authorized by Congress in 1939, were completed during 1942. However, during 1943, volumes II and III were published, and volume IV was completed and sent to press. Volume IV synthesizes the different studies of the survey and summarizes its major conclusions and recommendations. The final completion of this survey, for which $40,000 was appropriated by Congress, marks the close of one of the most extensive and thorough studies ever made of the higher education of Negroes.

Land-Grant Colleges and Universities

The usual reports were secured from the land-grant colleges and universities and the annual reports on these institutions prepared. During the fiscal year 1942 the 69 institutions employed on their staffs, 35,012 persons (full-time equivalent), enrolled a total of 254,608 students, and expended the sum of $172,049,710. In accordance with the second Morrill Act and supplementary legislation these institutions received appropriations from the Government for instruction amounting to $5,030,000 during each year.

Efforts to Develop a Comprehensive College Training Program

In June 1942, the Bureau of the Budget, reporting on an Office of Education budget request for funds for a college training program, indicated its belief that there should be developed a comprehensive program for utilizing colleges and universities by the War and Navy Departments and the War Manpower Commission. The report requested the Federal Security Administrator in his capacity as chairman of the War Manpower Commission to have such a proposal prepared.

The chairman of the War Manpower Commission transmitted the request from the Bureau of the Budget to the U. S. Commissioner of Education with the request that the Commissioner prepare such a proposal for the consideration of the Administrator of the Federal Security Agency and the chairman of the War Manpower Commission. The Commissioner in turn requested the Chief of the Division of Higher Education to take steps immediately to work out the proposal.

After numerous conferences with, and weeks of labor by leading college educators, the proposal was prepared and was submitted to the War Manpower Commission on July 10, 1942. The proposal

provided for a plan to set up a comprehensive program of utilizing colleges and universities involving training for Army and Navy and civilian purposes. The proposal was referred to a special committee of the War Manpower Commission. Based upon the work of that committee, the Division of Professional and Technical Employment and Training of the War Manpower Commission undertook to work with the War and Navy Departments in the development of separate plans for an Army program and a Navy program in the colleges. These plans and programs were announced on December 15, 1942. In the meantime, early in November 1942 the Chief of the Division of Higher Education in the Office of Education had been invited to serve as part-time Assistant Chief of the Professional and Technical Employment and Training Division of the War Manpower Commission. When it became apparent that the Army and Navy programs would be carried out independently of any civilian program in the colleges, the need for a new and separate proposal for a civilian college training program became evident. This was prepared by the Bureau of Training of the War Manpower Commission from proposals submitted by the Professional and Technical Employment and Training Division and by the NYA. This was presented in June 1943 to the executive director of the War Manpower Commission and by him transmitted to the Bureau of the Budget. That proposal did not receive favorable consideration and was therefore dropped.

· IV ·

Vocational Education

ENROLLMENT IN ALL TYPES of vocational schools and classes continued a steady increase during the biennium from 2,290,741 in 1940 to 2,434,641 in 1941 and 2,629,737 in 1942, the last period for which statistics are available. The total enrollment for 1942 included 610,050 persons in vocational agriculture courses, 850,597 in trade and industrial courses, 954,041 in home economics courses, and 215,049 in distributive education courses. These enrollment figures do not include persons enrolled in the Federal program for training war production workers described in section I of this report, but refer entirely to the federally aided program of vocational education carried on by the States under the Smith-Hughes and George-Deen Acts administered through the Office of Education.

Agricultural Education Service

The fiscal year 1943 is almost certain to show a substantial decrease in the agricultural education programs in the States as a result of the war. Despite the fact that teachers of vocational agriculture have been generally classified as essential to the war effort, the records show large numbers of voluntary enlistments, inductions, and transfers to other agencies that are able to pay larger salaries. It is estimated that the 9,079 departments of vocational agriculture in rural high schools which were in operation at the end of June 1942 will have decreased to about 8,000 for the fiscal year 1943. Moreover, many States have been forced to lower standards for certifying teachers in order to fill vacancies and to keep departments in operation.

Contributions to the War Effort

In addition to the regular activities prescribed by law, the service has made many direct and practical contributions to the war effort. Teachers of vocational agriculture throughout the country have been stimulated to greater efforts by staff members of the service through correspondence, conferences, and personal field contacts to give greater emphasis to the planning, production, harvesting, processing, distributing, and storing of those farm commodities, particularly fruits, vegetables, and animal and poultry products, so vitally needed by ourselves, our armed forces, and our Allies in the present war. Prac-

tically every department of vocational agriculture throughout the Nation has a well-equipped farm shop. Many thousands of discarded farm implements and machines have been completely overhauled in these farm shops by enrollees in all-day, part-time, and evening classes. This service has been especially significant since practically no new farm machinery has been available for purchase, only a small amount of spare parts could be secured, and yet greater production of farm commodities has been demanded of farmers than ever before in our history. Moreover, the supply of farm labor has been drastically reduced—all of which meant that the only possible way to secure increased production of vital farm commodities is through increased mechanization at a time when such increased mechanization could only be secured through the repair of old or even discarded farm machinery.

Another direct contribution to the war effort has resulted from the activities of staff members working in cooperation with the several States in helping to solve the farm labor problem. Many thousands of in-school urban youth have been selected, trained, placed, and provided with some follow-up supervision while working on farms during the harvest season. In thousands of communities local teachers of vocational agriculture have provided preliminary training for urban youth and adults before they were placed on farm jobs in order to acquaint these prospective farm workers with the kinds of work which they would be expected to perform, living conditions, hours of work, and remuneration they might reasonably expect. Hundreds of schools made special adjustments in their daily schedules and program in order to enable their students to secure special training that they might cooperate later on in the war effort by working on farms during the summer months. In addition, teachers of vocational agriculture, through their State supervisors and under the general direction and leadership of the Agricultural Education Service, conducted hundreds of short-unit, intensive training programs for adult farmers who expected to employ inexperienced farm labor during the summer months. The purpose of these instructional programs was to prepare better these prospective employers of inexperienced labor in methods of training such laborers most effectively on the job.

Supervised Farming Activities

One of the provisions of the Smith-Hughes Act with respect to the use of Federal funds as reimbursements on the salaries of qualified teachers of vocational agriculture is that each person enrolled for such instruction shall be required to carry out a program of "supervised or directed practice in agriculture on the home farm or on a farm provided by the school for a period of at least 6 months."

During the present emergency the inroads of industry and the armed services have so reduced the available skilled manpower in agricultural production that the required program of supervised farming afforded an increased opportunity for planning, organizing, and conducting farm activities so as to make the greatest contribution to the production goals set forth by the U. S. Department of Agriculture. All-day students of vocational agriculture under the leadership of their teachers have increased materially the size of their crop and livestock enterprises.

Teachers of vocational agriculture also have rendered invaluable service as supervisors of school and victory gardens in small towns and suburban communities. The amount of vegetables produced from such gardens will probably never be known exactly but the total will undoubtedly go a great way toward relieving additional quantities of fruits and vegetables needed to be grown by commercial producers for distribution through commercial channels to our Allies, the armed services, and city persons unable to secure such food products through any other than commercial sources.

Student Organizations

Future Farmers of America.—In common with the decrease in the number of departments of vocational agriculture which resulted from a scarcity of qualified teachers, it was only natural to anticipate a considerable decline in the active membership of this national organization of farm boys from the 245,000 boys in 7,500 local chapters reported in 1942.

Ever since the United States entered the war, Future Farmers of America enrolled in departments of vocational agriculture have redoubled their efforts in helping, through their organization, to win the war. They have collected millions of pounds of scrap metal (steel and brass), paper, rubber, and rags. Over $4,000,000 worth of war bonds and stamps have been purchased in the names of State associations of the F. F. A., local chapters, and individual members. More than 107,000 former active members of the organization are now in the armed services.

New Farmers of America.—The New Farmers of America is the national organization of Negro farm boys studying vocational agriculture in the public schools. This organization is found in all States where separate schools are maintained for separate population groups, and is administered on a national basis by this service. The membership is not as large as that of the Future Farmers of America and its financial resources are considerably less than is true of the Future Farmer members. Nevertheless, in proportion to opportunities and facilities, no group of farm boys in America have worked harder, more enthusiastically, or more patriotically in every possible

way to cooperate in helping to win the war through various farming activities.

Teacher Training

During the biennium, the service has kept current figures on the teacher-supply situation which have proved invaluable. Both the Selective Service System and the National Roster of Scientific and Specialized Personnel have complimented the service on the completeness, accuracy, and currency of these statistics.

The national program of vocational education in agriculture lost 1,862 teachers during 1941–42, and the loss in 1942–43 was in excess of 2,300. Replacements from undergraduate teacher-training programs have been virtually eliminated because of the decline in enrollments in colleges of agriculture. This fact, together with the heavy loss of employed teachers, has brought about significant changes in teacher-training programs throughout the country. Many emergency teachers have been employed and attempts have been made to provide them with some professional training on the job on an itinerant basis through the activities of resident teacher-training departments.

Research in Vocational Agriculture

Because of the changing needs, the service has cooperated with the Department of Agriculture, the Children's Bureau, and the several State departments of agricultural education in developing training programs for in-school urban youth designed to prepare them as farm laborers during the summer months. However, it has been able to continue keeping up to date the usual statistical studies and analyses of State programs of vocational education in agriculture, and has issued a series of statistical releases based on these studies.

Business Education Service

The principal activities of the Business Education Service during the biennium were: (1) Assistance to the States in the promotion and development of the federally aided program of distributive education provided for in the George-Deen Act; (2) assistance in the administration of programs of training designed to help retail businesses meet problems and conditions with which they are confronted as a result of the wartime emergency; and (3) assistance in developing clerical-training programs to meet wartime needs.

Special Wartime Training in Distributive Education

To help retail business executives and managers to meet the shortage of trained and experienced store workers which became widespread and acute in 1942 and 1943, the service gave special attention during

the year to assisting the States in organizing preemployment replacement-training programs.

A conference of representative retailers, trade-association executives, State supervisors of distributive education, and staff members of such Government agencies as the War Production Board, the Office of Price Administration, and the Department of Commerce had recommended the following four wartime training programs to meet specific emergency training needs of those engaged in retail businesses, which the service has assisted the States in organizing.

Program A. Wartime Emergency Replacement Training for New Store Workers

The aim of this program was to provide at least partially trained workers for replacement of the large number of experienced workers who have entered military service or who have taken jobs in war production industries. Older women and others not suited for work in war industries were trained as replacements. This program was in operation in approximately 40 States and enrolled approximately 50,000.

Program B. Wartime Training for Experienced Salespersons.

Under this program salespersons are taught how to help the customer select merchandise and to adapt his buying habits to wartime conditions, and how to explain to the customer the reasons for shortages, substitutes and alternates, priorities, rationing, restricted credit terms, special taxes, and price control. By the end of the fiscal year, this program was in operation in 44 States and approximately 60,000 experienced salespersons were receiving training in wartime merchandising.

Program C. Wartime Clinics for Owners and Managers of Distributive Businesses

Information was given through conferences, panels, and group discussions on laws, regulations, orders, controls, and other changes to which retail businesses are adjusting themselves during the present emergency. By the end of the fiscal year these wartime business clinics for owners and managers of retail stores had served approximately 125,000 retailers.

Program D. Wartime Training for Store Supervisors and Department Heads

This program consisted of intensive induction and on-the-job training of the large number of persons who were entering retailing as replacements, and the retraining of experienced salespersons to serve in a wartime period. Program D has been widely publicized through trade journals and has been favorably received by leaders in the distributive trades. In a majority of the States numerous store supervisors who have taken this course are now using their new teaching skill in training new employees and in helping experienced workers.

Growth and Tendencies of Training in Distributive Occupations

Distributive education administered under the George-Deen Act continued to make consistent and substantial progress during 1942–43, as is indicated by: (1) Increased enrollment in classes in distributive occupations, and in expenditures of local, State, and Federal funds for such training; (2) employment by additional States of full-time, qualified State supervisors of distributive education; (3) use of an increasing number of full-time itinerant teachers to reach smaller communities and to serve workers employed in smaller distributive businesses; and (4) by numerous specific benefits to owners, managers, and workers in retail, wholesale, and service businesses.

During the year distributive education programs were in operation in 46 States, the District of Columbia, and Puerto Rico. No programs were reported in Nevada, New Hampshire, Hawaii, and Alaska. War conditions delayed the establishment of distributive education in Hawaii, but a supervisor of distributive education has now been employed, and a program will be organized there during the year 1943–44.

Forty-one States now employ full-time, qualified supervisors of distributive education—an increase of 4 over the previous year, and in 36 of these States the supervisors of distributive education are coordinate with the supervisors of other vocational education services. Six States now employ State supervisors who provide leadership and guidance in the clerical and office-training phases of business education.

There has been a marked tendency since the United States entered the war to modify and reorganize course instructional content to include subject matter bearing directly upon retailing problems and needs resulting from wartime conditions.

Another trend is toward extending retail training to a greater number of small cities and towns. At the same time, larger cities have initiated part-time programs for employees on company time, as well as cooperative part-time classes on a school-and-employment schedule.

Principal difficulties encountered during the biennium have been the inability to obtain sufficient numbers of qualified personnel to direct new programs and the difficulty of retaining those already employed in teaching and supervisory positions.

The Business Education Service has worked with many national trade associations in developing instructional materials; in several instances subject-matter committees, composed jointly of representatives of an association and representatives of State divisions of vocational education, have been appointed by the service to advise in

formulating specific training programs and in preparing related instructional materials.

Teacher Training in Distributive Education

Special emphasis was placed on the maintaining of adequate programs of teacher training. Colleges and universities were assisted in organizing professional education courses and such technical courses as marketing, advertising, credits and collections, retail accounting, and store organization and management. Other kinds of teacher training are being carried on largely through in-service supervision, through itinerant programs, and through the medium of district and State-wide conferences. As a part of the in-service teacher-training programs the States are being encouraged to require their teacher-coordinators and local supervisors to work on an actual job at least every third summer so that they may have first-hand contact from time to time with practical business problems.

Studies in Distributive Education

With the assistance of education committees representing national trade associations, extensive studies of the merchandising of foods, drugs, shoes, and meats were made in preparing course outlines and instructional materials for a training program for owners, managers, and employees of retail drug, meat, food-serving, and shoe businesses.

Considerable study has been made of the effect of the war upon retail business and current instructional materials have been collected and prepared for use in special courses designed to meet major wartime problems of retailing.

Office-Training Phases of Business Education

Although the Office of Education has no appropriation of funds for the office-training phase of business education considerable professional service was rendered schools in adjusting their office-training programs to wartime needs, particularly in the experimental office-training programs in the public schools of Atlanta, Ga.; Boston, Mass.; Greensboro, N. C.; New York, N. Y.; and Washington, D. C., for the training of stenographers and typists for the War Department. More than 3,000 stenographers and typists employed by the War Department, were enrolled in intensive courses in typewriting, shorthand dictation, and military correspondence in evening-extension classes in the public schools of the District of Columbia.

To assist the armed forces in meeting their needs for stenographic and clerical help, preinduction training outlines in Army clerical procedure were made available for school use by the Office of Education in cooperation with the Adjutant General's School, Fort Washington, Md., and the Civilian Preinduction Training Branch of the

War Department. This preinduction course is based upon clerical procedures as followed in a headquarters office and is designed to train young men and women for service in clerical military jobs held by soldiers, members of the Women's Army Corps, and civilian employees at Army posts.

Home Economics Education Service

Continuing Work on Wartime Problems

Both regional agents and special agents have continued to assist teacher-training institutions, State supervisors, city supervisors, and teachers in adapting the homemaking curriculum to wartime needs. The emphasis on nutrition, consumer education, home care of the sick, training youth for wartime services, food conservation, and community organization has continued. There has been further work with Government agencies that have programs affecting family life or dealing with family welfare. In some cases the service has participated in joint publications with these agencies. The Home Economics Education Service in cooperation with other Office of Education staff members and the Nutrition Division of the Nutrition and Food Conservation Branch of the Food Distribution Administration has assisted in the preparation of the publications *Nutrition Education in the Elementary School*, *Handbook for Workers in School Lunch Programs*, and *Handbook for Food Demonstrations in Wartime.*

Field Service of Agents

Attention has also been given to studies and activities which have long-time values, and to strengthening home economics programs for post-war needs.

The Home Economics Education Service has given advice and leadership to colleges and universities that are making studies basic to curriculum adjustments. Conferences for home economics college administrators and staff members were held in three centers in different sections of the country. In these conferences, 90 representatives from 20 colleges discussed such questions as: Wartime adjustments needed in curricula, special short-term and refresher courses to prepare students for special war jobs, guidance problems brought on by the war, and planning to meet post-war needs.

The Service has given direct assistance in a number of States and localities on adjustment of school programs to meet the wartime needs of families and children. This has included work with State supervisors of home economics and local school personnel on problems of community organization for family life education and participation in National and State meetings concerned with problems of family living.

State visits of regional agents have included work with State supervisors of home economics, conferences with groups of teachers, and with teacher-training institutions on curriculum adjustment in colleges and in secondary schools to meet wartime needs.

Service at Headquarters

An agent of the Home Economics Education Service worked with the Red Cross in the revision of the Red Cross manual on home nursing for the Junior Red Cross course. Another agent assisted in the preparation of the manual on *Training High-School Pupils for Wartime Service to Children.* Articles prepared by home economics agents for the U. S. Office of Education publication, *Education for Victory*, include Training Volunteers for the School Lunch, Administration of School Lunch Programs, Home Economics Education and the Victory Corps, Strengthening Cooperation in the Food Program, and Important Consumer Problems 1943.

One agent served as chairman of the program committee which planned a national institute on home economics and the war, held in June under the auspices of the American Home Economics Association. Other staff members participated in this meeting as group discussion leaders and consultants.

Other committees on which members of the Home Economics Education Service have participated are: Office of Education Committee on Consumer Education, Office of Education Committee on Nutrition, Food Habits Committee of the National Research Council, National Cooperating Committee on School Lunches, Committee on Health and Physical Fitness Program for Colleges, and the Coordinating and Executive Committees of the National Nutrition Program.

Occupational Information and Guidance Service

The war has had a definite effect upon the program of the Occupational Information and Guidance Service of the Office of Education. The demand for occupational descriptions of military service and war production work, for accurate information on the changes in other occupations, and for facts concerning new training and scholarship opportunities in connection with the war program, was reflected during the year in the types of service requested of the Office. To meet these demands the Office assembled and disseminated pertinent information through State supervisors of occupational information and guidance and other State and local authorities; prepared for the use of guidance counselors, bibliographies and outlines describing apprenticeships in the Army and Navy and other war opportunities; participated in vocational conferences conducted by schools, colleges, and community organizations;

and assisted other agencies and individuals engaged in the preparation of occupational information for use in vocational guidance programs in the schools.

The fiscal years 1942 and 1943 were marked by two main developments: One was a large increase in State adoptions of supervision in this field; a second was the great demand for assistance in solving war problems which involved guidance and selection factors.

State Programs of Supervision

The following States and Territory set up provisions for State supervision of occupational information and guidance: California, Colorado, Hawaii, Indiana, New Mexico, Oregon, South Dakota, Utah, Wisconsin, and Wyoming. This brings the total number of State departments of education with specific provisions for this work to 33.

National Conferences

Because of war conditions two national conferences were held during the 1943 fiscal year. The first, at Cambridge, Mass., in August 1942, was attended by representatives of approximately 20 States. Besides the formulation of several important reports relating to policies and practices within the States, its most significant achievement was a report on the guidance of youth now enrolled in schools so that they might more readily find their places in the war effort. This report became a basis for the *Guidance Manual for the High-School Victory Corps* which was published in March 1943 as a suggested program in war guidance for all secondary schools. The second conference was held at Ann Arbor, Mich., in March 1943 and was attended by representatives of 41 States. Practically every Federal agency interested in securing the attention of pupils still in school for some critical military or civilian need was represented.

Educational Experience Summary Record Form

The most widespread effort to provide young people leaving school with specific evidence of their abilities, interests, and scholastic and work experience ever attempted was summed up in the development of the Educational Experience Summary Record in the spring of 1943. This record, developed in cooperation with the War Department, War Manpower Commission, Food Production Administration, and the National Association of Secondary School Principals, was printed by the War Department and distributed free to all secondary schools. The form is officially recognized by the War Department in the interviewing and classifying of inductees who were recently enrolled in school.

Cooperative Report

The service was asked by the U. S. Commissioner of Education to represent the Office in assisting the National Selective Service System

solve a problem presented by the psychosomatic characteristics of 18-year-old inductees. The large proportion of men disqualified either at induction, after some military training, or even later in active service for nervous or emotional causes raised the question of securing a better means for identifying such cases among boys just out of school age for whom evidence available for more mature persons was lacking. Work was begun with the National Selective Service System and psychiatric consultants secured by them, including persons from the Office of the Surgeon General of the Army and the National Committee for Mental Hygiene. Through the supervisor of occupational information and guidance in Maryland an experimental State-wide project, conducted with outstanding cooperation from State and local school authorities and the State Selective Service System resulted in securing sample reports on personality traits from nearly every secondary school in that State on more than 4,000 boys shortly liable to induction. At the end of the 1943 fiscal year this experience had resulted in the adoption of a campaign in which the cooperation of all secondary schools will be requested nationally. State supervisors of guidance are expected to play an important part in assisting State and local school systems to understand and administer the program adopted.

Recruiting of Candidates for Nurses' Training

The assistance of this service was solicited in the guidance of a proper proportion of girls who would graduate from high schools throughout the Nation during the year into training for a nursing career, for which 65,000 candidates were desired, or approximately 1 out of every 9 girl graduates in the United States. Relationships were established with the National Nursing Council for War Service, the Office of Defense Health and Welfare, the United States Public Health Service, and the Nurse Testing Division of the Psychological Corporation. As a result of this cooperation the service published a pamphlet entitled *Professional Nurses Are Needed* which was a handbook on the procedures involved in the guidance of high-school girls who might consider nursing as a career. Close liaison on the State level among the agencies involved was credited as influential in meeting more closely the quotas desired in nurse-training institutions.

Cooperation With Other Agencies

Assistance in furnishing information or in formulation of those policies bearing on pupil personnel problems was rendered to many outside governmental and civilian agencies. Among these were the Children's Bureau, the Brazilian Government, the Civilian Preinduction Training Branch of the Industrial Personnel Division of the War Department, and the National Vocational Guidance Association. A Nation-wide so-called school manpower warcast was planned and

carried out in the spring of 1943 over the Mutual Network under the joint auspices of the National Vocational Guidance Association and with the cooperation and participation of the War Manpower Commission and War Department. Recordings of this broadcast have been in active demand over a wide territory ever since.

Trade and Industrial Education

War Production Training has made a definite contribution to the regular program in trade and industrial education. Management, labor, and the public, including governmental agencies, have cooperated with school officials on the Federal, State, and local levels to the end that these training programs function with maximum effectiveness. Out of this collaboration has come a mutual understanding of the contribution which trade education can make to the common welfare. In view of this development it is logical to believe that a training service will be demanded in the post-war period on a scale without parallel in the history of trade and industrial education in the United States.

Trends

The war emergency is creating some very definite trends which will affect the regular program during the post-war period.

1. The preparatory, or all-day trade, program which has largely been confined to boys will include many more girls in the future.

2. The all-day trade school has been occupied traditionally in a large degree by training for the highly skilled occupations, which covered 2 or more years. Industrial development during the war has reemphasized the importance of a training program for occupations both below and above those found in the typical trade school. The trade program in the post-war period, therefore, will not only embrace short periods of training for such occupations as machine operators and helpers, but will encompass a technical educational service for workers in industry which is below college grade but extends beyond the offerings of the regular trade school.

3. The need for area trade schools has become a pressing issue.

4. Industrial management is more and more utilizing the services of officials in trade and industrial education on the local, State, and Federal levels in an advisory capacity in connection with personnel and training problems.

5. The demands created by the emergency have caused an extension of the employment age to include both the older men and the youth. Experience has shown that they can be prepared through training to function effectively on the job. The post-war vocational program, therefore, will likely find a widespread demand from these groups for training on both the preparatory and extension bases.

Apprentice Training

Although the war emergency has curtailed the attention that would normally be given to an expansion of apprentice training, every effort has been made to continue existing programs. California sets a splendid example through the work now being performed to prepare for the post-war demand for workers in the building trades. That State has organized a number of area and local committees to develop sound instructional material. The industrial survey now being conducted in New Jersey doubtless will furnish a basis for the development of an enlarged program of apprentice training.

Occupations Given a New Emphasis

Training for women has definitely shifted from such occupations as cosmetology and power sewing to the metal trades to meet the demands of the emergency. Numerous courses have been conducted in welding, aircraft, riveting, drafting, and marine electricity. Training in nursing and the selection and preparation of food has received especial attention. After the war it will be necessary to train women in the occupations in which they succeeded during the emergency.

The Post-war Program

Consideration is being given at this time to the development of a post-war training program. It is recognized that industry is now planning to be prepared to adjust promptly to meet the manufacturing problems that will arise at the conclusion of hostilities. The U. S. Office of Education realizes that one of the crucial questions which must be faced by the industrial groups involves training. For that reason definite steps are now underway to give State and local officials in trade and industrial education guidance and assistance in working cooperatively with management, labor, and private and governmental agencies to the end that the workers have available training facilities that will prepare them for immediate entrance on the job when the time for readjustment arrives.

Supervisory and Teacher Training

During the past year a series of regional conferences on war production training, involving State supervisors and teacher trainers, have been sponsored by the U. S. Office of Education. Stimulus has been given through these conferences to the improvement of State-local supervisory organizations through more effective delegation of functions; to the redelegation of the supervisor to the real job of supervision—the improvement of instruction; to in-service training of teachers as the most effective means of instructional improvement; to the appointment and training of special instructional supervisors; to the organization and incorporation in the curriculum of short-unit courses to meet specific needs; and to the development of short func-

tional teacher-training courses that will provide teachers newly recruited from industry with the essential information and teaching skills required to give effective instruction in the courses for which they are responsible. In addition, assistance has been given directly to States in solving supervisory organizational problems; in organizing short, intensive, instructor-training courses; and in planning and carrying out programs of supervisor and instructor training.

Special Groups

A Negro agent was added to the staff of the Trade and Industrial Education Service as a special representative in defense vocational education. He has worked in cooperation with State and local officials both in developing war production training and in planning long-time training programs in industrial education for Negroes.

Employee-Employer Relations

The U. S. Office of Education has, throughout the year, maintained contacts with the various labor organizations and State and Federal agencies. Frequent conferences were held for the purpose of discussing the various problems affecting vocational education programs. There has been continued effort toward developing a cooperative relationship between State educational authorities, management, and labor officials. Emphasis was placed on the continued development and utilization of representative advisory committees.

In cooperation with various Federal agencies the Office has brought to the attention of the officials in charge of vocational education the various Federal employment laws and regulations, especially as they apply to cooperative part-time programs and apprentice training.

Public Service Training

Public service training, as sponsored by the U. S. Office of Education under a provision of the George-Deen Act, is designed to provide educational assistance to persons employed in occupations maintained to carry on the business of government—national, State and local. Many public occupations require the performance of duties similar to those found in industry and in private business, but certain aspects of these duties are peculiar to public needs. Although some training can be offered before workers enter public employment, the principal demand is for "in-service" training.

The war has greatly increased the need for training in public service occupations because the armed forces and essential war industries have drained heavily from the experienced civilian personnel. Hundreds of inexperienced persons are, therefore, being used for replacement in public occupations. Many of them are in real need of special training which need might be met through public-service channels if public funds were available.

During the year, representatives of the Office, as consultants, cooperated with State staffs in developing and further improving public-service training programs, particularly those for municipal administrators, firemen, policemen, school board members, finance officers, tax assessors, health and sanitation employees, inspectors, water and sewage plant operators, and building custodians. More than 89,000 persons were enrolled in public service classes during 1941–42, the latest figures available.

The Office of Education has cooperated with the Office of Civilian Defense in an advisory capacity on fire-protection plans and training procedures in wartime, and with the safety and security branch of Army ordnance in providing firemen training for 105 explosive plants in 31 States. Cooperation with nongovernmental agencies included work with the National Fire Protection Association, International Association of Chiefs of Police, Western Actuarial Bureau, American Municipal Association, Municipal Finance Officers Association, National Association of Assessing Officers, National Safety Council, U. S. Chamber of Commerce Fire Waste Council, and State leagues of municipalities.

Model Aircraft Project

The model aircraft project was started by the U. S. Office of Education in February 1942 at the request of the Secretary of the Navy, and was continued through the fiscal year ending June 30, 1943, in cooperation with the Nation's schools and the Navy's Bureau of Aeronautics to supply solid scale-model airplanes for use by the military services in training in aircraft recognition.

The project was continued through the school year to enable the schools to complete the Navy's original request for 500,000 model planes. At the beginning of the school year 1942–43, the Bureau of Aeronautics requested 300,000 additional solid scale-model planes, comprising 10,000 models each of 30 new types of planes. The Bureau of Aeronautics again supplied the plans and specifications which were distributed to participating schools by the Office of Education.

It is estimated that, by the end of the fiscal year, 700,000 approved scale-model planes had been delivered to the military services and that about 800,000 youth in more than 6,000 schools had participated in the project.

Table 10.—*Appropriations for allotment to the States and Territories for vocational education, 1943 and 1944*

Act	Fiscal year ended— June 30, 1943	Fiscal year ended— June 30, 1944
SMITH-HUGHES ACT		
Total	[1] $7,167,000	[1] $7,167,000
Vocational agriculture	3,027,000	3,027,000
Vocational trade, industry, and home economics	3,050,000	3,050,000
Vocational teacher training	1,090,000	1,090,000
GEORGE-DEEN ACT		
Total	[2] 13,800,000	[2] 14,200,000
AN ACT MAKING APPROPRIATIONS FOR THE TERRITORY OF HAWAII		
Total	30,000	30,000
Vocational agriculture	10,000	10,000
Vocational trade, industry, and home economics	10,000	10,000
Vocational teacher training	10,000	10,000
AN ACT MAKING APPROPRIATIONS FOR THE ISLAND OF PUERTO RICO		
Total	105,000	105,000
Vocational agriculture	30,000	30,000
Vocational trade and industry	30,000	30,000
Vocational home economics	30,000	30,000
Vocational teacher training	15,000	15,000
Grand total	21,102,000	21,502,000

[1] Permanent and continuing appropriation. Estimated expenditure, $7,000,000.
[2] Allotments to States made on basis of $14,483,000, as authorized in the Act.

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Vocational Rehabilitation

THE NATIONAL PROGRAM of vocational rehabilitation had its beginning in 1920 under a congressional act which became effective on June 2 of that year. The act provides for the promotion of a grant-in-aid program for the vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment. The basic act has been amended five times for the purpose of extending its provisions. On August 14, 1935, a section of the Social Security Act made the provisions of the organic rehabilitation act permanent, and increased the authorization of appropriations for aid to the States. A further amendment passed on August 10, 1939, increased the authorization of annual appropriations to the States from $1,938,000 to $3,500,000.

From the 7 States that inaugurated cooperative programs of vocational rehabilitation in 1920, the work has been extended to all 48 States, the District of Columbia, Hawaii, and Puerto Rico.

With but few exceptions the national program of vocational rehabilitation has shown an annual increase in the number of applicants for rehabilitation service, in the number served, and in the number rehabilitated.

The expansion of war industries coupled with a shortage of manpower in many States has provided enlarged employment opportunities for the physically handicapped during the biennium. The reports received from the States show that the live roll at the close of the fiscal year 1943 will be approximately 70,000 as compared with 55,000 at the close of the preceding year. These reports also indicate that the number of cases rehabilitated will be approximately 40,000 or nearly twice the number rehabilitated during the year ended June 30, 1942.

To assist war industries hampered by labor shortage the rehabilitation programs have been accelerated in a majority of the States. This acceleration has manifested itself principally in three types of services:

1. The locating, interviewing, and counseling of large numbers of physically handicapped persons.
2. The use of shorter and more intensified training courses.
3. The selective placement of disabled persons in war industries.

Increased Referrals

A large number of public and private agencies contacting and dealing with physically disabled persons have been referring cases to the vocational rehabilitation service. One of the new referral agencies is the Selective Service System. Rejections for army service due to physical limitations has revealed larger numbers of disabled young men than ever estimated through surveys. Those rejected by draft boards because of obvious disabilities should have been known to rehabilitation departments, but this was not always the case. Many learned for the first time of the presence of such hidden physical disabilities as heart and lung impairments when examined at induction centers. Their employment adjustment is not only important because of the shortage of manpower, but also because of the care that should be exercised in the selection of employment for them.

With the assistance of local draft boards these men have been advised of the services offered by rehabilitation departments. Some cases are placed immediately as a result of interviews, others are given rehabilitation services in preparation for employment. One State supervisor reported that approximately 30 percent of the draftees rejected because of physical disabilities can be served by the rehabilitation service. The remaining 70 percent are found to be satisfactorily employed, not interested, or not feasible for rehabilitation service.

Another method of recruiting workers with physical disabilities was demonstrated in Detroit through a cooperative program initiated by the Regional Office of War Manpower in region V. The Detroit Council for the Handicapped, in cooperation with the U. S. Employment Service, the Federal-State rehabilitation service, and other agencies under the sponsorship of the War Manpower area office, compiled a registration of the handicapped known to the public and private agencies in the city. Names of disabled persons and other pertinent data were secured concerning those unemployed, unsuitably employed, or employed at levels of work below their known capacities.

A total of 2,392 registrations were filed with the council. This project not only brought to the attention of the Rehabilitation and Employment Services more than 1,400 prospective employees in need of the services of these agencies, but greatly stimulated the referral of physically disabled persons to the rehabilitation and employment services by the 55 agencies that participated in this cooperative program of recruiting for war manpower.

As a result of this project cooperative programs for recruiting physically disabled workers were developed by the U. S. E. S. and the Vocational Rehabilitation Service at several points in Ohio.

Training for War Work

In the early days of the war the rehabilitation departments in a number of States experienced some difficulty in getting rehabilitation cases accepted by war production training classes. Those responsible explained that employers would not accept such cases after the training was completed. As labor shortages have increased, rehabilitation departments have found employers not only willing but anxious to secure rehabilitation clients. The Shelby County School of Aeronautics near Memphis, Tenn., was requested by the commanding officer of the Air Corps Depot at Mobile, Ala., to train physically impaired persons in the various phases of aircraft mechanics. At a conference of State Supervisors of rehabilitation in the Southern region held at Memphis shortly after the receipt of this request plans were completed for sending rehabilitation clients to this school. Most applicants were given a mechanical aptitude test by the U. S. Civil Service, and a medical examination before being approved for training. In 60 days the recruiting efforts of the rehabilitation workers of the southern region resulted in the enrollment of 500 physically handicapped persons at the Shelby County School of Aeronautics. The training period lasts from 2 to 6 months, depending upon the previous training and experience of the client. At the close of the 1943 fiscal year 526 clients had completed their training and had been transferred to regular employment at the Mobile or other sub-depot. At that time there were about 150 rehabilitation trainees at the school.

At the Williamsport Technical Institute, Williamsport, Pa., special classes were established for rehabilitation cases, in which hundreds of physically disabled persons were trained during 1943. Many of these cases were employed by the Lycoming Motors Co., of Williamsport, upon the completion of their training. Special classes for the training of rehabilitation clients were established in the vocational schools in Wisconsin as well as in some other States.

New Placement Methods

New techniques have been developed for the purpose of expediting the placement of physically disabled persons in employment.

In Connecticut a new type of rehabilitation clinic has been developed which has attracted Nation-wide attention. It was developed by the State rehabilitation department as a cooperative program in which industry, the medical profession, college psychologists, educators, employment service and rehabilitation workers participate. At the clinics, case reports on disabled persons which include educational records, employment history, and reports of medical and psychological examinations are presented to a group of employers.

Following a discussion of these reports the applicant is presented in person. In some of these clinics the bidding has been quite spirited for the services of some clients. The State supervisor reports that the clinics are resulting in the placing of about 4,000 disabled persons per year in industry.

Other special methods have been used in some States for the placing of disabled persons in employment. Through cooperative relations developed with the Curtiss-Wright Aircraft Co., by the rehabilitation office in Buffalo a large number of disabled persons are being placed with this company. All physically handicapped persons employed by the company came through the rehabilitation department. Those making direct application to the company are routed through the rehabilitation office.

Somewhat similar relations have been established by the rehabilitation department of Missouri with the North American bomber plant in Kansas City, Kans., which has resulted in the employment of all persons with disabilities referred to the plant by the department, including 17 deaf boys who were trained in electrical work as a group at the National Defense Training Center in Kansas City, Kans.

Physical Restoration

Although the Federal Rehabilitation Office has always recognized physical restoration as a prerequisite to other rehabilitation services for many disabled persons, it has taken the position in the past that remedial treatment should be secured but not provided by the rehabilitation service. Some States have been able to secure corrective treatment for some of their cases through private or public charity, but a large number of applicants have gone without rehabilitation services or have had to struggle against a handicap that could have been ameliorated or corrected.

For several years many rehabilitation workers have urged more liberal policies in this phase of rehabilitation and the Federal office has given the matter serious consideration. To determine the need and advantages of a program of physical restoration for rehabilitation applicants, the rehabilitation division authorized a few State departments to undertake experimental programs for a limited period. The conditions under which these programs were authorized were: (1) that all sources of assistance would first be exhausted before rehabilitation funds were used for medical care and (2) that only such physical repair services were to be given as would promptly restore the individual to work ability; (3) that the costs would be maintained at reasonable level but consistent with good practice. Four States—Connecticut, Michigan, New York, and Wisconsin—undertook such programs.

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In all of these programs emphasis has been placed on the treating of cases where relatively simple surgery requiring a short period of hospitalization will materially decrease the physical handicap, remove or compensate it, and thus make possible the early placing of the individual in industry. The types of disabilities most frequently treated were hernia, varicose veins, and cataract and other eye disabilities.

Reports from some of these programs are not complete, but those received show the average cost of physical restoration ranges from $100 to $110. For many cases the cost of this service represents the only direct case expenditure as the clients are placed in employment without other preparatory service. This is less than the average training cost per case which has varied from $241 in 1938 to $138 in 1942. It is about one-third of the average case cost of rehabilitation over a period of several years.

At a meeting of the States Rehabilitation Council held in June 1943 the council approved the report of its committee on physical restoration which recommended that physical restoration be officially authorized as one of the rehabilitation services to be rendered disabled individuals.

Training Rehabilitation Workers

During the fiscal year 1943, two courses were conducted by the division for training of State rehabilitation personnel. The first was a 2-week training conference held near the beginning of the year at Memphis, Tenn., for the training of 37 new case workers from 12 Southern States. Lectures were given on all phases of rehabilitation case work by the director, regional agent, and three members of the research staff. The second course was held near the close of the year at Columbia University. This training, which extended over a 6-week period, was so organized that a student might enroll any 2 or more successive weeks and in that period receive training in one or more phases of rehabilitation service.

Services for the Blind

The Vocational Rehabilitation Division of the U. S. Office of Education is charged with the responsibility of administering an act authorizing the placing of blind persons as operators of vending stands in Federal buildings, and enlarging the economic opportunities of the blind.

During the biennium considerable emphasis has been laid on the placement of blind persons in various types of industrial employment. Industrial placement programs were initiated in Arkansas, Delaware, Colorado, Iowa, Maine, Texas, and the District of Columbia. A member of the staff was sent to each of these States to lay the groundwork for such a program. He made contacts with employers, training schools and cooperating agencies, and demonstrated to industrial man-

agers and personnel managers processes that can be performed by sightless persons, interviewed and selected candidates for employment and placed them in jobs which matched their ability. Training was given new placement agents who were to assume the responsibility of continuing the placement program.

A member of the staff of the services for the blind developed a placement program for the blind in the District of Columbia which resulted in the placement of a number of blind persons in such industries as tent and awning manufacture, coffee packing, food packing, electric products, airplane parts, and paper goods even though Washington is not usually considered an industrial community.

Stand Program

Forty-four States, the District of Columbia, and Hawaii have licensing agencies designated by the Commissioner of Education to carry on stand programs. On June 30, 1943, there were 355 stands in Federal buildings and approximately 1,000 in non-Federal buildings throughout the country. The average yearly income to stand operators for the country is $1,167.60. A model stand program is carried on in the District of Columbia where the Vocational Rehabilitation Service for the District of Columbia is the licensing agency, and the Washington Society for the Blind, a nonprofit corporation, acts as its financial agent. The average income to stand operators in the District of Columbia is $3,000. This is due to the close supervision given the stand program by the Washington Society for the Blind which has a staff of specialists experienced in merchandising. The stand program in the country as a whole has not grown much during the biennium because of the shortage of merchandise and staff personnel problems of the various organizations for the blind.

Publications

Three booklets were published in cooperation with the National Society for the Blind. The first was a compilation of information listing 376 blind persons at work in war plants in 17 States. Material was secured for this book from a survey made by the service for the blind. The second publication consists of a group of approximately 50 letters from sighted employers of blind persons. The third contains more than 70 photographs and 100 original letters from sighted employers of blind employees. These booklets have provided invaluable assistance to placement agents for the blind throughout the country, as they provide indisputable evidence as to the efficiency of blind persons when properly matched with production processes and when placed under satisfactory conditions.

A film "Blind Men at Work in Industry," made by a member of the staff of the services for the blind, has been shown in conjunction

with talks given to groups of business men, manufacturers, social workers, personnel directors, etc. This has been effective in proving that blind persons can be absorbed easily into their organizations.

District of Columbia Rehabilitation Service

The Rehabilitation Division of the Office of Education is also charged with the administration of an act of Congress, Public 801, Seventieth Congress, approved February 23, 1929, which provides vocational rehabilitation service for the disabled residents of the District of Columbia. As the licensed agency for the District of Columbia under Public Act No. 732, Seventy-fourth Congress, approved June 20, 1936, the District Rehabilitation Service is responsible for the administration of the vending stand program for the blind.

The service has made use of various facilities in the community in providing services not available through its own funds. The Washington Society for the Blind, a nonprofit corporation in the District of Columbia, has acted as finance and business agent for the service in the operation of the stand program. The U. S. Public Health Service, as authorized in the District Act, has provided examinations and medical reports on applicants of the service, and private medical specialists have cooperated in supplementing this service. Physical restoration for most cases needing this service has been secured through hospitals and other medical facilities in the community. Public and private relief agencies have provided maintenance for many cases, and social agencies generally have cooperated in case work wherever needed. The U. S. Employment Service, the veterans placement representatives, and various other agencies associated with the War Manpower Commission have cooperated in securing local employment opportunities and in placement of physically handicapped clients.

District of Columbia Case Production 1943

	Number of cases
I. In general	
(*a*) Total cases registered during the year	1,823
(*b*) New cases	997
(*c*) Cases carried over from previous year	826
(*d*) Closures during the year	803
II. Total closures during the year	
(*a*) Rehabilitated	495
(*b*) Nonrehabilitated	12
(*c*) Rejected	128
(*d*) Not accepted	80
(*e*) Transferred to other State	88
III. Live roll carried over June 30, 1943	
Total cases carried over	1,020

The racial distribution of all cases was as follows:

	Number	Percent
Whites	1,167	[1] 64.0
Negroes	647	[1] 35.5
Other races	9	[1] .5

[1] Approximate.

Major Services Rendered

	Number
Surgical or medical treatment procured	76
Artificial appliance supplied or repaired	167
Vocational training courses	279
Travel to and from training	48
Living maintenance while training	13
Placements (in temporary or other jobs, exclusive of 495 rehabilitation placements)	197

With Reference to the 495 Rehabilitated Cases

	Number	Percent
Placed in Government jobs	229	46.3
Placed in private jobs	266	53.7
Placed in war jobs	229	46.3
(a) Government jobs	175	
(b) Private jobs	54	

These are jobs essential to civilian economy and indirectly to the war effort.

Wages

Average weekly wage of all cases		$28.65
Average Government wage	$32.20	
Average private wage	25.60	
Total weekly earnings of all cases		14,180.00
Annual earnings of all cases		737,360.00

Summary

Average case cost of rehabilitation	101.00
Rehabilitated cases known to Board of Public Welfare (This is 20.6 percent of all rehabilitated cases)	102.00
Average monthly relief cost per case in the District of Columbia, 1943, general public assistance	24.84
Blind aid	33.79

On the lower basis, the 102 rehabilitated cases were costing the Board of Public Welfare at the rate of $2,533.68 per month and $30,404.16 per year. Cost of rehabilitation of this group, $10,302.00. Annual earnings of this group, approximately $150,000. District of Columbia share of rehabilitation appropriation is $25,000 annually. The work expectancy of the average rehabilitated case is from 20 to 25 years.

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Miscellaneous Educational Services

CCC Educational Activities

THE NEED for an adjustment in the CCC educational program to meet the requirements of the war effort resulted in the adoption of new regulations governing the training of enrollees of the Civilian Conservation Corps during 1941–42.

The education and training program of the Corps was divided into two parts: (1) Basic training, and (2) special training.

Basic Training

Basic training included such training as is inherent in the local camp situation such as amenability to discipline; good work habits; ability to get along with groups of men; plus primary work in occupational, academic, social, health, recreational, and administrative training. Study of health and hygiene was required of all enrollees, and the American Red Cross first-aid course was required of all leaders and assistant leaders, truck drivers, and their understudies. Safety study and practice was required of all men in the Corps. The following table shows some statistical results of the physical and health training program during the fiscal year 1942.

Course	*Enrollment*	*Number of successful completions*
First aid	133,649	85,599
Health and hygiene	35,126	29,324
Safety	55,481	49,355

Occupational Training

The CCC enrollee obtains his occupational training from work experience and from training stations which have been established for this purpose. More than 50 CCC jobs provide the basis for occupational training. These were analyzed and training specifications were drawn up to assist the foreman-instructor in deriving the maximum job training value for the enrollee. In each camp one or more training stations were established to provide supplementary and related training to that which was obtained from the work job during work time or for preliminary training in any occupation which leads to a job in the war effort, provided the camp had the facilities for such

training. The following figures indicate the average monthly enrollment during the fiscal year 1942 in the two types of training: On-the-job, 55,440; and related instruction, 29,699.

Academic Training

Academic training was carried on in camp classes and in nearby schools and was available to the enrollee during his leisure time. Such training included training for illiterates, as well as elementary, high-school, and college training. The following table indicates the school level of enrollees during an average month of the fiscal year:

Educational level	*Number*	*Percent*
Beginners	9,606	11.20
Elementary	36,450	42.49
High school	33,792	39.41
College	5,918	6.90
Total	85,766	100.00

Special textbooks in reading and arithmetic were prepared to facilitate literacy training and training up to and including the fourth grade. That the Corps has made a creditable contribution in the elimination of illiteracy the following figures indicate: Number on beginners' level, 20,016; number taught to read and write, 19,631; number on elementary level during average month, 36,450; and percent taking academic courses, 36.3.

During the leisure time of the men there were also provided training courses in subjects in which the men could not be trained through the medium of their regular camp jobs. During the year a considerable amount of this training was carried on in cooperation with the State departments of vocational education and vocational schools. Records show that 115,928 enrollees completed units of courses successfully.

Social Training

The CCC enrollee obtains his social training continuously from the various camp activities. The purpose of such training is to inculcate in all enrollees those qualities which contribute to their growth as individuals and to their effective membership in the social community. It is the responsibility of the Camp Committee on Education to provide a rich, well-balanced program of activities which will yield the maximum to the all-round social development of the enrollees.

Administrative Training

The CCC enrollee who desired to climb to a position of responsibility in the camp could do so by enrolling in administrative training.

An enrollee must demonstrate that he is capable of doing administrative work before being admitted to such training. The following table indicates the extent of administrative training during an average month of the 1942 fiscal year:

Field of training	*Number of enrollees*	*Number of successful completions*
Foreman	552	432
Leader	3,101	2,363
Teacher	454	390

Special Training

The second major field of training outlined in the regulations governing the training of enrollees of the Civilian Conservation Corps has been designated as "special training."

Special training included (1) full-time special courses and schools established for the purpose of training enrollees for positions in the CCC; and (2) leisure-time courses in preparation for immediate employment in the war effort.

Because of the need for more advanced schools in cooking, baking, mess management, clerical work, radio operation, and the training of subalterns, the CCC established full-time training centers to train enrollees in these jobs.

The defense training courses carried on in cooperation with the State departments of vocational education and local schools authorized under Public Law 146 provided vocational training for 59,427 CCC enrollees during 1942. The U. S. Commissioner of Education classified CCC enrollees as being out-of-school rural or nonrural youth not otherwise provided for and, as a consequence, the use of funds for the operation of defense courses in the camps was authorized. The bulk of CCC enrollees took general preemployment courses under plan IV; that is, operation, care, and repair of motor vehicles; metal work; woodworking; and elementary electricity.

The following figures indicate the number of men enrolled in these courses by subject: Motor vehicles, 16,336; metal work, 12,642; woodworking, 15,724; electricity, 9,906; and other courses, 4,819.

Altogether, 95,008 CCC men have been enrolled in defense training courses since December 1, 1940.

The Congress ordered the discontinuance of the Civilian Conservation Corps with the expiration of the fiscal year, June 30, 1942. The sum of $8,000,000, however, was provided for the liquidation of the Corps, to be accomplished by June 30, 1943. The educational program of the Civilian Conservation Corps was actually discontinued on October 8, 1942.

Information and Radio Services

Outstanding among the special assignments to the information and radio services during the biennium were: (1) Organization and management of the National Institute on Education and the War, (2) organization and maintenance of information service to promote the development of the High-School Victory Corps, (3) revision and amplification of the script and transcription loan service, and (4) preliminary work on a pamphlet *F–M for Education*, designed to help educators, school board members, and others to understand the postwar opportunities made available through the FCC education channel allocation.

With cooperation from the Office of Education and staff members from national education associations and the Washington, D. C., and Montgomery County (Md.) public schools, the information service organized a 3-day national institute on education and the war held in Washington August 28 to 31, 1942. Leaders in all phases of American education were invited to attend. More than 700 from all States participated in the sessions which were addressed by leading officials of practically all the major Federal agencies charged with war work. Major addresses, facts, and conclusions presented in the institute were assembled and printed in the *Handbook on Education and the War.* Leaders attending the Institute were encouraged to organize similar meetings throughout the United States and many did so.

Distributions by Mail

Mailing lists, about 400 in number, with 200,000 names, were used by war agencies 81 times in 1943, a substantial increase over the 37 times they were used during the previous year. A break-down of the agencies using the lists is as follows: OWI, 26; Treasury Department, 13; War Department, 10; Navy Department, 3; Pan American Union, 1; Department of Labor, 3; Department of Agriculture, 3; War Production Board, 4; Office of Price Administration, 7; Office of Civilian Defense, 3; National Resources Planning Board, 2; Department of Commerce, 2; National Youth Administration, 1; ODHWS, 2; Committee on Printing, 1.

Wartime information distributed to schools, colleges, libraries, and other educational institutions totaled more than 1,380,000 pieces.

Graphics

In response to war demands for rapidity of output, production of graphic materials increased. Special work was done for the Navy, the Army, and the Office of War Information—for example, design of an illustrated job-training chart for naval aviation, and an Army-Navy orientation book for high-school students, *Our Armed Forces.*

Designs for insignia of the six divisions of the High-School Victory Corps were originated, as well as designs for the entire series of pamphlets dealing with the organization and development of the Victory Corps. Detailed pictorial charts were worked out on approximately 75 subjects .

Miscellaneous folders, fliers, bulletins, and portfolios were designed. They included over 50 booklets, bulletins, and covers; 3 comprehensive portfolios on Latin-American exhibits for United States schools; 175 drawings; over 100 signs.

Demand for photographs of wartime activities in the schools so increased that it was necessary to take approximately 1,000 special photographs of school war programs. One set was prepared, on request, for distribution throughout Britain and the Dominions. General requests totaled 1,521.

About 24 general exhibits were prepared—of the easily portable, quickly assembled variety—dealing with educational techniques, the High-School Victory Corps, libraries, war production training, and the like. Work was also done on 175 special Inter-American educational exhibits requested by the Coordinator of Inter-American Affairs.

Radio

Still greater intensification of efforts of the Radio Service toward the promotion of the national war program marked the biennium. A revised edition of the *Transcriptions for Victory Catalog* containing 250 different program titles and a *Scripts for Victory Catalog* listing approximately 300 radio scripts was prepared and distributed. Statistics indicating the volume of distribution are given below:

	Volume for 1941–42	Volume for 1942–43	Grand total to date
SUPPLEMENTARY MATERIALS:			
Radio manual	2,458	1,378	21,621
Radio glossary	1,858	804	18,167
Handbook of sound effects	4,662	758	14,275
Radio bibliography	1,360	601	7,440
College radio courses	980	363	3,764
Technical publications (on loan)	----------	432	5,701
Total	11,318	4,336	70,968
CATALOGS:			
Fourth edition script catalog	1,893	570	9,507
Supplement to above	3,430	777	5,759
Scripts for victory catalog	771	4,343	5,114
Transcriptions for victory	3,448	1,100	4,548
Total	9,542	6,790	24,928
TEACHING KITS	48	225	225
TRANSCRIPTIONS:			
Program loans	2,832	2,057	6,077
SCRIPTS (individual loans)	31,418	15,997	325,005
FREC service bulletin (total copies)	65,000	67,500	260,500
MISCELLANEOUS:			
Individual requests for one or more services	----------	15,752	71,629
Requests for technical advice	182	261	443
Separate pieces of outgoing mail	106,529	84,950	----------

Federal Radio Education Committee

During the biennium 1941–43, the Federal Radio Education Committee has operated on a budget of $16,240.

Its research projects assigned to the U. S. Office of Education, with one exception, were completed in the summer of 1941. The project to develop a standard radio receiver for schools had progressed to the point in August 1941 where specifications had been approved and the RCA Manufacturing Co. was ready to build a model set for test purposes. However, because of shortages of materials and production facilities, upon the advice of the Committee on Scientific Aids to Learning who had financed the project, and of the FREC, completion of the project was abandoned until after the war.

A proposal, the outgrowth of the development of a set of suggested criteria for children's radio programs published earlier by the FREC, to establish a research and service agency for the improvement of children's radio programs, was considered at a special conference in Washington during February 1942. The meeting was attended by some 75 representatives of the broadcasting industry, advertising agencies, women's organizations, teachers, and others. After considerable discussion, plans were made for further investigation by a small committee to be named by the Commissioner. However, the growing preoccupation with the war effort on the part of possible supporters of the project prompted the FREC Executive Committee to postpone it until after the war.

March 1943 marked the end of 5 years of research at Ohio State University, where the evaluation of school broadcasts project had been established by the FREC. A total of 50 publications have resulted from this research program, which was concerned with in- and out-of-school listening by children.

In the spring of 1943, the FREC voted to launch a new monthly radio program listing service to schools. FREC members have long been concerned with the complaint of teachers that to date no satisfactory program log is available. Teachers need a log which supplies them with notices of programs sufficiently far in advance; they need more adequate descriptions of program content, to enable them to select and fit programs into their curricula. In an effort to meet this situation, the FREC agreed to initiate a new type of program-listing service, giving brief annotations about selected educational programs to be heard over each of the four major networks and suggested grade levels for listening.

An Advisory Committee is responsible for selecting the programs to be listed. Distribution is channeled through State departments of education for circulation to their respective school systems.

Through the *FREC Service Bulletin* current information about

existing wartime programs is provided monthly to stimulate the use of educational radio in schools and civic organizations that broadcast. A subcommittee on post-war planning for educational radio has been established and it is expected that the FREC will continue to play an effective role in further resolving the problems which both broadcasters and educators face in trying to use radio to its maximum effectiveness as an educational medium.

Editorial and Publication Services

Educational wartime needs and activities are reflected in the editorial and publication services of the Office of Education during the biennium.

Education for Victory replaced SCHOOL LIFE in March 1942 for the duration in order that official announcements, reports on emergency programs, information, news, and other important material could reach the Nation's educational army promptly and directly. Beginning December 1942 the number of copies distributed on the first and fifteenth day of each month to school and college executives and supervisors was increased to approximately 65,000.

U. S. Office of Education Publications Which Came From the Press During the Fiscal Year 1942

America Builds a School System. (Bulletin 1941, No. 12.)
Annual Report of the U. S. Commissioner of Education, 1941.
Assistance on School Plant Problems as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 4.)
Bibliography of Research Studies in Education, 1939–40. (Bulletin 1941, No. 5.)
Conservation Films in Elementary Schools. (Bulletin 1941, No. 4.)
Education of School Administrators. (Bulletin 1941, No. 6.)
Education of Teachers: Selected Bibliography, October 1, 1935—January 1, 1941. (Bulletin 1941, No. 2.)
Education of Teachers as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 6.)
Educational Directory 1941–42. Issued in four parts:
I. State and County School Officers.
II. City School Officers.
III. Colleges and Universities.
IV. Educational Associations and Directories.
Educational Research Studies of National Scope and Significance. (Biennial Survey of Education in the United States, 1938–40, volume I, chapter X.)
Federal Funds for Education, 1938–39. (Leaflet No. 61.)
Handbook of College Entrance Requirements. (Bulletin 1941, No. 13.)
Higher Education, 1936–40. (Biennial Survey of Education in the United States, 1938–40, volume I., chapter III.)
Index to SCHOOL LIFE, volume 26, October 1940–July 1941.
Inter-American Friendship Through the Schools. (Bulletin 1941, No. 10.)
Job Training for Victory. (Chart.)

Library Service. (Biennial Survey of Education in the United States, 1938–40, volume I, chapter VIII.))
Pre-Aviation Cadet Training in High Schools. (Leaflet No. 62.)
Pupil Personnel Services as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 5.)
School Library Administration: An Annotated Bibliography. (Bulletin 1941, No. 7.)
Secondary Education in Austria, 1918–1938. (Bulletin 1941, No. 9.)
Some Principles of Consumer Education at the Secondary School Level. (Pamphlet No. 94.)
Sources of Visual Aids for Instructional Use in Schools. (Pamphlet No. 80 Revised.)
State Boards of Education and Chief State School Officers. (Bulletin 1940 No. 6, monograph No. 1.)
State-wide Trends in School Hygiene and Physical Education. (Pamphlet No. 5, Revised.)
Statistical Summary of Education, 1937–38. (Bulletin 1940, No. 2, chapter I.)
Student Participation in School Government: Good References. (Bibliography No. 74.)
Supervision of Elementary Education as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 8.)
Supervision of Health and Physical Education as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 14.)
Supervision of Instruction as a Function of State Departments of Education (Bulletin 1940, No. 6, monograph No. 7.)
Supervision of Parent Education as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 13.)
Supervision of Secondary Education as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 9.)
Supervision of the Education of Negroes as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 11.)
Supervision of the Education of Out-of-School Youth and Adults as a Function of State Departments of Education. (Bulletin 1940, No. 6, monograph No. 12.)
Unit Costs in a Selected Group of High-School Libraries. (Bulletin 1941, No. 11.)
Visual Aids in Education: Good References. (Bibliography No. 73.)
Voices of Democracy. (Bulletin 1941, No. 8.)
Weekday Classes in Religious Education. (Bulletin 1941, No. 3.)

Education and National Defense Series

Our Country's Call to Service. (Pamphlet No. 1.)
Living Democracy in Secondary Schools. (Pamphlet No. 7.)
Practicing Democracy in the College. (Pamphlet No. 8.)
Populations Adrift. (Pamphlet No. 11.)
Hemisphere Solidarity. (Pamphlet No. 13.)
How to Read the News. (Pamphlet No. 16.)
How Libraries May Serve. (Pamphlet No. 17.)
Vocational Rehabilitation and National Defense. (Pamphlet No. 19.)
Helping the Foreign-born Achieve Citizenship. (Pamphlet No. 21.)
Food For Thought: The School's Responsibility in Nutrition Education. (Pamphlet No. 22.)

Vocational Education

Building Electrical Equipment for the Farm. (Vocational Division Bulletin No. 209.)

The Individual Inventory in Guidance Programs in Secondary Schools. (Vocational Division Bulletin No. 215.)

Medicine. (Guidance Leaflet No. 6 Revised.)

Occupational Information and Guidance Bibliography, 1937–38. (Vocational Division Bulletin No. 212.)

References and Related Information on Vocational Guidance for Girls and Women. (Vocational Division Bulletin No. 214.)

School Lunches and Education. (Vocational Division Leaflet No. 7.)

Selling Home Furnishings. (Vocational Division Bulletin No. 216.)

The State and Pre-Service Preparation of Teachers of Vocational Education. (Vocational Division Bulletin No. 219.)

Vocational Rehabilitation

Rehabilitation of the Deaf and the Hard-of-Hearing. (Vocational Rehabilitation Series Bulletin No. 26.)

Civilian Conservation Corps

Camp Life Reader and Workbook No. 4.

Camp Life Arithmetic Workbook No. 5.

Reprints

In addition to the foregoing publications and to meet a continuing public demand, the following Office publications were reprinted:

The Deaf and the Hard-of-Hearing in the Occupational World. (Bulletin 1936, No. 13.)

Health Work and Physical Education. (Bulletin 1932, No. 17, monograph No. 28.)

Home Economics in Public High Schools of the United States (Vocational Division Bulletin No. 213.)

Occupational Experiences for Handicapped Adolescents in Day Schools. (Bulletin 1937, No. 30.)

Opportunities for the Preparation of Teachers of Exceptional Children. (Bulletin 1937, No. 17.)

Statement of Policies for the Administration of Vocational Education. (Vocational Division Bulletin No. 1.)

U. S. Government Publications on Health, Physical Education, and Recreation. (Bibliography No. 61.)

Requests for reprints of articles which appeared in SCHOOL LIFE and in *Education for Victory* were received by the Office from numerous educational organizations and groups, as a result of which, reprints were made of 28 articles.

U. S. Office of Education Publications Which Came From the Press During the Fiscal Year 1943

Accredited Secondary Schools in the United States. Supplement. (Bulletin 1942, No. 3.)

Arts, Crafts, and Customs of Our Neighbor Republics—A Bibliography. (Bulletin 1942, No. 2.)

Educational Directory, 1942–43. Issued in four parts:

I. State and County School Officers.
II. City School Officers.
III. Colleges and Universities.
IV. Educational Associations and Directories.

Educational Legislation. (Biennial Survey of Education in the United States, 1938–40. Volume I, chapter IV.)
Expenditures Per Pupil in City School Systems, 1940–41. (Circular 214.)
General Studies of Colleges for Negroes. (Miscellany No. 6, volume II.)
Handbook on Education and the War—Proceedings of the Institute.
Health Services in City Schools. (Biennial Survey of Education in the United States, 1938–40. Volume I, chapter V.)
Index. Biennial Survey of Education, 1936–38. (Bulletin 1940, No. 2.)
Industries, Products, and Transportation in Our Neighbor Republics. (Bulletin 1942, No. 6.)
Intensive Study of Selected Colleges for Negroes. (Miscellany No. 6, volume III.)
Inter-American Education Demonstration Centers—Report of Project, January-June 1942. (Leaflet No. 65.)
Opportunities for the Preparation of Teachers in Health Education. (Bulletin 1942, No. 1.)
Our Neighbor Republics: A Selected List of Readable Books for Young People. (Bulletin 1942, No. 5.)
Planning Schools for Tomorow—The Issues Involved. (Leaflet No. 64.)
Pre-Flight Aeronautics in Secondary Schools. (Leaflet No. 63.)
Program of the National Institute on Education and the War.
Public Library Statistics 1938–39. (Bulletin 1942. No. 4.)
Socio-Economic Approach to Educational Problems. National Survey of the Higher Education of Negroes. (Miscellany No. 6, volume I.)
Statistics of Special Schools and Classes for Exceptional Children. (Biennial Survey of Education in the United States, 1938–40, volume II, chapter V.)
26 Job Opportunities in the U. S. Army Air Forces. (Chart.)
Victory Corps Aeronautics Aptitude Test.

Education and National Defense Series

What Democracy Means in the Elementary School. (Pamphlet No. 6.)
National Unity Through Intercultural Education. (Pamphlet No. 10).
Understanding the Other American Republics. (Pamphlet No. 12.)
Inter-American Cooperation Through Colleges and Universities. (Pamphlet No. 14.)
Guidance Problems in Wartime. (Pamphlet No. 18.)
How Rural Youth May Serve. (Pamphlet No. 20.)
Together We Serve. (Pamphlet No. 24.)

Victory Corps Series

High-School Victory Corps. (Pamphlet No. 1.)
Physical Fitness Through Physical Education for the Victory Corps. (Pamphlet No. 2.)
Guidance Manual for the High-School Victory Corps. (Pamphlet No. 4.)
Community War Services and the High-School Victory Corps. (Pamphlet No. 5.)

School Children and the War Series

School Services for Children of Working Mothers. (Leaflet No. 1.)
All-Day School Programs for Children of Working Mothers. (Leaflet No. 2.)

Nursery Schools—Vital to America's War Effort. (Leaflet No. 3.)
Food Time—A Good Time At School. (Leaflet No. 4.)
Meeting Children's Emotional Disorders at School. (Leaflet No. 6.)

Vocational Education

Community Occupational Surveys. (Vocational Division Bulletin No. 223.)
Digest of Annual Reports for State Boards of Vocational Education, 1942.
Family Saving and Spending in Wartime. (Vocational Division Leaflet No. 11.)
Military Service. (Vocational Division Bulletin No. 221.)
Negro Farm Families Can Feed Themselves. (Vocational Division Leaflet No. 8.)
Occupational Information and Guidance Bibliography, 1939. (Vocational Division Bulletin No. 218.)
Opportunities in the U. S. Merchant Marine. (Vocational Division Leaflet No. 9.)
Professional Nurses Are Needed. (Vocational Division Leaflet No. 10.)
Safety for the Worker. (Vocational Division, Defense Training Leaflet No. 1.)
Training Restaurant Sales Personnel. (Vocational Division Bulletin No. 222.)
Vocational Training Problems When the War Ends. (Vocational Division Leaflet No. 12.)
War Production Occupations for Vocational Training.
The Worker, His Job, and His Government. (Vocational Division Bulletin No. 220.)

In order to meet requests for material which appeared in *Education for Victory* during the fiscal year ended June 30, 1943, reprints of 23 articles were made.

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ANNUAL REPORT

of the United States Office of Education

1944

FEDERAL SECURITY AGENCY

ANNUAL REPORT

of the United States Office of Education

FOR THE FISCAL YEAR

1944

[This report also constitutes
Section 2 of the Annual Report
of the Federal Security Agency]

FEDERAL SECURITY AGENCY . . . . . PAUL V. MCNUTT, *Administrator*
U. S. OFFICE OF EDUCATION . JOHN W. STUDEBAKER, *Commissioner*

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LETTER OF TRANSMITTAL

FEDERAL SECURITY AGENCY,
U. S. OFFICE OF EDUCATION,
Washington, D. C., October 28, 1944.

SIR:

I have the honor to submit herewith my report embracing the activities of the U. S. Office of Education for the fiscal year ending June 30, 1944.

Respectfully,

John W. Studebaker

U. S. Commissioner of Education.

The Honorable PAUL V. MCNUTT,
Federal Security Administrator.

FOREWORD

THE BASIC LAW establishing the U. S. Office of Education states that "The Commissioner of Education shall present annually to Congress a report embodying * * * such recommendations as will, in his judgment, subserve the purpose for which the Office is established."

In conformity with that legislative mandate this annual report has been prepared. Part I is devoted to a report of the activities of the various divisions and services of the U. S. Office of Education during the fiscal year ending June 30, 1944. Part II presents the Commissioner's recommendations for a Plan of Organization to Improve the Service of the U. S. Office of Education. Part I therefore looks to the past; Part II looks to the future. It is hoped that the entire report will be carefully studied as the basis for discussion and considered congressional action respecting the role of the Federal Office of Education in relation to organized education throughout the country in the years ahead.

• Part I •

Reports from Administrative Divisions

THE FOLLOWING REPORTS for the fiscal year ending June 30, 1944, were prepared by the various administrative divisions of the U. S. Office of Education. These reports give a condensed review of the year-round activities of the respective services and indicate some of the educational trends apparent during another year of war.

General Division

Programs of the various divisions continue to be significantly influenced by wartime needs of education and post-war planning for education. The programs reported this year are in the main continuations of those begun within the past 2 years. For example, School Services in War Areas, a project carried on in cooperation with the Federal Works Agency, is a continuation on a reduced scale of the former programs of extended school services for children of working mothers and school facilities in war areas. Activities in the field of school transportation in cooperation with the Office of Defense Transportation, and of physical fitness in schools and colleges supported by the Committee on Physical Fitness of the Federal Security Agency, were continued as in the previous year. Programs in the inter-American field were expanded in certain areas; and one entirely new phase, provision for the study of educational systems in the countries to the south of us, was added.

The following new programs were developed during the year in cooperation with other government agencies. (1) In pursuance of a recommendation made by the National Conference for Cooperation in Health Education held in April 1943, regarding the teaching of facts concerning the venereal diseases at the secondary school level, the Public Health Service made available to the Office one specialist in social hygiene. This program which operates largely in the field, is designed to study and evaluate successful programs of social hygiene education as carried on by schools. (2) In cooperation with the program of the Food Distribution Administration of providing school lunches, a consultant on the school lunch was appointed to advise with State departments of education in setting up the school lunch program in their respective States.

Reassignment of staff.—In order to improve and simplify the Office organization and to clarify relationships in the General Division, some reassignment of staff was made, effective May 1, involving personnel in the American Schools and Special Problems Divisions and

in health and physical fitness activities, and the consultants. The two divisions named were discontinued and personnel assigned to two new divisions, General Instructional Services and School Administrative Services. A new Division of Physical Education and Health Activities was created. Fields represented in these newly organized units are as follows:

General Instructional Services.
Industrial arts.
Nursery school-kindergarten-primary education.
Elementary education.
Secondary education.
Education of exceptional children.
Tests and measurements.
Rural education.
Negro education.
Parent education.

School Administrative Services.
State school administration.
School finance.
School plant
School legislation.
School facilities.
Transportation.
School board service.

Physical Education and Health Activities.
School health.
Social hygiene.
Physical fitness.

Consultants
Educational planning and research.
Educational services.
Extended school services.

Research and Publication.—Because the staff is more and more occupied in cooperative activities with war agencies and is devoting an increased proportion of its time to consultative and advisory services, fewer research studies have been made than formerly. But more responsible than shifting of emphasis in the work of the staff are wartime conditions and fiscal limitations affecting publication of research studies. During the last pre-war fiscal year, 1941, 38 research manuscripts were completed and sent to press. During the fiscal year 1944, manuscripts for but 11 research studies from the General Division were sent to the printer. Selection of those to be printed was made on the basis of greatest need in the present war emergency. The list includes for the past year the following subjects: Juvenile delinquency; the school lunch; education in China; free textbooks; Federal expenditures for education; schools and community organization, the last pamphlet to be issued in the Education and National Defense Series; two studies of educational needs after the war—School building needs and Our schools in the post-war world; and three statistical chapters of the Biennial Survey of Education, two of which, for State school systems and for higher education, were the surveys for two bienniums combined in reduced form into one study each. In addition, many articles were prepared and published in Education for Victory. These articles reported numerous studies and promoted many essential wartime activities in the schools.

School Administrative Services

School Administrative Services, organized in May 1944, was staffed with specialists in school organization and administration, school housing, legislation, finance, and transportation.

Much of the time of these specialists was required in connection with wartime programs and activities. This necessitated advisory and consultative services to Federal agencies responsible for programs affecting or involving public education and to State and local educational officials on problems of organization and administration arising in connection with wartime activities and on post-war planning.

Staff members were assigned to maintain liaison with the following national war agencies:

Office of Defense Transportation on problems in pupil transportation services arising in connection with the conservation program;

Federal Works Agency on school administration and other problems in school systems in war areas;

War Production Board on the salvage drive in schools; and on the effects of wartime restrictions and preference ratings on (1) general educational requirements for maintenance, repair, and operating supplies, and (2) on specific requirements in war areas for school facilities;

Office of Surplus War Property Administrator on problems of utilization and disposal of surplus property for educational use.

Members of the staff directed conferences of State supervisors of transportation held at the time of the regional meetings of the American Association of School Administrators in Atlanta, New York, Chicago, and Kansas City for the purpose of discussing problems of pupil transportation in wartime, particularly as they relate to obtaining new equipment, conserving present equipment, and applying the policies of the Office of Defense Transportation. They directed a conference in New York City of school business officials and other educational authorities to consider with representatives of national war agencies wartime restrictions on school equipment and supplies, fuel, pupil transportation, school lunchroom requirements; and to formulate recommendations for urgently needed adjustments in such governmental regulations. They also directed a conference of the Transportation Study Advisory Committee to assist the Office on formulating plans for State-wide studies on a Nation-wide basis of current practices in providing pupil transportation services.

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

1. The development of standards and educational requirements of school furniture and equipment in the interest of simplified practice and as a guide to the industry in manufacturing types of furniture which will be more functional as educational tools.
2. The preparation of the 1945 *Review of Educational Research* on the "School Plant and Equipment."
3. A study of school plant needs in non-urban areas as a basis for developing floor plans for community schools and for layouts

of special rooms such as libraries, shops, canneries, and science and homemaking laboratories.

4. The development, in cooperation with the Bureau of Agricultural Economics, Department of Agriculture, of preliminary sketches for school and community buildings needed in the Columbia River Basin Project.

5. The completion of the cooperative study of public-school expenditures to determine relative status of State programs of finance in terms of a weighted unit cost.

6. 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.

7. Formulating a statement of estimated school facility requirements in war areas as an integral part of the projected 1944 community facilities program of WPB.

8. Formulating a proposal for the utilization of surplus war property appropriate for educational use.

9. Developing statements of the need for a single State educational authority as the responsible State agency for maintaining Federal-State relations in Federal programs involving, for example, the utilization of surplus war property appropriate for educational use, the education and training of returning veterans, and the planning and constructing of educational plants as a part of a post-war public works program.

10. Developing a bulletin on the training of school bus drivers.

11. Formulating a statement on the function of pupil transportation in making school facilities available to all children.

12. Formulating plans for a program of State-wide studies to determine the need for and location of educational plant facilities.

Consultative field services were provided upon request in 36 States on school transportation and 12 States on problems in organization and administration and on post-war planning, with special emphasis on school plant surveys.

Considerable attention of specialists was required for consultation in the Office on these and related problems with State and local school officials from 15 States and with representatives of several Federal agencies and other organizations.

Two studies were completed during the year, viz: Federal Government Expenditures for Education, 1941 and 1942 (which study was published as Education Leaflet No. 70); and Bibliography on School Finance (Good Reference Bibliography Series). A review of Federal and State wartime legislation affecting education was reported in a series of 10 articles in Education For Victory.

The following studies are in progress: Federal Government Expenditures for Education, 1943 and 1944; Coordination and Improvement of School Laws; State Plans for Financing Education; 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; and Organization and Functions of State Departments of Education.

School Services in War Areas

Operating under the general supervision of this Division is the cooperative program with the Federal Works Agency through which Federal assistance is given to local schools for the maintenance and operation of regular school services and for extended school service programs for the children of employed mothers. This program is described in more detail on page 22.

School Transportation in Wartime

The Office of Education continued its cooperation with the Office of Defense Transportation, State departments of education, and other interested agencies in the conservation program as it involved school transportation in wartime. The continued employment of a specialist on school transportation problems was made possible by funds supplied by ODT for the year. The following activities are reported:

1. Representatives of the Office and of ODT met with State supervisors of pupil transportation at the four regional meetings of the American Association of School Administrators to discuss problems of school bus maintenance, of equipment needs, and of mileage conservation;
2. The specialist on school transportation problems rendered field services to State departments of education in 36 States;
3. The Office cooperated with State departments of education in conducting surveys to determine new school bus needs for 1944;
4. Plans for allocating available new school buses authorized in the production program by WPB were developed cooperatively with ODT and State departments of education; and
5. The development of school bus maintenance programs to insure maximum conservation of present equipment received special emphasis in all meetings and conferences on transportation.

General Instructional Services

Pressing current problems affecting school programs and educational practices claimed much of the time of the specialists in this division. However, in addition to the consideration given such problems, which either grew out of wartime conditions or were accentuated by them, the staff members insofar as time and facilities permitted, studied and reported on subjects in their respective fields which require continuous attention by the Office.

Special Groups: Education of Exceptional Children, Negroes, Migrants; Rural Education

Universal education as it exists in the United States includes in the total number of persons encompassed in its program some groups which differ, in terms of their own characteristics or in terms of their environmental experiences, from the majority. These differences are factors conditioning their educational achievement and require study in order to plan educational provisions to meet their special needs.

One such group, composed of exceptional children and youth, is the subject of continuous study and planning by this Office. At the present time all activities for this group have been colored by wartime demands and post-war considerations. With special attention to this situation studies of services rendered by schools for exceptional children and youth were continued during the year. This work included gathering information on practices in both elementary and secondary schools relative to adjustments in regular classes, the organization of special schools and classes in local school systems, and the programs of residential schools for children and young people who are physically or mentally handicapped or socially maladjusted. In efforts to forward the cause of exceptional children active cooperation has been maintained with the National Congress of Parents and Teachers, the American Association on Mental Deficiency, the War Relocation Authority, and the Children's Bureau. Articles dealing with this group of children were prepared and issued in Education For Victory and in a number of other professional periodicals.

During the war period there has been an increasing need for selected materials bearing upon Negro life. To meet this need there was compiled an annotated list of source materials, including books, articles in periodic literature, films, scripts, transcriptions, plays, pictures, exhibits, slides, etc. The list was prepared with a view to its use by elementary and secondary schools, college students, teachers, and adults interested in the contributions Negroes are making to American life. A study in intercultural education was completed of the opportunities afforded teachers to learn about certain of our racial and national minority groups. The report is now in press. An evaluation of research concerning Negroes during the past 3 years was made and is planned to appear as a chapter in an issue of the Review of Educational Research.

During the year studies were made, through field trips, office interviews, attendance at conferences, and the examination of current literature and special reports, of the effect war conditions are having upon programs in public schools and colleges in which Negroes are enrolled. Special attention was given to the adaptation of such programs to meet war situations. As a result of the information obtained in connection with this work, the Office has rendered extensive consultative and advisory services to various kinds of educational organizations and schools interested in making modifications in their programs and educational practices to insure their maximum efficiency during the war. To this end the Office has participated in the programs of many organizations and agencies interested in education, and has cooperated with agencies, for example, the Southern Education Foundation, in their projects to improve educational opportunities for Negroes.

The problem of children of migrants has for many years challenged the efforts of school administrators and teachers to provide them with educational facilities that will be feasible and effective. Particularly has there been a demand for materials on this subject that would serve as guides to such efforts. A chapter on this subject was prepared for the yearbook of the National Society for the Study of Education.

The war has brought problems to the rural high schools of the country that are just as serious as any found in urban high schools in

large industrial cities. In recognition of this fact the Department of Rural Education of the National Education Association decided to devote a part of its yearbook to this subject. At the request of that department the Office prepared a chapter on "The Victory Corps in Rural High Schools," which was published in the yearbook in the summer of 1944. In order to furnish references to recent materials in the field of rural education a number of bibliographies were revised during the year. Data and other forms of information were gathered from a large number of universities, colleges, and State school authorities on specific high-school courses offered by correspondence which would be useful to small high schools in improving their pre-induction training programs.

Pupil Welfare and Personnel

For the past few years the Office has had continuous requests as to practices in the various States relating to: (1) child accounting, with special interest manifested in the improvement of methods for taking a periodic census and for keeping a continuous census; (2) compulsory school attendance, especially with such provisions as govern methods used for realizing maximum attendance, provisions for exemption from attendance, and enforcement practices; and (3) child labor provisions as these are related to school attendance. During the year the Office completed a detailed study on each of these points for every State in the Union, and has a comprehensive manuscript ready for publication.

As a result of the work of the National Committee on Cumulative Records, appointed by the Office, a manuscript entitled "Handbook on Cumulative Records" has been prepared for publication. Two tests were issued by the Office, one the Victory Corps Aeronautics Aptitude Test, and the other the Scientific Aptitude Test. A study of their reliability and validity was made in cooperation with schools. The results of this study were given wide publicity through an article in the *Journal of Psychology* and reprints.

The Office of Education assigned for a part of the year its consultant in Tests and Measurements to cooperate with the War Department in the formulation of general policies for the use of its tests. This staff member has continued to emphasize as part of his responsibilities the continuous contacts with various research agencies in the field of education. One such activity has been serving as secretary of the American Educational Research Association.

One of the major problems of common concern during the year was the apparent increase in juvenile delinquency, particularly among youth of upper elementary and secondary school age in war-impacted areas. As a contribution to the solution of this problem the Office prepared and issued a report on what city school systems were doing to combat the problem; it also made available a loan packet of materials from various sources designed to be suggestive to communities and agencies in handling the situation. Articles appearing in Education For Victory called attention to desirable action and pointed to constructive programs under way.

In cooperation with the Children's Bureau, Department of Labor, material was prepared and given wide publicity on the desirability of youth continuing in school for the completion of the public-school pro-

gram. This material, which was duplicated and issued jointly by the two offices, sets forth facts about the number of children who were employed, and includes convincing statements from the President of the United States, the War Manpower Commission, and the National Congress of Parents and Teachers on the subject of why children of school age should attend school.

Curriculum and Teaching Problems: Elementary and Secondary Education

The demands for manpower had a decided effect on school enrollments, causing in industrial communities especially large drops in high-school enrollments. To meet this problem and also to realize inherent values in work experience, school systems began the development of work-school programs. The extent of such programs warranted the Office's undertaking a study of work-school provisions in various cities, a report on which was issued in Education For Victory.

The program for improvement in dental health of high-school pupils launched in the spring of 1943 by the American Dental Association, in cooperation with the U. S. Public Health Service and the U. S. Office of Education, was continued throughout the year. Responsibility for enlisting the assistance of the educational profession in the program was assigned largely to the Office of Education and was discharged through personal letters and articles in educational magazines. Because of its significance for post-war health, the dental program, begun as a war measure, will be continued.

A workshop on nutrition education at the elementary school level was conducted at the State Teachers College, Terre Haute, Ind., in cooperation with various agencies. The persons in attendance at this workshop were carefully selected for their ability to help bring about improvement of nutrition education in the public-school systems of their communities.

Studies were made of current school practices related to entrance regulations and legislation affecting school opportunities for children below the age of 6. A study was also made of the effect war conditions are having upon young children. These studies have been summarized and issued as current reports.

A conference of elementary school supervisors to study current problems in this level of education was conducted at the time of the meeting of the American Association of School Administrators at Chicago. The results of this conference were summarized in several articles appearing in Education For Victory.

Loan collections of current educational materials have been made available to study and conference groups and college students. These materials include sample books of report cards and illustrated leaflets explaining school programs. A selection and arrangement was made of educational materials for translation and use in Latin-American countries. A study was made of provisions in the various States for supplying at public expense textbooks and other instructional materials. A report on this study was issued as a bulletin.

The staff member in elementary education continued to supervise the work of the Inter-American Demonstration Centers. This year the Demonstration Center program was part of a larger teacher-education project. (For a full report of this project see p. 21.) Work with the demonstration centers consisted largely of developing

techniques and procedures for interesting teachers in the materials to be found in the Inter-American program.

Special Services for Schools: School Lunch, School Gardening, etc.

Early in the fiscal year the Office of Education called a conference of the executive committee of Chief State School Officers to discuss with representatives of the Food Distribution Administration and with selected State school lunch authorities the basic problems involved in making the best possible use of funds which the FDA was authorized to use "for the maintenance and operation of a school milk and school lunch program." As an outgrowth of the conference a statement of "Policies and Procedures" was drawn up and circulated to State departments of education. During the last half of the fiscal year funds were made available to the Office by the Food Distribution Administration for the employment of a consultant on school lunches to work with State departments of education in developing the educational phases of the school lunch program. Several documents were prepared and issued, including a summary of States' school lunch provisions—legal, financial, and supervisory personnel employed—and a check list for evaluating a State program of school lunch supervision. Articles were prepared for publication in Education For Victory reporting the outstanding school lunch programs of State, county, and local school systems.

The Office cooperated with the U. S. Department of Agriculture in the promotion of Victory Gardens, and for this purpose participated in two field conferences. An effort was made to center the attention of educators on the importance of school-directed gardening as a contribution to the Victory Garden program and as an important aspect of the school lunch program as a part of the instructional program of the school. Articles on this subject were prepared and published in Education For Victory.

The Office has gathered information and worked cooperatively with schools and the War Production Board in efforts to make available for educational purposes an equitable supply of paper for textbooks and of equipment and supplies for industrial arts work. Cooperative services have also been rendered in the promotion of campaigns for the collection by schools of paper and other critical materials and of milkweed floss.

Physical Education and Health Activities

Activities in the area of health, physical fitness, and social hygiene were coordinated during the year in the newly formed Division of Physical Education and Health Activities. Two specialists assigned by the Committee on Physical Fitness of the Federal Security Agency and one assigned by the U. S. Public Health Service to work in schools and colleges supplemented the regular health consultant services of the Office. None of the personnel was employed throughout the year. Four persons in a total of 26½ months on duty, provided the following services:

Physical Fitness Institutes to stimulate programs of health and physical education were conducted in five central, southern, and western centers. Ways of meeting the teacher shortage and of develop-

ing public understanding were considered in addition to program extension and perfection.

Forty schools and colleges and twenty-two professional conferences were supplied with consultation and speakers' services. The staff contributed leadership to six workshops and two in-service teacher-training efforts. Two of the former were conducted jointly with the U. S. Public Health Service, and served to bring together State and local leadership in education and in public health to view and make plans for the solution of health problems for which there was mutual concern.

State and local school officers are showing a lively interest in the reorganization of curricular emphases in health education. Similar interest is evidenced in college and university post-war planning committees. Consultation services have been made available to a number of such efforts.

Problems of juvenile delinquency and the threat of venereal disease, both accented by the war, have stimulated new interest in social hygiene. In cooperation with the U. S. Public Health Service a great deal of exploratory study has been directed toward the development of a sound educational approach to fundamental problems in this field. Already many school authorities and parent groups have indicated an interest in this kind of assistance.

The problem of motivation in health education has formed the basis of discussion and study in a number of workshops, teachers' institutes, and class-room observations. A publication illustrating methods of improving health instruction is in preparation. It will bring the results of this study graphically to the attention of health teachers.

In the conduct of its work the division enjoyed helpful cooperation with the Children's Bureau, the Office of the Coordinator of Inter-American Affairs, the War Production Board, the Committee on Physical Fitness, the U. S. Public Health Service, and other public agencies, as well as with a large number of voluntary organizations.

Statistical Services

The Statistical Division, operating in 1944 with only about two-thirds of its normal staff, continued its endeavor to meet first the demands of the war agencies for facts in the field of education needed in the various war programs, and, second, the normal demands for data collected through its periodic studies. To meet the first demand a survey of the effect of the war upon schools and colleges was made as of October 1943. To save paper and not circularize the schools twice, the National Education Association joined with the U. S. Office of Education in this survey, both using data from the same statistical form. The results were processed in limited editions as Circulars 227 (for schools) and 228 (for colleges). In response to definite requests many special tabulations of data and estimates were made for the various war agencies.

Because of fiscal limitations, the chapters of the 1938–40 Biennial Survey of Education for State School Systems, Higher Education, City School Systems, and Non-public Elementary and Secondary Schools could not be printed last year when they were finished. The first two were therefore combined during this year with data which

became available for the chapters of the 1940–42 Biennial Survey; the publication of the other two chapters had to be postponed. Brief pre-releases were put out to supply some data in the meantime.

The Office of Education cooperated with the Children's Bureau in formulating the questions and tabulation plans for the study of the working load of children, ages 14 and 15, 16 and 17, and 18 and 19, as special questions in the April monthly sampling survey of the Bureau of the Census.

The war has had its effect upon the recency of data available from the Office of Education. The most recent data on subject registrations in public and private high schools and academies are 10 and 11 years old (1933–34, 1932–33). The general data for public high schools by size and type are 6 years old (1937–38). Data on private schools giving trade and industrial courses are 10 years old (1933–34). Data on the salary, training, and experience of rural school teachers are 9 years old (1934–35). Data on private commercial and business schools are 11 years old (1932–33). More recent materials should be provided in all these fields at the earliest possible date.

The Library

The Office of Education Library contributed to the war effort during the year through increased loan and reference services to the Office staff, to other Government agencies, and to groups or individuals engaged in wartime activities. There has been continued use of its resources, moreover, by graduate students and professional research workers in educational fields.

Acquisitions

The acquisition of more than 8,000 separate publications during the fiscal year represents a continuing effort to build up and maintain in the Library an up-to-date and comprehensive collection of educational materials. The cooperation of publishers has enabled the Library to acquire display copies for its representative collection of textbooks and other works on education and related subjects. Funds have been allotted for the purchase of other books and periodicals. Acquisition of foreign educational publications for the most part has been suspended during the war, depriving the Library for the time being, at least, of current additions to a distinctive section of its collection.

Reference and Loan Services

The volume of reference and loan services has increased during the year beyond that normally expected. A partial reason is due to the removal of the Office of Education from its headquarters in the Interior Department Building to a temporary building several blocks away and inadequate to house the library. Books, therefore, in many cases have to be transported back and forth between the library and the temporary building. It is hoped that this condition can be corrected in the near future. Despite a decrease in reading room attendance, the number of books requested for reading room use has increased, while greater demands from Government agencies are reflected in an increased number of telephone calls and interlibrary loans.

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Bibliographical Service

While the publication of bibliographies has been curtailed during the emergency, efforts have been made to render service through Education For Victory, processed lists, and correspondence. These devices have been used also to make available data in the collection of 6,109 theses, representing 72 institutions depositing currently copies of graduate efforts in educational research. A limited number of bibliographies on topics of current educational interest have been compiled cooperatively by members of the Library staff and specialists in the Office.

Administration

Administrative problems of acquisition, cataloging, reference work, and bibliographical service have been complicated because of the retirement of four members of the staff, including the chief librarian, all of whom had served the library for many years. The public library specialist of the Office was assigned to act as chief librarian during the interim, and two positions involving order work and cataloging have been filled. Temporary adjustments in the assignment of duties enabled the Library to handle an increased volume of demands for service, at the expense, however, of a steadily growing body of unorganized material. A survey of the resources and organization of the Library was made during the year, including suggestions for administrative reorganization and expansion of services to meet current needs.

Service	*1942–43*	*1943–44*
Volumes cataloged	6,434	5,271
Books loaned	6,922	9,325
Theses loaned	559	601
Interlibrary loans	1,813	2,557
Reading room attendance	10,741	9,542
Books used in reading room	22,462	26,539
Telephone reference calls	3,517	6,676
Packets loaned	8,368	8,756

Information Exchange on Education in Wartime

The Information Exchange during the year loaned 8,756 packets of teaching aids in response to 4,170 requests from sources throughout the United States and abroad. Requests came from secondary school teachers, school administrators, elementary school teachers, librarians, and college faculty in the order named. Especially noteworthy was the use of packets during the summer of 1944 by 85 workshops, 30 of which were devoted to a study of Inter-American affairs.

Since the establishment of the Exchange in January 1941, approximately 6,000 packets on 30 subjects have been assembled and offered for loan to the schools. About 30,000 packets have been loaned since that time. The Inter-American series has been in greatest demand, followed for 1 year by the nutrition packets and for the past 2 years by the Far East packets. Next in order of demand (based on length of time each has been in circulation) have been the packets on the Soviet Union, democracy, the role of schools in wartime, health, postwar planning, consumer education, and guidance.

According to users of the service, it has been of invaluable assistance in teaching subjects for which there are no suitable textbooks and for which up-to-date materials are essential. Small schools with meager library facilities and well-equipped city schools alike call upon the Information Exchange for help. The largest number of requests have come from New York, California, Pennsylvania, Illinois, and Texas, although Alabama and Louisiana led the list for several months following visits of field agents from the Office of Education to those States.

At the close of the fiscal year, the services of the Information Exchange were terminated because of fiscal limitations. If they should be resumed, the experiences of the past 3 years will be extremely valuable. It should always be possible to determine the subjects for new packets on the basis of current emphases and trends in the curriculum. During the war years it has been clear that teachers wanted up-to-date information about the nations engaged in the war and about post-war plans, and there is keen interest now in plans for the education of returning service personnel.

Average monthly circulation of packets, 1943–44 and 1942–43

Number of times circulated	Subject of packet	
	1943–44	1942–43
Over 200	Inter-American understanding.	
150–199		Inter-American Understanding.
100–149	Far East.	
50–99		Far East. Nutrition. Understanding Democracy.
40–49		Health.
30–39	Guidance. Soviet Union.	Role of Schools in Wartime. Consumer Education.
20–29	Post-War Planning. Nutrition. Children in Wartime. Understanding Democracy. Role of Schools in Wartime. Conservation. Great Britain.	Post-War Planning. Conservation. School-Community Cooperation. Nursing. United Nations. Victory Gardens. Canada.
10–19	School-Community Cooperation. Juvenile Delinquency. Consumer Education. Nursing. Aviation Education. Negroes in American Life. United Nations. Health. Victory Gardens. Canada.	Guidance. Children in Wartime. Aviation Education. Negroes in American Life.
Under 10	Japanese-American Relocation Libraries. Poland. Intercultural Education. Libraries.	

Library Service

War-Related Activities

War-related activities featured most of the work of the Library Service Division during 1943–44. The division aided libraries by keeping them informed about Federal programs in which their participation was needed and by representing them in matters in which Federal policies affected library operation. By means of frequent articles in the "Libraries and the War" section of Education For Victory, it called to the attention of libraries the various programs to be stressed by the war agencies, such as manpower utilization, fuel conservation, rationing, and others. It served in a consultative capacity in many cases, and continued to work on the problem of document distribution to libraries.

Serving as a contact point between libraries and professional associations on the one hand and war agencies on the other, the division arranged numerous conferences at which library leaders presented briefs regarding the effects of regulations on the services to the war effort and to the home front.

The division continued to meet the demand from schools and libraries for the information about current war-related publications of Federal agencies, by preparing for each issue of Education For Victory, a selected, annotated bibliography, "U. S. Government Announces." During the year, a total of 285 entries representing some 75 different Governmental units were listed, after an examination of about 700 publications.

Exhibit Project

Closely allied to war activity was the extensive Latin American exhibit project operated by the division with the aid of a grant from the Office of the Coordinator of Inter-American Affairs. During the 1943–44 school year, these exhibitions of teaching materials were used by more than 656,000 students in 2,334 institutions. Twenty entirely new exhibitions were prepared. Nine of these, *The Spanish Language in the Countries South of Us*, are for the use of teachers of Spanish. They include storybooks, plays, biography, history of Spanish for young people, a Mexican puppet theater with puppets, and photographic mounts of costumes, dances, and heroes. A similar exhibition with Brazilian material was prepared for teachers of Portuguese.

Ten other new exhibitions in the field of social studies were constructed. In addition to books of biography, geography, economics, folklore, animals, history, music, art, science, and social problems, these exhibitions contain mounts portraying such subjects as topographical characteristics of South America, trees of Latin America with samples of the woods, and other resources of the Americas. Ten more sets of *Art in the Countries South of Us* were constructed, depicting the story of our southern neighbors from pre-Columbian times to the present through illustrations of their architecture, painting, and sculpture.

Descriptive leaflets and teachers' manuals were prepared for both the new and replenished exhibitions. Typical comments from educators who have used these teaching materials indicate that the exhibits are supplying much needed information and furthering a better understanding of the Americas.

Consultative Service in the Field

Travel restrictions and lack of personnel curtailed the amount of field service that could be rendered; however, the specialist in school libraries participated in the following conferences and in-service training institutes: Summer conference for school libraries at the State Teachers College, Geneseo, N. Y.; Summer institute for librarians, held at the University of Illinois Library School; Institute for librarians sponsored by the State Teachers College at Emporia and the Kansas Library Association; the Inter-American Workshop in Emporia and the Inter-American Center in Kansas City, Mo.; and the School of Library Service at Columbia University.

Other Activities

The major statistical undertaking of the year was the collection and compilation of basic data on the public-school libraries of the country. In response to a request made during the House subcommittee budget hearings, the division assembled figures regarding the effect of the termination of WPA funds on the libraries operated with WPA support.

The specialist in school libraries participated in the selection of children's books sent to the Near East by the Department of State and the books sent by the Y. M. C. A. to the mothers and children in the European internment camps; the specialist in public libraries recommended to the international organization concerned, books on history, political science, and economics at the college and secondary level for prisoners of war. During the year the specialist in public libraries was detailed to survey the Office of Education Library to study its organization and make recommendations for its further effectiveness. Pending appointment of a librarian, he served in that office.

Readjustment Period

With the readjustment period problems in mind, the specialists in school libraries have been working with school library leaders in the endeavor to formulate standards for the post-war period and to plan for needs. In connection with one phase of this activity, the Office of Education invited a small group of school librarians to Washington to confer with its staff members on the physical lay-out, equipment, and furnishing of libraries in various types of schools.

Comparative Education

Providing current information about education in other countries.— Through the section on "News from Abroad" in Education For Victory, the Comparative Education Division has tried to give a current picture of significant developments in the field of international education. Among the articles prepared were prompt reports on the progress of the British Education Bill, a detailed account of education in Iceland, and numerous reviews of recent publications on education in other countries.

Preparing basic studies on education in Latin American countries.— To promote a better understanding of education in the American republics and to provide a basis for closer cooperation in the field of

inter-American education, the Office of Education has undertaken the preparation of basic studies on education in a number of Central and South American countries. The work is based on a project approved by the Interdepartmental Committee on Cooperation with the American Republics. It involves travel by several persons in the various countries of Central and South America to gather first-hand data on their educational systems and to prepare reports from these data for publication. Beginning with March 1944, three Office of Education specialists were detailed for this work, one each to Mexico and Costa Rica, and one to the Dominican Republic and Uruguay.

Arranging internships for foreign students.—In cooperation with the Division of Cultural Cooperation of the Department of State, five Chinese students were made available to public schools and colleges, one each at Springfield, Mass.; Bronxville, N. Y.; Philadelphia, Pa.; Lincoln, Nebr; and Mills College, Oakland, Calif. Two Filipino internes were placed directly by the Office, one in Horace Mann-Lincoln School, New York, and in New York City schools; the other in Wilson Teachers College, Washington, D. C. Further, a Chinese graduate student of the University of Pennsylvania and an Afghan graduate student from Columbia University did from 3 to 4 months of internship work in the U. S. Office of Education.

Assisting in finding teachers for Afghanistan and the Near East.—The Division assisted the Department of State in finding United States teachers for Afghanistan, Turkey, and Beirut, Lebanon. Four teachers thus selected are now in Afghanistan and Turkey; two additional teachers will leave next year.

Assisting in the development of international understanding.—Arrangements were worked out with the University of Nebraska, the University of Montana, and three affiliated universities whereby a visiting Chinese professor spent some time in conference work and small group meetings at these institutions.

A series of six lectures on the peoples of the Far East 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 two lectures each on the people of China and Japan, and one each on the people of the Philippines and Thailand.

Preparing instructional materials.—Field work on China was conducted with the elementary school teachers in Bucks County, Pa., and on China and the Philippines at Horace Mann-Lincoln School and certain New York City schools. In both instances the work resulted in publications. Out of tentative listings of materials prepared in connection with the lectures on the Far East, longer lists of curriculum materials were developed on China, India, Thailand, and the Philippines. These included annotated references to books, pamphlets, audio-visual material, maps, and units of study.

Assisting students of comparative education.—The majority of the persons writing to the Division for information about education in other countries were university and college students preparing term papers or working on theses in comparative education. Other inquirers were university and college professors, school superintend-

ents, and teachers. While many of the requests were for education in general, many were concerned with specific phases such as elementary, secondary, or higher education; illiteracy; educational statistics; education in the countries at war; international education; and plans for post-war educational reconstruction.

Counseling of foreign students.—Requests for the evaluation of foreign student credentials came from 196 colleges and universities and other institutions. In all, 813 cases were received representing 73 different countries, an increase of 126 cases over the previous year. In terms of world areas, 329 cases came from 25 European countries, 141 from the British Empire, 225 from Latin America, 20 from the Near East, and 98 from the Far East. This represents an increase of 74 cases from the Far East; of 40 cases from Latin America; and of 18 cases from the British Empire. With reference to European countries the number of cases declined by 5, while those from the Near East declined by 1. Over one-half the cases came from nine countries: Germany, China, Canada, Austria, British West Indies, Iceland, Mexico, Panama, and England. One-fourth came from 12 countries: Colombia, France, Peru, Costa Rica, Cuba, Soviet Union, Italy, Poland, Brazil, Haiti, India, and the Netherlands. The remaining 189 cases came from 52 different countries.

Inter-American Educational Relations

The program of activities of the Division of Inter-American Educational Relations has expanded in terms of the scope of the several projects and in the number of specific activities. The expansion has been made upon the framework of the division built up during the past 5 years. Most of the funds received for the support of the division come by transfer from the State Department under the Budget "Cooperation with the American Republics." In addition, funds continued to be received for certain projects from the Office of the Coordinator of Inter-American Affairs.

Exchange of educational personnel.—One of the chief activities of the division is the administration of fellowships and professorships under the terms of the Buenos Aires Convention which has been ratified by 15 of the American Republics. This program involves assisting in the selection of candidates from other republics, recommending appropriate institutions for study, making arrangements for registration, and paying monthly allowances. During the year 26 fellowship students came for study in this country from 11 of the American Republics. During the year arrangements were also completed for 19 teachers of English from Latin America to obtain intensive training in language in our universities, subsequently these teachers were sent to selected school systems in this country to broaden their knowledge and contact with our schools. Ninety-five teachers of Spanish were selected from all parts of the United States and were then recommended to Mexican educational authorities as suitable candidates for the Spanish Language Institute held in Mexico City recently. Approximately 200 teachers and students from other American Republics who have come to the United States on programs other than those sponsored by the Government, have received guidance on

matters of selecting institutions in which to study or in which to observe educational practices. Upon the invitation of the Minister of Education in Haiti, the division continued a cooperative program designed to teach English in the schools of that Republic. It was responsible for selecting and sending teaching personnel to Haiti and for providing suitable teaching materials for the project.

Promotion of language study.—In the field of language study, the division has provided service for teachers and students of the four official languages of this hemisphere, Spanish, Portuguese, French, and English. This specific activity is intended to aid in interpreting the life and culture of all the American republics. During the year a collection of texts was assembled for the teaching of English as a second language and these materials have been made available upon request to the Army and Navy officials responsible for training programs, various governmental and private agencies, and to visiting Latin-American students and teachers. Articles dealing with methods and materials of teaching languages were contributed to 12 educational journals, and annotated bibliographies were compiled, published, and distributed to institutions and individuals interested in the problem of teaching languages.

The staff cooperated with the Brazilian Ministry of Education in sending instructional materials to United States teachers of Portuguese, and worked with educational officials in Mexico in planning an intensive summer course for United States teachers of Spanish. An experiment was initiated to determine ways and means of improving language instruction through the use, in our public schools, of native speakers. The city school system of Baltimore, Md., was selected for this experiment and the initial efforts seem both useful to Baltimore and successful in providing valuable data for similar programs in other cities.

Preparation and exchange of information on education.—The division has prepared summaries of significant articles, books, and studies on education which appeared in publications in the United States and in the other American republics. In cooperation with the Central Translating Division, Department of State, it has assisted in the selection and revision of official publications on educational practices in the United States. A bulletin, "Education in the United States," prepared by the Office of Education was translated into Spanish in connection with this program, and is now being widely distributed throughout Latin America. Several different requests have been received for as many as 500 copies. In addition, a report on the rural cultural missions in Mexico prepared especially for the Office of Education by the director of the missions, has been translated into English and is being summarized and prepared for distribution to a number of Government agencies and educational institutions.

Preparation and exchange of teaching materials.—Materials suitable for teaching on 15 different Inter-American subjects were assembled in loan packets and distributed to approximately 3,000 schools in the United States. In addition to these packets a large quantity of free materials was distributed to teachers, students, Pan-American club members, educational agencies, and institutions. Several hun-

dred packets containing bulletins and pamphlets describing United States education in its different phases have been sent on request to our Cultural Relations Attachés in other American republics; to Ministries of Education; and to universities, schools, and individual educators. In turn, a large amount of valuable material has been presented to the office by official agencies and individuals in other republics. These materials are now available for use by research students and teachers in the library of the Office.

The program of the division for the exchange of teaching materials includes the related activity of promoting extracurricular activities designed to develop friendship and understanding among students of the American republics. During the year a bulletin entitled "Inter-American Cooperation in the Schools: Student Clubs" was prepared for publication. Three news letters for Pan American club sponsors were issued and other appropriate materials were sent free or on loan to more than 1,500 Pan-American clubs throughout the country. Exchange of letters, books, music, pictures, stamps, flags, toys, and scrapbooks were arranged by the specialist on Pan-American Club Activities between members of the United States student clubs and young people in the other American republics.

During the year, the division has provided speakers and consultants for more than 75 Inter-American workshops, institutes, conferences, and teachers' meetings in all sections of the United States. In the workshop, curriculum guides, study units, and exhibits were planned and completed. The following two topics are representative of the great variety of study units which were prepared in these workshops: "Development of Latin American Life Through Progress in Transportation" and "Teaching Pan-Americanism Through a Study of the Rural Schools of Mexico." At one workshop the entire group devoted its time to the preparation of the course of study for Spanish in the elementary schools; and at another, the chief problem concerned the improvement of school-community relationships, especially in rural Spanish-speaking areas.

The chief of the division, accompanying the U. S. Commissioner of Education, attended the "First Conference of Ministers and Directors of Education of the American Republics." The conference was held in Panama and was devoted to discussion of the long range cooperative programs between this country and other American republics.

Inter-Divisional Programs

Cooperating With Voluntary Organizations Which Have Educational Programs and With Professional Groups

Lay groups.—The general situation in education—indicated by the increase of delinquency among children and youth, curtailed enrollments, especially in secondary schools and colleges, scarcity of qualified teachers, and a renewed interest in post-war planning—is resulting in increasing requests to the Office for information and guidance in the study of such problems, especially from voluntary lay groups. Generally these groups are interested in studying their own State and local education systems with a view to profiting by the example of progressive systems elsewhere. Advisory relationships on educa-

tional problems have been maintained with such groups as the General Federation of Women's Clubs, the National Congress of Parents and Teachers, the American Association of University Women, the National Association of Junior Leagues, the National Grange, and other agencies with wide influence in shaping policies concerned with lay responsibility for school programs.

In order to meet the increasing requests from national officers of these and other organizations there were prepared during the year study or discussion guides on such topics as personnel and guidance services, recreation, the school lunch, extended school services, together with informational materials for their use in study or discussion. Among such materials are: Suggestive programs for club meetings, lectures, packets containing publications and information on the topics included in the study guides, etc. A file of voluntary organizations which maintain education committees or follow definite policies in education has been prepared to assist specifically those working for improved educational opportunities in their States or communities.

Professional groups.—Among professional agencies with special emergency problems served during the year is the American Association of School Social Workers, better known as visiting teachers. Schools in increasing numbers are finding the services of these special workers indispensable in solving certain personnel problems leading to failure of children to avail themselves fully of the opportunities the school offers and consequently to truancy, early dropping out of school, and often to delinquency. Their place in school systems, their functions, qualifications, salaries, etc., the types of organization needed to extend and improve their services, as well as questions of their professional status as combined school and social workers, were subjects of study during the year.

The Office also collected and edited two series of articles, one on the educational contributions of lay groups, and one on the need for and achievements of visiting teacher services in the schools—a much-needed contribution to school officials concerned with behavior and other pupil personnel problems. Both series appeared in issues of Education For Victory.

Program Planning in Education

Interest in educational planning continued throughout the year, especially on the part of State and local boards, commissions, or committees.

The association of the Office with the chief State school officials concerning their programs for post-war planning and their interest in general planning which affects education has been beneficial and has enabled the Office to keep a continuing file of progress made in educational planning by the different States.

A number of pamphlets on different phases of educational planning have been added during the year to the series "Planning Schools for Tomorrow." One, "Our Schools in the Postwar World: What Shall We Make of Them?" has been printed and distributed. Four others have been prepared and were ready for printing at the close of the year. They are: School Recreational Services for Children and Youth, The Needs of Exceptional Children, Pupil Personnel Services for All Children, and Good Health for School Children.

An article summarizing progress in educational planning in the United States and insofar as possible in other countries was prepared and published in EDUCATION FOR VICTORY.

Cooperative Project for Education of Teachers on Inter-American Education Affairs

A series of inter-related education projects, developed in the interest of the Good Neighbor Policy and made possible through a grant from the Office of the Coordinator of Inter-American Affairs, was planned and directed by the Office of Education. The goal of the year's program was to give schools and teacher-education institutions an opportunity to share experiences and resources with other schools; to develop programs indigenous to Spanish-speaking communities which can later be extended to other situations with similar problems; and to include in the pre-service education of teachers a desirable point of view, plus some concrete experiences contributing to an inter-American program. Brief outlines of the projects follow.

Demonstration Center Project.—From the approximately 30 centers which had operated during the preceding fiscal year, 10 which had been particularly successful in conducting inter-American programs were selected to cooperate with the Office in an effort to extend their influence to other schools in adjacent communities. Each center organized a team or teams of persons representing elementary, secondary, and teacher-college levels and special interest fields such as music, art, Spanish, social studies, for the purpose of visiting and cooperating with a limited number of schools within the assigned area. The purpose was that of stimulating and evaluating a program of inter-American studies as a part of the existing curriculum. Service was given to the participating schools through conferences, exhibits, workshops, and demonstrations.

Teacher-training programs.—Curriculum workrooms were set up in each of 6 teacher-training institutions where students specializing in elementary and junior high school work were given increased opportunities for the study of the other American republics and a better background for later classroom work in this field. Each of the workrooms was under the direct supervision of a social studies specialist from the institution's staff.

Programs in Spanish-American communities in the Southwest.—Five school-community projects were developed, centered in as many teacher-education institutions located in or near Spanish-speaking communities in the Southwestern States. The objectives of the five projects were (*a*) to cultivate interest in and appreciation of education in the respective communities through focusing school programs on community needs and (*b*) to develop attitudes and techniques suggestive in the in-service and pre-service education of teachers. The services rendered by each project reached from 6 to 13 schools or school systems and several thousand Spanish-American pupils as well as the student teachers in the institutions represented.

All of the projects mentioned involved considerable correspondence, preparation of materials, supervision by the project coordinators, and by the committee member directing the respective programs, including personal visits as well as conferences at the project centers and in the Office of Education.

School Services in War Areas

School needs in war areas.—Local school administrative units in war areas continued, during the year 1943–44, to need Federal assistance from Public Law 137 (Lanham Act) for (1) school building facilities and (2) maintenance and operation of regular school services and of extended school services for children of working mothers. Extended school services included nursery schools for preschool children and before-and-after-school, holiday, and vacation programs for school-age children.

Administration of Public Law 137.—In accordance with the amendment (Public Law 150) to the Lanham Act, applications by local school districts for Federal assistance were referred to the U. S. Office of Education for recommendation as to need. These recommendations, which served as a basis for final review by the Federal Works Agency, were made by field consultants of the Office assigned to the several regional offices of the Federal Works Agency. These consultants cooperated with State departments of education and local educational authorities in determining the need for assistance. Funds for use by the Office of Education to provide these consultative services were transferred to the Federal Security Agency by the Federal Works Agency. These funds were sufficient to provide a staff of six consultants in the field and one specialist on school facilities and a clerk-stenographer in the Washington office.

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

Increasing need for the employment of women in industry and activities connected with the war effort resulted in about 600 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.

Cooperation with other Federal agencies.—To coordinate efforts in the field of community facilities in war areas the Office has cooperated with the following agencies in developing adequate services for children: the Federal Security Agency's Office of Community War Services, Federal Public Housing Authority, War Production Board, War Manpower Commission, Federal Works Agency, War Department, Office of War Information, Children's Bureau, and Committee on Congested War Areas.

Informational service concerning extended school programs.—A series of articles in Education For Victory, news letters, reports, loan packets, and correspondence have all been utilized for disseminating information on extended school services to State departments of education, local school systems, child-care committees, and others interested. Through the distribution of materials and participation of staff members in national meetings, service has been rendered to many lay and professional organizations.

Higher Education Division

Services to Colleges and Universities

Activities of the Division of Higher Education during the year, as during the preceding year, were associated to a considerable extent with the numerous and diverse tasks of the institutions of higher education in support of the war effort. As the time of victory approaches, however, and as the extent of present and future wartime losses in the educational services of the institutions became more apparent, increasing emphasis was given to the study of ways and means for repairing or preventing some of these losses. Many of the fruits of victory undoubtedly will be lost if the quantity and quality of the Nation's professional, managerial, research, and other leadership are not restored and improved as early as possible in the post-war period.

Effects of the War Upon Colleges and Universities and Upon Teacher Personnel

A study of staff and student personnel conditions in the colleges was conducted jointly with the Statistical Division of the Office. More than half of the 1,702 institutions of higher education cooperated. That there would be increasingly heavy losses in the future social, economic, and civic life of the Nation through failure to prepare an adequate supply of trained leadership was indicated by a 44 percent loss of civilian students since 1939. There was a 17.9 percent loss of civilian and military students combined. Heavy losses in graduate enrollments—some 69 percent in the 4 years—tended to shut off the supply of the Nation's highly trained leadership at its source. A 10-percent reduction in the number of college staff members during the same period was accompanied by a loss of many of the institutions' abler young faculty members. Toward the close of the year, an even more serious situation with respect to personnel and finance threatened several hundred institutions because of the discontinuance of most of the work of the Army Specialized Training Program and of related war-training activities. Some investigation of the possibility of extending the programs of the colleges, with outside help, to include additional service was also undertaken by the Division, and proposals were made for action.

The findings of a number of studies concerning the effects of the war upon teacher personnel were brought together and disseminated. A brief study concerning the effects of the war on the regular and emergency certification of teachers, was initiated. Forty-eight States cooperated. Preliminary returns to June 30 indicated that regular certification requirements had not been lowered significantly despite the serious wartime shortage of teachers, but that the number of emergency permits issued in order to legalize the employment of teachers who could not meet regular requirements had increased to approximately 69,000—nearly double the number issued during the preceding year, and a 15-fold increase since June 1942. The lowering of teacher competency through the employment of emergency teachers, the doubling of the normal teacher-turnover rate, the closing of 7,700 classrooms during the year because teachers could not be

found, and the loss since 1940 of more than half of the prospective teachers enrolled in teacher-education institutions, were disclosed by Office studies. These studies indicated that the necessity for early action to restore pre-war standards and to assist in the resumption of earlier advances is imperative.

Efforts by the Division to assist in maintaining as many as possible of the gains made before the war in the professionalization of teaching followed the most widely established technique available; namely, supplying the facts about the situation to the public, which supports the schools. Nearly a score of articles, circulars, pamphlets, and other publications were written and disseminated during the year. The topics covered included means for relieving teacher shortages, availability of teacher-placement services, extent and nature of the teacher shortage, suggestions to applicants for securing teaching positions, trends in enrollments of prospective teachers, teacher-certification practices, teaching as a profession, and many related topics. The major news services, and both lay and professional periodicals cooperated with the Office in calling the attention of the public to the plight of the schools. There is evidence that genuine gains were made in remedying conditions, although the teacher shortage will doubtless remain serious until after the end of the war.

Most of the field work in teacher education was also devoted to informational services concerned with teacher shortages and means for improving the services of emergency and other teachers. Meetings of national or regional organizations in which the staff member in teacher education participated, included those of the American Association of Teachers Colleges and the American Association of School Administrators, Atlanta; National Conference of State Supervisors of Occupational Information and Guidance, Cincinnati; Training Aids Development Section of the Navy, New York City; Eastern States Association of Professional Schools for Teachers, New York City; and Institute on Professional Relations, Gainesville, Fla.

Accredited Higher Institutions

In order to continue the service rendered to educational officers and students as well as to Government agencies over a long period of years, the Division prepared another compilation of accredited higher educational institutions for publication in a bulletin. Prior to the war it was customary to publish such compilations at intervals of approximately 4 years. Six years have elapsed since the publication of the last bulletin in 1938, but in the meantime two mimeographed compilations were issued for the particular use of the Army and Navy in selecting colleges and universities for many purposes, including the placement of their war-training programs, and for other Government agencies in making appointments to positions requiring college or university training. An effort was made to make the present compilation more useful than previous ones by indicating the purposes of each agency in accrediting institutions.

Contributions to Education for Victory

Through contributions to the Office's periodical Education for Victory, information has been published regularly on the Government activities involving the participation of colleges and universities. In

each issue also space has been given to accounts of the wartime work of higher educational institutions. These accounts have dealt latterly more with the plans of the colleges for post-war education.

Land-Grant Colleges and Universities

The usual activities of the Office relating to the land-grant colleges and universities were carried on. Annual reports were received from all the institutions. The Division cooperated with the Statistical Division in the preparation of the Office's annual report on these colleges and universities. The certification of the Federal funds for the institution, as required by law, was prepared.

During the year 1942–43 the 69 land-grant colleges and universities enrolled 235,389 students in residence, a decrease of 37,005, or 14 percent, from the year 1940–41. A total of 42,626 degrees were conferred, of which number 5,192, or 12 percent, were graduate degrees. During the 2 years from 1940–41 to 1942–43 the number of degrees conferred dropped 16,387, or 28 percent.

The income of the land-grant colleges and universities for general and educational purposes for the year 1942–43 amounted to $221,671,636, of which amount 27 percent was from Federal sources. An additional amount of $5,849,472 was received for physical plant and $10,023,694 for addition to endowment. Contrary to the decrease in enrollments and number of degrees conferred from 1940–41 to 1942–43, the income for general and educational purposes increased $49,484,964, or 29 percent.

The question had arisen in several States as to the necessity of legislative appropriation by the State of the Morrill-Nelson-Bankhead-Jones funds to make them available to the land-grant colleges and universities. The office of the General Counsel of the Federal Security Agency developed an opinion that appropriation of these funds by the State legislature is neither necessary nor permissible and that in accordance with the law the Federal funds must be made available to the colleges and universities immediately upon their receipt by the State Treasurer. Mimeographed copies of the opinion were sent to the land-grant colleges and universities.

Howard University

The annual report of Howard University for the fiscal year ending June 30, 1943, was received. (The 1944 report will not be available until later.) Data have also been obtained from the University for the fiscal year ending June 30, 1944. During the latter year, the seventy-seventh in the history of the University, it operated nine schools and colleges, enrolled 4,196 students, and employed a teaching staff of 278 (193 full-time equivalent) persons. The enrollment was the highest in the history of the University. The total income for the year was $1,914,215, of which amount 64 percent was from the Federal Government. (A more detailed statement on the University's activities during 1943–44 appears in Section 7 of the Federal Security Agency's Annual Report.)

Adjustment of College Curricula

During the year the project on the adjustment of college curricula to wartime conditions and needs was completed. This project, begun

in 1942, was under the general direction of a committee of five persons appointed by the U. S. Office of Education Wartime Commission. The committee obtained the cooperation of the national associations of college teachers in each of the principal fields of study in the arts and sciences, which appointed a subcommittee to prepare the report for that field. A total of 21 reports have been prepared and distributed to the colleges and universities of the country.

The colleges and universities are now engaged in planning their services for the post-war period. One of the most perplexing problems that confronts them is the curriculum in the arts and sciences. In order to assist them in dealing with this problem a project has been outlined to indicate the contributions which each of the several fields in the arts and sciences can make to a liberal education. The plan is to enlist the assistance of the national associations of college teachers to prepare a report which will describe the intellectual content of a liberal education.

Clearinghouse of Information on Post-War Planning

In November 1943 a letter was sent to all the colleges and universities of the country announcing that the U. S. Office of Education would serve as a clearinghouse to collect information on post-war planning in colleges and universities and make it available in suitable form to institutions and persons interested. Using the information thus collected, a brief report entitled "Devices and Plans Reported by Institutions" was prepared and widely circulated in a conference workbook on problems of post-war higher education. Much of the information received from the institutions was published in EDUCATION FOR VICTORY.

Post-War Planning in Higher Education

During the year almost every activity of the Division was affected by the Nation-wide interest in educational planning for the post-war period. Beginning with the fall of 1943, especial attention has been given to field work with groups of college officials who were making exploratory studies of their common post-war problems. In addition to the attention given to post-war problems by regular members of the staff, a State university dean was employed for 6 months to give leadership to the project. During this period the staff produced a *Conference Workbook on Problems of Post-War Higher Education* which has been used widely by groups engaged in post-war planning.

Beginning with January 1944, a full-time staff member was added to give direction to State-wide and similar conferences on post-war planning. Staff members participated in a number of State-wide conferences. Participation has been by invitation from voluntary organizations that were working cooperatively on groups of post-war problems, such as admission and credit for returning veterans and war workers, changes in counseling and guidance procedures to meet the needs of veterans, peacetime lessons from the training programs of the armed forces, and courses and curricula needed to meet the needs of all post-war students, especially short-time occupational and life-needs programs.

The post-war problems of higher education are not new. Rather, they are persistent problems that educational institutions must resolve anew in terms of the economic, political, and cultural conditions likely to prevail in post-war America. In a number of States the Division has also been instrumental in getting the institutions of a State to take an inventory of their facilities and to make a determination of the uses to which they are willing to put these facilities in the immediate post-war period.

Dental 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 committee to have charge of the work. A member of the staff of the Division of Higher Education was selected to serve as the chairman of the committee. Plans have been developed for the appointment of subcommittees of dental teachers—one for each of the principal subjects of the dental curriculum—to make studies, prepare reports, and organize group conferences for the annual meetings of the Association.

Engineering, Science, and Management War Training

The Engineering, Science, and Management War Training program of the fiscal year 1943–44 is the successor to the three similar programs which have been conducted since October 9, 1940. For brevity, the program is usually referred to as the ESMWT–II 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 of the U. S. Office of Education was authorized to conduct ESMWT–II in Public Law 135—78th Congress, 1st Session, approved July 12, 1943. That Act provided $25,000,000 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. These courses were required to be of types approved by the Chairman of the War Manpower Commission. Not to exceed 20 percent of the amount allotted from this appropriation to any school was expendable for the purchase of additional equipment and the rental of space.

The total number of men and women enrolled in ESMWT–II was 411,937, and approximately $18,000,000 of the $25,000,000 appropriation was encumbered to meet the cost of their instruction. The saving of $7,000,000 resulted from 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

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trained personnel in the authorized fields far exceeded the capacity of all facilities provided to meet it.

Of the entire ESMWT–II enrollment, 270,715 were in courses organized to meet the shortage of engineers; 11,275 in courses for chemists; 9,280 in courses for physicists; and 120,667 in courses relating to nonengineering production supervision.

Trends in enrollment.—The peak of enrollments has passed and a downward trend has begun. This trend to date is not believed to correspond with any decrease in the need for college-trained engineers, chemists, physicists, production supervisors, and their technical assistants, but with depletion of the supply of qualified, potential trainees, and the consequent meager success of all efforts to spread courses of demonstrated value over wider areas. 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, and the limited number of high-school graduates with knowledge of mathematics—curtailed the volume of preemployment training, despite all efforts of institutional representatives to maintain it. The training of employed persons for up-grading to more responsible work was not so drastically affected, however, and enrollment in in-service courses continued at about the level of the previous year's program in which total enrollment was considerably greater. This situation accounts for the relative rise of in-service enrollment in ESMWT–II to 89 percent of total enrollment as compared with ESMWT–I in-service enrollment which was only 64 percent of the total for that year's program.

Table 1, which sets forth the 10 specific types of courses in which greatest ESMWT–II enrollments were reported, affords an interesting contrast with similar data for the preceding fiscal year. Industrial Organization and Management courses, for instance, which ranked seventh among last year's enrollments stands first in ESMWT–II. Conversely, Engineering Drawing and Descriptive Geometry courses have dropped in rank of enrollment from first place in ESMWT–I to fifth in the program here reported. 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 types of course from July 1, 1943 through June 30, 1944

Type of course	*Enrollment*	*Percent of total*
Industrial Organization and Management	36,346	9.0
Personnel Administration and Labor	33,652	8.4
Accounting	27,436	6.8
Mathematics	26,695	6.6
Engineering Drawing and Descriptive Geometry	26,086	6.5
Communications	19,169	4.8
Industrial Production Engineering	16,303	4.0
Aeronautical Structures	16,195	4.0
Safety Engineering	15,548	3.9
Electronics	15,087	3.7
All other courses	170,167	42.3
Total	402,684	100.0

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

Table 2.—Cumulative enrollment, by State, from July 1, 1943, through June 30, 1944

State	Enrollment	Percent of total
California	72,651	18.0
Pennsylvania	40,005	9.9
New York	35,984	8.9
Illinois	32,306	8.0
Texas	31,521	7.8
Ohio	21,518	5.4
New Jersey	19,453	4.8
Indiana	18,373	4.6
Michigan	13,757	3.4
Alabama	9,955	2.5
All other States	107,161	26.7
Total	402,684	100.0

Training of women.—Enrollment of women declined from nearly 22 percent of the total enrollment at the end of the first quarter of ESMWT–II to approximately 17 percent at the end of the fiscal year. The many opportunities opening to women with little preliminary training for large earnings and glamorous employment and the dearth of girls who had had basic mathematical instruction in high school or college, made it extremely difficult to fill women's classes for college-level training. Nevertheless, the ratio of women to the total of persons in training seems to have stabilized at about 17 percent.

Table 3 gives the female enrollment and percent of female enrollment in the 10 types of courses that ranked highest in the enrollment of women during the ESMWT–II program.

Table 3.—Cumulative female enrollment, by specific types of course, from July 1, 1943, through June 30, 1944

Type of course	Enrollment	Percent of total
Accounting	10,298	13.3
Personnel Administration and Labor	9,818	12.6
Engineering Drawing and Descriptive Geometry	9,040	11.6
Aeronautical Structures	4,370	5.6
Mathematics	3,810	4.9
Industrial Organization and Management	3,368	4.3
Communications	2,935	3.8
Office Management	2,601	3.4
Aeronautical Inspection and Testing	2,618	3.4
Analytical Chemistry	2,217	2.9
All other courses	26,443	34.2
Total	77,518	100.0

Training of Negroes.—Little change in the ratio of Negroes to total enrollment has occurred during the fiscal year, Negro enrollments have increased from about 1.75 percent of ESMWT–I to approximately 1.83 percent of ESMWT–II enrollments. Table 4 presents Negro enrollments in the 10 courses recording the highest nonwhite enrollment.

Table 4.—Cumulative Negro enrollment, by specific types of course, from July 1, 1943, through June 30, 1944

Type of course	Enrollment	Percent of total
Communications	974	13.2
Engineering Drawing and Descriptive Geometry	903	12.2
Personnel Administration and Labor	680	9.2
Analytical Chemistry	597	8.1
Industrial Organization and Management	477	6.5
Office Management	415	5.6
Accounting	348	4.7
Electricity and Magnetism	308	4.2
Mathematics	301	4.1
Power Generation and Transmission	161	2.2
All other courses	2,218	30.0
TOTAL	7,382	100.0

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 are attending ESMWT courses. While the program, of course, has made no effort to discriminate against such men, the training usually does not appeal to those facing imminent induction, and employers prefer 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. The percent of veterans actively enrolled indicates a consistent gain from a low of 0.39 percent enrolled in July 1943, to 3.44 percent at the end of the program in June of 1944.

ESMWT has no special authorization for the training of veterans; and, consequently, they are enrolled under exactly the same terms and conditions as apply 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 is conducted.

That no distinction is made between veterans and nonveterans in accepting enrollments at the participating institutions is borne out by a comparison of table 5, 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 5.—Rank of courses with greatest veterans' enrollment, from July 1, 1943, through June 30, 1944

Type of course	Enrollment	Rank in veterans' enrollment
Mathematics	471	1
Personnel Administration and Labor	416	2
Communications	385	3
Industrial Organization and Management	385	4
Engineering Drawings and Descriptive Geometry	376	5
Accounting	304	6
Production Engineering	293	7
Aeronautical Structures	257	8
Electronics	224	9
Safety Engineering	151	10

Relationship to the War Manpower Commission.—This year the Congress placed ESMWT under the Federal Security Agency, U. S. Office of Education, requiring that the types of courses to be offered in ESMWT be approved by the Chairman of WMC.

Although these provisions of the Law had the effect of placing ESMWT outside the constituent agencies of the WMC Bureau of Training, the Director of ESMWT has continued, in voluntary cooperation, the plan of operation adopted in the ESMWT–I program.

To implement this plan, Regional Representatives were continued on duty in each War Manpower Region; all contacts in the field between ESMWT and WMC were channeled through ESMWT Regional Representatives; and copies of course proposals, enrollment reports, and similar documents were routed from the institutions within each WMC Region to the appropriate ESMWT Regional Representative who, in turn, supplied such information as was needed and requested to the WMC field staff.

This plan was eminently successful in meeting the requirements for smooth cooperation between the two agencies at the regional level; and is being continued.

The Congress provided in Public Law 373—78th Congress, 2d Session, the sum of $10,000,000 to finance the continuation of ESMWT during the 1945 fiscal year.

Student War Loans Program

In 1942 the Congress appropriated 5 million dollars to provide loans to needy students in the following technical and professional fields: Engineering, physics, chemistry, medicine, veterinary, dentistry, and pharmacy. The loans were to enable such students to complete their accelerated courses and speedily put their training to effective civilian service in the war effort. During the fiscal year 1943 a total of 11,081 students in 286 colleges and universities had received war loans amounting to $2,941,301.64.

However, as a result of factors arising subsequent to the inauguration of the loan program—such as the lowering of the draft age and the establishment of college training programs by the Army and Navy—the Congress decided in 1943 that the usefulness of the loans had been too seriously curtailed to warrant continuation of the program after June 30, 1944. A further stipulation was made to the effect that during the fiscal year 1944 the loans should be available only to those students who had entered the program the previous year. Due to losses caused by graduation and constant attrition to the armed forces, the number of students remaining eligible for loans shrank rapidly, with the result that during the fiscal year 1944 only 1,567 students were assisted by loans which totaled $409,478.41.

The following table summarizes the separation of student war loans borrowers from the program, reported as of June 30, 1944:

Inducted by Selective Service before graduation	118
Entered service voluntarily before graduation	3,891
Graduated and in military service	1,473
Graduated and placed in essential employment	2,025
Graduated, but not yet placed	156
Authorized withdrawal for illness, etc	101

Withdrawal outside terms of agreement	24
Died	4
TOTAL	7,792

These figures indicate that the great majority of borrowers entered the armed forces, the largest category of them being reservists who were called to active duty before their graduation. Although only one student in every four has therefore been permitted to utilize his specialized training in essential civilian services, it is obvious that the additional education which the loans made possible has given the other borrowers an opportunty to make a more effective contribution to their various assignments in the armed forces.

In view of the fact that the law provided for the cancellation of the loans of those borrowers who were inducted by Selective Service prior to their graduation, it is important to call attention to the fact that only 118 students had benefited from this provision through June 30, 1944. The total amount of cancellations is only $21,908.95.

Borrowers serving in the armed forces receive the privilege of having repayment of their loans deferred during the period of their active duty. Despite this fact, and the further fact that in only a small percentage of cases had the first of four annual installments of repayment fallen due prior to June 30, 1944, collections amounting to $133,745.49 of principal and $7,833.02 of interest had been made. It is especially gratifying that 439 borrowers have already paid their notes in full during their first year out of college, although the law allows them 5 years for repayment. The present steady repayment of principal and interest indicates that the loans program will be nearly self-liquidating.

This experiment in the use of Federal funds for loans to assist selected students in completing their higher education has not only proved to be an inexpensive means of providing urgently needed personnel for the war effort, but has also had an even broader human significance.

Vocational Education Division

The following is a report of the 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 Office of Education, as well as the emergency war training programs conducted under Public Law 135.

Enrollments in all schools and classes for the year 1943, the latest for which complete statistics are available, totaled 2,284,066. This includes 492,932 persons enrolled in vocational agriculture classes; 618,471 in trade and industrial education; 874,342 in home economics courses; and 298,321 in distributive education. Preliminary statistical reports for 1944 indicate a reduction in enrollments to a total of 2,008,489. The foregoing enrollments do not include the enrollments in the emergency war training programs in which 1,507,770 persons were enrolled in Food Production War Training and 1,705,050 enrolled in the Vocational Training for War Production Workers Program during 1944.

Agricultural Education

Fiscal year 1944 was the third consecutive year in which there was a serious decrease in agricultural education programs. This is due chiefly to losses of vocational agriculture teachers in spite of the fact that they have been considered essential to the war effort. Records show that many teachers have been lost through induction and enlistment into the armed services as well as to business and Government agencies which need men similarly trained and are able to offer greater remuneration.

There were 9,079 departments of vocational agriculture during the 1942 fiscal year. The figure dropped to 8,452 for the next fiscal year. It is estimated that there were 7,000 departments of vocational agriculture in actual operation as of June 30, 1944.

Supervised Farming

Food and fibre are fundamental to the successful conduct of the war. The production of these two items are the objectives of supervised farming programs conducted by students of vocational agriculture, working under the guidance, supervision, direction, and instruction of teachers of vocational agriculture. From this it can be understood that the national program of vocational education in agriculture is making a direct and practical contribution to the war effort. Reports from the States indicate an increase in production by students of vocational agriculture, of nearly 100 percent in value for each crop year since Pearl Harbor.

Educational Service

Staff members of the Agricultural Education Service through conferences, correspondence, and personal contacts in the field, have stimulated State staffs and teachers of vocational agriculture to increase their emphasis upon the approved planning, production, harvesting, processing, distributing, storing, and utilization of such commodities as fruits, nuts, vegetables, grain crops, roughages, and poultry and animal products which are so essential at this particular time.

New farm machinery available for purchase by farmers has not met the needs. The number of new parts to service used machines has not been adequate. Fortunately, vocational agriculture departments have been so equipped that thousands of used and discarded farm machines have been reconditioned for use. This means of further mechanization was instrumental in promoting an unprecedented level of agricultural production.

Farm Labor Training

Staff members have worked with the States to help alleviate the critical farm labor shortages. Thousands of urban youth of in-school age have been carefully selected, trained, and placed on farms during harvest seasons and at other times when peak labor loads occur. The States were also given assistance in the establishment of short-unit training programs for adult farmers employing inexperienced farm laborers to assist them in giving effective training on the job.

Research

During the past year research activities have been directed toward post-war planning needs. Particular consideration is being given to the results attained by youth and adult educational programs which have been either established or stimulated in an effort to meet wartime educational training needs in agriculture. Cooperation continued with the Department of Agriculture, Children's Bureau, and the State departments of agricultural education, in the development of training programs and training aids for in-school urban youth who intend to work on farms during the summer and at other times when not in school.

Farm Youth Organizations

The Future Farmers of America, an integral part of the vocational agriculture program, has felt the reduction in number of departments of vocational agriculture and qualified teachers serving in these departments as advisers of local chapters. The Agricultural Education Service has cooperated with many wartime agencies to aid State staffs and local teachers of vocational agriculture to utilize more effectively the Future Farmers of America organization. The results of this are evidenced by the aggressiveness of this youth organization in actively participating in wartime activities.

In cooperation with State staffs, the Future Farmers of America Foundation has been developed to assist further, promote, and stimulate the best interests of students and former students of vocational education in agriculture on a local, State, or national basis.

The New Farmers of America is the national organization for Negro farm boys studying vocational agriculture in the public high schools. This organization is maintained in all of those States having separate schools for Negroes. It is administered on the national level by the Agricultural Education Service in a manner similar to the Future Farmers of America. Like the Future Farmers of America, this organization has taken advantage of every opportunity and facility to help in winning the war.

Subject Matter

The subject-matter material developed by the staff has been somewhat limited because of emergency wartime requirements utilizing the time of staff members. However, a bulletin, "Directing Vocational Agriculture Day-School Students in Developing Their Farming Programs," published during the year is serving an urgent need to aid further in our wartime effort. Other subject-matter teaching materials have been prepared by staff members through interviews with local teachers of vocational agriculture and their students.

Adult Training

An outstanding contribution that has been made for the benefit of adults has been the training programs for State staff members and specialists in the development and conduct of community educational services, particularly in the operation of school-community food processing plants. Demand has been made in many areas for further assistance of a similar nature.

Teacher Training

The continued loss of employed teachers due to the war emergency remains a major problem. More than 5,800 teachers of vocational agriculture have left teaching with 1,862 leaving the work in 1942, 2,319 leaving in 1943, and approximately 1,500 in 1944.

Replacements of newly trained persons from teacher-training institutions have been exceedingly few in number due to the decline in enrollments in the colleges of agriculture and to the operation of the Selective Service Act. The heavy loss of employed teachers with the elimination of the supply of newly trained teachers has necessitated the employment of a large number of persons with emergency certificates. The conditions have led to marked changes in teacher training with the emphasis changed from premployment training activities to in-service and itinerant training of teachers on the job.

A significant development during the year has been the work of the subcommittee on agricultural teacher training, committee on curriculums, (college division) American Society of Agricultural Engineers, in collaboration with an advisory group of agricultural education specialists. The preparation of teachers of vocational agriculture through courses in agricultural engineering to enable them to deal adequately with problems involving the physical and mechanical. aspects of farming is of utmost importance. The report of the committee represents an outstanding achievement with respect to defining the areas of agricultural engineering in which teachers of vocational agriculture should be trained.

Business Education

The Business Education Service is charged with the responsibility of advising and assisting State and local school authorities, teacher-training institutions, business education associations, organizations of business employers and employees, and other public and private agencies in the organization, administration, and improvement of specific business training programs suited to the needs of communities and groups served. Considerable emphasis during the year was placed upon development and improvement of training programs needed by business establishments in meeting conditions and problems brought about as a result of the war.

Wartime Training in the Distributive Occupations

To help retail business executives and managers meet the shortage of trained and experienced store workers, the Service gave special attention during the year to assisting the States in organizing and administering preemployment replacement training programs, wartime training programs for experienced distributive workers, and supervisory training for store managerial personnel. In response to requests from State supervisors, representative retailers, distributive trade associations, the Office of Price Administration, the Department of Commerce, and others directly interested in and affected by retailing problems growing out of the emergency, special training programs were administered to meet specific wartime needs of those engaged in retail business. These included:

(1) *Wartime emergency replacement training for new store workers* to provide at least partially trained workers for replacement of the large number of experienced store people who have entered military service or who have taken jobs in war production industries. Older men and women, and others not suited for work in war industries, were trained as replacements.

(2) *Wartime training for experienced salespersons* to give retail store workers systematic instruction in methods of helping customers select merchandise and adapt buying habits to wartime merchandising conditions and regulations.

(3) *Wartime training for store managers and department heads*, to fill a critical need for supervisory and management instruction in on-the-job methods of: (*a*) training the large number of persons entering retailing as replacements; and (*b*) retraining experienced salespersons to serve customers in a wartime period. Many store supervisors and managers throughout the country who have taken this course are now using their new teaching skill in training new employees and in helping experienced workers.

(4) *Human relations training for merchandising personnel* to help supervisors develop and improve skill in working effectively with, and getting desired results through, the people they supervise. This course, given in six 2-hour sessions, was initiated and developed in the latter part of the fiscal year but was well received by merchandising personnel in a number of States.

Wartime Training in the Office Occupations

There is no Federal appropriation of funds for allotment to the States for specific training either of clerical office workers or of office supervisory and managerial personnel. However, the Office of Education is nonetheless aware of and interested in the many problems and urgent needs of this large and important area of vocational training. Though facilities are limited for this purpose, the Service during the year assisted State and local school authorities, teacher-training institutions, business organizations, and government agencies in the development and improvement of office training programs. Through field trips, conferences with representatives of State departments of education and local school officials, visits to teacher-training institutions, participation in meetings of office managers and office training specialists, and through the preparation and dissemination of teaching aids and materials, much assistance was given in selecting, adjusting, and adapting office training programs to meet wartime needs.

Teacher Training in Business Education

Special emphasis was placed on maintaining adequate programs of teacher training. The Business Education Service has continued to encourage and promote the organization of preparatory teacher training on a cooperative basis, with occupational work experience and related professional and technical training supplementing and complementing one another, and with directed teaching in actual retail or office training situations.

Colleges and universities were assisted in organizing professional education courses and such technical courses as marketing, advertising, credits and collections, specialized accounting, and business organiza-

tion and management. Other kinds of teacher training were carried on largely through in-service supervision, through itinerant programs, and through the medium of district and State-wide conferences, in which many representatives of the Business Education Service participated. The States were encouraged, as a part of their in-service teacher-training programs, to require teacher-coordinators and local supervisors to work on an actual job at least every third summer so that they may have first-hand contact from time to time with practical business problems.

Research in Business Education

In cooperation with education committees representing national trade associations, studies were made of the merchandising of foods, drugs, shoes, and meats. Course outlines and instructional materials were prepared for training programs for owners, managers, and employees of retail drug, meat, food-serving, and shoe businesses.

Plans were made jointly by the Business Education Service and the vocational education committee of the National Office Management Association to make a study of the skills and duties required in various specific jobs in the clerical office occupations, as a basis for determining and developing functional instructional materials.

The effect of the war upon various types of businesses was studied and instructional materials were prepared for use in special courses designed to meet major wartime business problems.

Growth and Tendencies of Training in Business Occupations

Enrollment in cooperative part-time business training programs, whether federally reimbursable or nonreimbursable, continued to increase. Under the full-time leadership and guidance of qualified State supervisors, vocational business training programs were in operation in 43 States, the District of Columbia, Hawaii, and Puerto Rico. Such programs were not reported for Alaska, Florida, Idaho, Nevada, New Hampshire, and Wyoming.

Of the 46 full-time State supervisors of vocational business training, only 9, including those of the District of Columbia, Hawaii, and Puerto Rico—an increase of 3 over the previous fiscal year—are responsible for specific leadership and guidance of training for both the distributive and the office occupations. This trend is in accordance with recommendations of the Business Education Service that adequate State and local supervision be provided for all phases of business training.

There is a trend toward extending retail training to a greater number of small cities and towns. At the same time, larger cities have initiated part-time retail programs for employees on company time, as well as cooperative part-time retail classes on a school-and-employment schedule.

The Business Education Service worked during the year with national retail and office management associations in developing instructional materials. In several instances, subject-matter committees, composed jointly of representatives of an association and representatives of State divisions of vocational education, were appointed by the Service to advise in formulating specific training programs and in preparing related instructional materials.

During the year many teachers and supervisors of office training organized and developed cooperative part-time programs of training for office workers. Progress was also made in the establishment of adult extension training for full-time office workers; and in some localities a beginning was made in the development of supervisory training for office managers, department heads, and executives.

Supervisors of business education cooperated with State and local supervisors of occupational information and guidance in developing vocational business training programs to meet community occupational needs.

The cooperative part-time classes formerly offered on the postgraduate and junior college level are now being offered in the junior and senior years of high school. It is expected, however, that after the war, youth will remain in school longer, and that cooperative part-time training will again be organized on the postgraduate and junior college level.

Principal difficulties encountered during the year were the inability to obtain a sufficient number of qualified personnel to direct new training programs and the difficulty of retraining those already employed in teaching and supervisory positions.

Plans for Post-War Business Training

The Business Education Service, in cooperation with regional and national business education associations and with national associations of businessmen—particularly the National Retail Dry Goods Association; National Office Management Association; National Restaurant Association; National Paint, Varnish, and Lacquer Association; and the National Association of Retail Grocers—initiated and made considerable progress in developing a systematic study of post-war training needs in business education. In studying these needs, special consideration was given to changes and adjustments that should be made in various existing training programs for business workers.

Home Economics Education

In the light of war conditions affecting home and family life and developments in homemaking education throughout the States, special emphasis in the program of the Home Economics Education Service was given to assisting with (1) home economics curriculum adjustments needed now and in the post-war period, (2) community organization for home and family life education, (3) homemaking education for adults, (4) research in home economics education, and (5) projects carried on in cooperation with the Division of Inter-American Educational Relations. Special attention was given to working on the strengthening and expanding of programs through the schools in nutrition education, food production and conservation, the school lunch, improvement of family health, and consumer education.

Curriculum Adjustments

Conferences on college curriculum work were held in the four regions to discuss (*a*) wartime curriculum adjustments and post-war needs, (*b*) guidance responsibilities of home economics staff, (*c*) methods of

teaching, (*d*) stimulation of professional growth of staff, and (*e*) ways of strengthening the college program.

At the request of the land-grant colleges a conference was conducted to determine the adjustments needed in teaching clothing and textile courses in the colleges.

To assist home economics teachers who are being asked for advice on family problems involving the adjustments of returning war service personnel, a conference was conducted with representatives of the Selective Service System; Office of the Surgeon General, War Department; National Committee of Mental Hygiene; and the American Red Cross. As a result, a series of pamphlets are being prepared to aid teachers.

Community Organization for Family Life Education

The many adjustments in home and community life caused by the national defense program and the war have revealed the need for more attention to community organization. Groups especially concerned with the welfare of families are asking, "How is our community contributing to or how is it interfering with the maintenance of satisfactory home life?"

Home Economics Education Service staff members have the experience and training which enables them to give communities practical help. Through working with four experimental programs initiated in different sections of the country in 1938, it has been possible to discover additional ways that agencies and organizations can work together to improve home and community life.

Many schools were given assistance in their work with community organizations. Some school systems employed a person—often called the coordinator of family life education—to relate the school's program to that of other community groups concerned with the family. The Home Economics Education Service helped in making preliminary plans for the employment of such a coordinator and an analysis of her responsibilities. Three of the original experimental centers were given help in evaluating their programs. Assistance was given to a teacher-training institution in conducting a workshop in community organization for family life education. Other college workshops and State conferences were assisted in preparing home economics teachers and other school persons to participate in community organization for family life education.

Expansion of Homemaking Education Programs for Adults

Emphasis was given to serving families in war-congested communities through the adult homemaking programs. Assistance was given to the homemaking education program for adults living in housing projects. The Service participated in a regional conference of housing project representatives to consider ways of providing homemaking education for families in housing projects.

Research in Home Economics Education

Consideration was given to the need for a strengthened and expanded program in studies and research. Staff members participated in meetings of the Home Economics Education Research Com-

mittee of the American Vocational Association in which plans were developed for an over-all program of research in home economics education. Colleges were given assistance in determining the most pertinent problems in home economics education needing study and in developing techniques for research.

Inter-American Education Activities

The Home Economics Education Service assisted in planning itineraries and in arranging with State staffs for South American educators to visit homemaking programs in colleges and secondary schools. Members of the staff have conferred with and furnished materials to Latin-American visitors who came to the U. S. Office of Education seeking information on homemaking education programs, and have advised on programs for students coming to the United States for study. An illustrative bulletin describing homemaking programs in secondary schools was prepared for translation into Spanish and Portuguese.

Nutrition Education

Assistance was given in nutrition education at both national and State levels. The staff worked with the Nutrition Programs Branch of the War Food Administration through (*a*) membership on a nutrition planning committee made up of representatives of government agencies providing field service on various aspects of nutrition; (*b*) participation in regional conferences called by the Nutrition Programs Branch; (*c*) providing consultative service on community organization to their regional workers; and (*d*) advising on the preparation of a handbook for nutrition committees. Regional agents while on field trips to the States participated in county nutrition committee meetings and gave assistance to nutrition committees in workshops and conferences.

The Office of Education Nutrition Committee continued to serve in a coordinating capacity for the nutrition activities of the various divisions and services in the Office of Education. The permanent membership, as formerly, represented agricultural, distributive, elementary, health, home economics, Negro, and rural education. Other representatives on the committee for a part of the year were a nutrition education specialist and a school lunch specialist. Both specialists were provided through funds from the War Food Administration. During the year this committee (a) supervised the preparation of pamphlets in the Nutrition Education Series; (b) advised on the program of work of the nutrition specialist and the consultant on school lunches; and (c) planned and directed in cooperation with the Nutrition Programs Branch of the War Food Administration a nutrition education workshop in elementary teacher education.

In addition to serving in a coordinating capacity, the committee stimulated and pointed up the nutrition education work carried on throughout the Office.

Members of the Office of Education staff assisted in organizing an Interdepartmental Nutrition Planning Committee. Agencies having home economics field service personnel are represented on this committee which acts in an advisory capacity for the Nutrition Programs Branch of the War Food Administration. Staff members helped to

plan and participated in the national conference on Home Food Conservation held in Chicago in January 1944.

The Cooperating Committee on School Lunches continued to promote nutrition education in the schools. The committee had 12 meetings during the year. Staff members of the Office of Education carried responsibility for preparing the agenda and conducting the meetings; they served on the small subcommittees through which much of the work of the committee is done.

Special emphasis was given to the promotion of nutrition education in the elementary school as an integral part of health education and of the total educational program. Home economics and elementary teachers developed more effective cooperation in nutrition activities. In numerous instances, classes for adults grew out of the cooperative work of home economics and elementary school teachers.

Vocational education in agriculture emphasized the production of food. Many pupils cultivated vegetable gardens as home projects. In the Food Production War Training program administered by the Agricultural Education Service 18,273 foods courses were given during the year, with an enrollment of 726,443 men and women.

Distributive education classes in nutrition were organized to encourage salespersons to form proper nutritional habits. Special emphasis was given to nutrition education in all restaurant training work.

All home economics instruction for secondary school pupils and for adults stressed food production and conservation, meal planning and preparation, and marketing. Approximately one-fourth of all home projects reported by teachers in vocational homemaking programs were in the area of foods and nutrition; 35 percent of the enrollment in homemaking education classes for adults was in food and nutrition.

The staff of the Home Economics Education Service reviewed films on nutrition, food preservation and conservation, and food services in the schools; assisted with the preparation of reports on food preservation and nutrition projects; participated in regional meetings on nutrition called by other government agencies; and helped with the preparation of teaching materials.

Members of the Office of Education staff from various fields of interest participated in regional conferences on gardening which were arranged by the U. S. Department of Agriculture.

Food Production and Conservation

Assistance in food production and conservation was given through (*a*) participation in a national and regional workshop in which State representatives in home economics and agriculture were brought together to learn how to operate a community canning center and how to provide an educational program in food conservation and nutrition in connection with the canning center; (*b*) working directly with staff in State departments of education on food production and conservation programs; (*c*) conferring with State supervisors of home economics and agriculture on community canning programs; (*d*) advising on the preparation of canning films; and (*e*) working with the agricultural education staff on plans for food conservation programs in the States.

The School Lunch

Staff members have worked toward making school lunch programs educational. They assumed definite responsibilities in the monthly meetings of the Cooperating Committee on School Lunches, which is composed of representatives of government agencies and organizations concerned with school lunch programs. Members of the Home Economics Education staff assumed responsibility for revision of two school lunch publications: *School Lunch Management* and *A Yardstick for School Lunches.* They assisted with State and regional meetings on school lunch programs, and worked with State supervisors of home economics and supervisors of school lunches in furthering the program.

Improvement of Family Health

The Home Economics Education Service assisted with two health education conferences sponsored by the U. S. Public Health Service and the U. S. Office of Education. The purpose of these conferences was to help State representatives find ways in which to work together toward a solution of health problems in their particular State.

The Home Economics Education Service in cooperation with the Trade and Industrial Education Service arranged and conducted a conference held in Washington on training practical nurses. The personnel included a representative from each of the professional nursing organizations, one or more from the U. S. Public Health Service and from State and local departments of vocational education.

Consumer Education

A member of the staff served as chairman of the intra-office committee on consumer education. This committee is composed of representatives of agricultural, home economics, secondary, elementary, and distributive education, and general administration. It serves as a clearinghouse for government agencies that have consumer materials they propose to distribute to schools and answers requests from schools for sources of materials on consumer education. The committee prepared several articles for Education For Victory, giving the latest information on the Government's program for rationing, salvage, and conservation.

Occupational Information and Guidance

The year was marked by important developments in the Occupational Information and Guidance Service, such as:(1) continued demand for assistance in solving problems which involved guidance and selection factors; (2) demand for field service from the 33 States which have State supervisors of occupational information and guidance and from other States which are considering setting up provisions for the work; and (3) guidance services for returning veterans and dislocated war workers.

State Programs of Supervision

Georgia appointed a supervisor during the year to the position which had been set up for some time. This brings the total number of State departments of education with specific provision for occupational in-

formation and guidance work to 34. Supervisors in 4 States are on military leave, but in each case a person has been appointed as acting State supervisor. Several States now have positions set up but unfilled.

National Conference

A national conference held in Cincinnati, Ohio, October 4–9, 1943, was attended by representatives from 46 States. Many Federal agencies interested in focusing attention of pupils still in school on some phase of military or civilian needs were represented. Some of the topics considered during the conference were: (1) Extension of war production training classes for high-school seniors; (2) Recruitment of candidates from secondary school for the U. S. Cadet Nurse Corps; (3) the National Selective Service–Secondary School Cooperative Report; (4) Recruitment from secondary schools of candidates for teacher training for vocational and general education in order to make sure that the supply of teachers has its fair hearing among young people available after military demands are met; (5) Guidance and selection bases for preinduction training; (6) Current military in-service training programs which have critical significance for boys now enrolled in vocational and general secondary schools; (7) Problems of post-war adjustment, military and civilian; (8) A review of the use of pupils in part-time and summer food production manpower; (9) A review of the *Educational Experience Summary* record and plans for increasing efficiency in serving military purposes; (10) Organization and administration of State and local plans for carrying out such measures as each State might adopt; and (11) Current problems of State supervision of occupational information and guidance.

Community Adult Counseling Service

How abrupt or how difficult the transition from war to peace is going to be no one has as yet any way of knowing. However, we do know that this transition from wartime to a peacetime economy may directly involve as many as 30 million individuals. We also know that each individual will have to treat this transition from war to peace as a personal problem, and that this transition can take place only in the community where this person will live. Thus, in a community of only 1,500 inhabitants, about 300 to 350 individuals might be involved. Should only half of these individuals desire counseling services, a sizable problem presents itself.

It was to discover whether something could be done in the way of assisting communities to help their people solve their problems that 7 States were invited to send their State supervisors of occupational information and guidance to spend a week in Washington beginning January 17, 1944.

The plan of work to promote the organization of community adult counseling services required that each man from the States included spend several weeks in clearing matters at the State level. With satisfactory results there, each was to find at least two or three localities in his own State where there seemed to be a reasonable chance for success in trying out a plan of attack. A member of the staff of the Occupational Information and Guidance Service went to each

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of the States and worked closely with the State men in the inauguration of the local projects. Training courses in adult counseling and a bibliography for adult community counseling work were developed in the Federal Office for use by the State supervisors in the community counseling center.

It was found that instead of 21 communities having community adult counseling services in the experiment there were over 60. Even though the centers had barely begun their work, all reported that returned veterans and dislocated war workers, as well as other adults, were making use of the counseling services. So successful were these counseling services that other communities within these States asked for assistance in developing services. Counselors' salaries came from a variety of sources, such as: Community Chests, boards of county supervisors, private agencies, veterans' organizations, labor, business, and boards of education. The counseling services were community affairs and use was made of all agencies and organizations in each community which had anything to offer in helping an individual make adjustments to the community. Community adult counseling services are being developed in other States—case loads are increasing in the communities which were in the original experiment.

Counselor Training

Teacher-training institutions and local schools have requested assistance in developing and carrying on counselor training work on both the pre-service and in-service levels. This demand is increasing with the need for greater numbers of trained counselors in secondary schools, since it is estimated that in the more than 24,000 public high schools in the United States not over 2,000 have counselors who are professionally trained for that specific responsibility. The development of community adult counseling services has also brought increasing requests for training of individuals to perform these functions.

Extension classes in the evening and on Saturday for teachers and counselors have been carried on in many cases by the State supervisors of occupational information and guidance. Many summer work conferences operated for 1, 2, or 3 weeks have been organized, and in many cases directed by State supervisors. In-service training work in local schools and on a regional basis also has been undertaken. Many State departments of education and teacher-training institutions have utilized the services of the Federal staff in developing plans and materials for the training of counselors.

Cooperation With Other Agencies

Assistance in the formulation of policies relating to occupational information and guidance problems or in giving information was rendered to many governmental and civilian agencies. Among these were the following: Bureau of Training, War Manpower Commission, which resulted in the publication *The Training of Vocational Counselors;* the Veterans' Administration, on several pertinent problems, one of which was the preparation of an occupational information leaflet to be used in recruiting senior cadet nurses in hospitals for veterans; various branches of the War Department; National Voca-

tional Guidance Association; U. S. Public Health Service; and the National Selective Service System.

Trade and Industrial Education

The agents in Trade and Industrial Education in the Vocational Education Division cooperate with State officials through State Boards for Vocational Education. These agents have certain administrative and supervisory duties to discharge in connection with State programs conducted under the provisions of the Smith-Hughes and George-Deen Acts. The first and major responsibility of these agents, however, is to provide leadership.

The types of service that were given to State officials included assistance in:

(1) Conducting professional conferences with local supervisors, coordinators, directors, and principals of trade training programs.

(2) Conducting conferences with managers, superintendents, and foremen in industry.

(3) Holding conferences with representatives of labor.

(4) Supplying data and information regarding the improvement of every phase of the promotion, organization, and administration of local programs of trade and industrial education in the evening trade extension, part-time, and all-day schools.

Training for Women

Through the cooperation of State directors of vocational education, several series of conferences were held with women counselors in industry, coordinators from local vocational schools, representatives of the War Manpower Commission, personnel directors, and industrial nurses. Training directors, foremen, superintendents, and company officials in industry attended some sessions.

A meeting of State directors, representatives of professional nursing organizations, practical nurse organizations, Public Health, Red Cross, and Home Economics Education was held in Washington to lay the ground work for planning a training program for practical nurses. A working committee was appointed to develop instructional content to be used in the courses now being organized.

Supervisor and Teacher Training

A series of conferences have been held with State officials regarding the improvement of instruction in trade and industrial education. The value of these conferences is indicated by the fact that State officials request their continuance. These conferences have resulted in agreements among officials in a majority of States on a pattern of supervisory organization which will integrate the functions of supervision and teacher training within the State. Plans for future conferences will encompass suggestions made by State supervisory staffs. These suggestions provide for the organization of working committees. The immediate problems which confront these working committees are (*a*) an evaluation of the gains made in training efficiency during the war production training experience and (*b*) the incorporation of these improvements into the long-term program.

Consultative services to individual States have included assistance in (*a*) the improvement of the work of teachers and supervisors and (*b*) the development and improvement of teaching content.

Area Trade Schools

Agents representing the U. S. Office of Education assisted State and local officials in the many problems growing out of the organization of training programs to meet the needs of large areas. The preliminary work involved the selection of locations for the training centers, the rental of buildings, and the purchase and installation of equipment and the training of teachers.

Policies adopted by the Office with regard to training war workers did much to facilitate the development of the area trade school organization.

Apprentice Training

The requirements of the Selective Service Act have greatly reduced the number of apprentices. Many of the groups now in training are either over the normal age for indenture or are considered as essential war workers.

Several States have organized area and local committes to develop material to be used in the instruction of apprentices. As the material is developed in each center it is not only distributed within the State but is made available to officials in adjoining States also. This scheme avoids overlapping and insures maximum development of instructional material with the least expenditure of time.

Employee-Employer Relations

The U. S. Office of Education has maintained close contacts with the American Federation of Labor, Congress of Industrial Organizations, national and international unions, and employer groups, such as the National Association of Manufacturers. Their representatives have been kept informed of developments in vocational education, including the Vocational Training for War Production Workers program. The consultant attended meetings of national labor and management groups and conferred with those present in regard to cooperative relationships between the officials in charge of vocational education and various organized groups. Continued encouragement has been given to the further development and use of State and local representative advisory committees.

State and local vocational education officials were provided with pertinent information contained in resolutions adopted at the national labor conventions and kept informed regarding labor legislation and employment regulations applying to vocational education, especially to the employment of student-learners in cooperative part-time programs. Meetings were held with groups of such officials for the purpose of discussing labor problems arising in connection with vocational training programs.

Public Service Training

Renewed interest in training for public service occupations was evident in many parts of the United States. The total enrollment for

such training in the Nation as a whole for the 1942–43 year, the latest figure available, was 81,624. While this figure was slightly lower than that of the preceding year, there was notable improvement in several phases of the program. Occupational groups receiving public service training under provisions of the George-Deen Act included: Firemen, peace officers, building custodians, school-bus drivers, public health workers, water and sewage plant operators, power plant operators, assessors, and inspectors.

The consultant conducted studies on the status of the public service training in the various States, by years, since 1937 and on the scope of such training programs. He advised with the States on the development and further improvement of programs, carried on instructor training programs, and cooperated with various agencies interested in improving the efficiency of public employees. Among these agencies were: The American Municipal Association, State leagues of municipalities, International Association of Police Chiefs, Northwestern University Traffic Institute, International Association of Fire Chiefs, National Fire Protection Association, Western Actuarial Bureau, the Federal Fire Council, and Army Ordnance.

At the request of the Safety and Security Branch of Army Ordnance, fire instructor training was conducted in cooperation with representatives of the Western Actuarial Bureau and the Office of Civilian Defense. Regional training schools were held at Lafayette, Ind.; Trenton, N. J.; Denver, Colo.; and Baton Rouge, La. A total of 125 men from explosive plants in these areas received 30 hours of instruction each and returned to assume responsibility for continuing plant fireman training programs.

The effect of the war on personnel available to carry on the business of government at local, county, and State levels was largely responsible for the increased need for public service training and for the additional requests for assistance. A much greater need for such training is unfolding as post-war plans develop.

Post-War Planning

Reports on specific programs in previous sections indicate that leadership is being directed to the adaptation of the vocational education program to post-war conditions.

Study of Vocational-Technical Training

A committee consisting of members of the staff and representatives of labor and management, and various educational institutions, was appointed by the U. S. Commissioner of Education in 1943 to advise concerning a new area of vocational education of less than college grade. A working committee of this group conducted inquiries resulting in a report on "Vocational-Technical Training for Industrial Occupations," which went to press in June 1944.

Study of Post-War Problems in Vocational Education

Since January 1944 a committee has been at work on an analysis of vocational training problems after the war. The work of this committee is still in progress.

Table 6.—Allotments to States of funds available from Smith-Hughes and George-Deen Acts, fiscal year ended June 30, 1944

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 1944, $14,200,000.

Emergency War Training

Food Production War Training

Public Law 135, 78th Congress, 1st Session, provided $12,500,000 for the continuation of those vocational courses in food production and conservation, mechanics, farm machinery repair, and farm labor training of less than college grade. With the beginning of the 1944 fiscal year the program became known as the Food Production War Training Program. There was a total enrollment of 1,507,770 in the 22 courses offered under this program by the various State boards for vocational education during the fiscal year. (Table 7.)

The funds allotted for this program were used (1) to train farmers and other persons in methods of achieving production goals of those farm commodities designated by the U. S. Department of Agriculture as essential to the war effort; (2) to train farmers in the repair, operation, and construction of farm machinery and equipment; (3) to provide necessary farm labor training to meet increased production demands; and (4) to provide training in the production, processing, and conservation of food for family use. The emphasis is placed on the needs of agriculture and not on training persons who expect to enter industrial occupations as was the main objective during the first 2 years the program operated under P. L. 812 and P. L. 146.

Shop courses.—The group of courses includes the following: (1) Operation, care, and repair of tractors, trucks, and automobiles (including both gas and Diesel engines); (2) metal work, including simple welds, tempering, drilling, shaping, and machinery repairs; (3) woodwork; and (4) elementary electricity, including operation, care, and repair of electrical equipment. There were 47,765 enrollments in these courses in the year ending June 30, 1944.

Farm machinery repair.—The farm machinery repair course had a total enrollment of 512,114 for the year. This course was well received by farmers in all sections of the country particularly because the supply of new farm machinery was restricted. Through this course farmers had the opportunity to obtain systematic instruction in repairing and adjusting their old machines. Many farm labor-saving devices were constructed by farmers as a result of the training they received in this course.

Food production.—Four additional courses were offered in 1944 for aiding farmers to increase the production and conservation of agri-

cultural products. These courses were entitled "Production of Fruits and Nuts," "Home Vegetable Gardening," "Production and Conservation of Feed for Livestock," and "Soil and Water Conservation and Use." The courses previously approved and again made available under Public Law 135 were those for increasing production in milk, poultry, eggs, pork, beef, mutton, soybeans, peanuts, commercial vegetables, sugar, hemp, and vegetable seeds. There was a total of 166,218 persons enrolled in this group of courses for the fiscal year.

Training farm workers.—Teaching material was prepared adapting the job instruction procedure to the training of farm workers. This program, designated "Job Instruction for Farm Workers," was inaugurated in the States through six conferences for white and one conference for Negro supervisors. Sixty-six individuals representing 36 States were trained in these conferences and are consequently in a position to develop this type of instruction in their respective States.

Enrollments in courses for the training of farm workers totaled 55,230. Included in this enrollment were a large number of nationals from Mexico and Jamaica who were brought into the United States to aid in meeting the farm labor problem.

Food processing.—The course in Production, Conservation, and Processing of Food for Family Use during the fiscal year enrolled 726,443.

It is estimated that approximately 3,800 school-type community canneries have been established in the United States. In order to give the vocational agriculture and home economics teachers, who are in charge of these canneries, training in their operation, eight subregional community canning workshops were held. These workshops were used to train persons in the State offices of vocational education who were in direct charge of this phase of the program. They in turn have held similar workshops in their respective States for the local teachers and supervisors.

Teachers and facilities used.—Classes in the Food Production War Training Program were taught by teachers of vocational agriculture, home economics teachers, local blacksmiths, mechanics, expert dairymen, poultrymen, and other qualified persons. School farm shops, implement dealers' service shops, local garages, and blacksmith shops were used in which to hold classes in farm machinery repair courses. Classes in the commodity courses were held in classrooms of the departments of vocational agriculture, rural schools, community halls, churches, and farm homes.

Table 7.—Enrollment in Food Production War Training Courses, June 30, 1944

Item	Cumulative enrollment from December 1, 1940	Cumulative enrollment from July 1, 1943
All courses	3,035,507	1,507,770
Shop courses	799,329	47,765
Farm machinery repair	785,170	512,114
Food production	433,381	166,218
Food processing	949,696	726,443
Training farm workers	67,931	55,230
Female	879,306	628,848
Negro	617,017	292,491
Urban	339,038	131,414
In-school	48,706	48,706

Model Aircraft Project

The Model Aircraft Project, which was started by the U. S. Office of Education in February 1942, at the request of the Secretary of the Navy, was discontinued on a national basis on December 31, 1943, after the Nation's schools had made approximately 800,000 model airplanes for use by the military services in training in aircraft recognition.

Vocational Training for War Production Workers

The close of the fiscal year marked the completion of 4 years of war production training. During this period more than 6,500,000 persons received training in vocational schools participating in the War Production Training Program.

Appropriations and expenditures.—To continue the program of war production training through the fiscal year ending June 30, 1944, the Congress appropriated under Public Law 135, 78th Congress, 1st Session, $90,000,000. The wording of Public Law 135 followed the pattern of previous legislation authorizing war training programs. During the year a total of $51,898,249 was expended for cost of courses, and $3,333,344 was used for the purchase of equipment.

Types of training.—War production training has been divided into two broad phases of training: (1) preemployment: for persons either unemployed or working in nonwar industries, and (2) supplementary: for persons already employed in war industries at the time of training. Supplementary training is further classified to include regular upgrading supplementary, preparatory supplementary (paid trainees), and supervisory training.

Table 8.—Enrollment in preemployment and supplementary courses to June 30, 1944

Item	Preemployment		Supplementary	
	Cumulative enrollment from July 1, 1940	Cumulative enrollment from July 1, 1943	Cumulative enrollment from July 1, 1940	Cumulative enrollment from July 1, 1943
TOTAL	2,586,792	274,600	3,975,619	1,430,450
Automotive services	65,576	6,603	82,985	18,183
Aviation services	646,043	44,587	994,015	338,580
Electrical services	53,647	5,640	52,493	10,116
Forging	7,702	907	2,690	1,232
Foundry	19,057	630	9,654	4,413
Machine shop	748,241	70,505	408,079	96,889
Radio services	72,160	20,781	146,021	31,620
Sheet metal work	73,716	3,320	22,677	1,609
Shipbuilding	424,885	64,435	749,473	339,133
Welding	278,155	38,973	201,037	51,318
Other	197,610	18,219	1,306,495	537,357
Female	544,242	68,726	711,701	398,822
Negro	200,829	38,050	107,947	59,841
Regular supplementary			1,947,317	392,342
Preparatory supplementary			1,087,157	642,267
Supervisory			737,901	387,985
Uniformed Military Personnel			203,244	7,856

Enrollments.—Enrollments in preemployment courses during the fiscal year totaled 274,600. Courses having the largest concentration of enrollments and the percentage of total enrollments were: Machine

shop, 25.7; shipbuilding, 23.5; aviation services, 16.2; and welding, 14.2. A total of 1,430,450 enrollments in supplementary courses was reported during the fiscal 1944. Of all supplementary trainees, 23.7 percent enrolled in shipbuilding courses. Aviation courses accounted for 23.6 percent of enrollments.

Training women war production workers.—During the year enrollments of girls and women accounted for 25.0 percent of the total number of preemployment enrollments, and 27.9 percent of the total number of supplementary enrollments.

Special attention was given to the training of women for work which was formerly done partially or entirely by men. It was learned that: The differences in training men and women are few and minor; women lacked mechanical familiarity and background, but not mechanical ability; proper orientation was needed to reduce turnover and absenteeism. An agent of the Federal staff was sent into a shipyard as an employee. This experiment revealed the need for more realistic training—conditioning women to the types of work as well as giving them the skills. An agent of the staff developed and led a series of training conferences for industrial counselors and supervisors of women employees. Each conference culminated in a report to the management which included findings, suggestions, and recommendations for the more efficient use of women in industry.

Instructional materials.—During this year, a total of 23 monographs were completed by the States. There were 13 monographs still in preparation on June 30, 1944. Previously, 101 similar monographs were completed, making the total completed or in preparation at the end of the fiscal year, 137. The training fields covered in these monographs were: Aircraft, blueprint reading, electronics, marine cooking and baking, machine shop practice, and welding. Advisory service was rendered in the preparation of monographs and sample copies of completed monographs were distributed to all States. New instructional outlines were prepared in beef killing and hide preparation, repair and maintenance of refrigeration plants, and tractor trailer operation. A training outline for refrigeration repairmen was developed for the National Refrigeration Service Council. This office is cooperating with the Civil Aeronautics Administration in the revision of instructional material used by the vocational schools in training licensed aircraft and engine mechanics.

Equipment and facilities.—During the current fiscal year $3,333,334 was expended for equipment. The expenditure was for the purpose of replacing worn out hand tools, machine tools, and for equipment requested by the Army, Navy, and Maritime Commission for training for specialized and specific production.

A survey made in October 1943 indicated that there were 134,673 training stations in use in war production training schools. Of this number 56,158 were provided through Federal funds.

Equipment purchased by the NYA and turned over to vocational school authorities after the discontinuance of the NYA on June 30, 1943, provided 18,171 training stations, of which more than 4,300 were of a type which could be utilized by the War Production Training Program.

Where existing space within the schools was found to be inadequate, funds were provided for rental of additional space.

Instructor training.—The problems of training instructors for war production courses no longer stand out as separate problems of teacher-training and instructional improvement. Instead, they are now identified and attacked under the single major objective of providing adequate instruction in the field of trade and industrial education. The problems and experiences of the several States in providing qualified instructors for this field during the war training emergency have stimulated the critical evaluation of past industrial teacher-training practices.

Foreman training.—Within the past year there has been an unprecedented need for foreman training services in war industries due to increased industrial payrolls and constant labor turnover. Through a small staff of qualified and experienced foreman trainers and conference leaders the U. S. Office of Education cooperated with the State boards for vocational education in the advancement of this program.

Training specialists of the U. S. Office of Education (1) conducted conference leadership and foreman training sessions for selected industrial supervisory personnel in the use of special conference methods and techniques; (2) analyzed industrial production procedures in war production plants and assisted employers in identifying training needs in order to increase production by giving necessary supervisory training; and (3) consulted with management and vocational training leaders regarding the planning and organizing of State foreman training and conference leading programs.

In addition to assisting the State boards for vocational education, various conferences were held with Government officials, Army and Navy officers, industrial management, and other supervisory personnal groups.

Special studies.—The follow-up surveys of preemployment and supplementary trainees begun during the previous fiscal year were completed, and the findings of these surveys were published under the titles "Preemployment Trainees and War Production," and "Supplementary Trainees and War Production." Altogether, 51,806 former trainees were interviewed in 43 survey centers in 15 States.

It was found that 75 percent of all preemployment trainees and 78 percent of all supplementary trainees were employed in industry. An additional 17 percent of the preemployment trainees and 18 percent of the supplementary trainees were serving in the armed services.

Cooperation With Federal and Non-Federal Agencies

Office of Defense Transportation.—As a result of the severe shortage of skilled employees in the transportation field, arrangements were worked out between the Office of Defense Transportation and vocational schools wherein courses of training were introduced for instruction in such fields as auto mechanics, tire repairmen, bus drivers, and streetcar motormen.

U. S. Bureau of Prisons.—Courses were offered in certain penal institutions in eight States to prepare inmates prior to release for employment in war industry.

War and Navy Departments.—The expansion of training activities by military establishments themselves has to some extent replaced training of uniformed military personnel by vocational schools. Al-

together 7,856 uniformed military personnel were trained during the current fiscal year on war production training facilities.

Training of civilian personnel of the War and Navy Departments continued through the year with 122,265 persons enrolling; 64,315 for the Army, and 57,950 for the Navy.

The civilian training program inaugurated for the training of mechanic learners from the Air Service Command has diminished as the required number of personnel has been reached. It is anticipated that due to a high rate of turnover, the program may, however, maintain its present size.

U. S. Employment Service.—Since the beginning of the War Production Training Program in 1940, the U. S. Office of Education in gearing war training programs to employment needs has developed a close working relationship with the local U. S. Employment Service offices. The Office of Education and the Bureau of Placement of the War Manpower Commission cooperated in the preparation and issuance of material concerning occupations approved for war production training in such industries as mining, logging, and transportation.

Other agencies.—Other instances of cooperation include the establishment of courses for the training of firemen and housekeepers for War Housing Projects of Federal Public Housing Authority. In cooperation with the War Relocation Authority courses have been offered in Relocation Centers. A program for the training of gas and electric refrigerator servicemen, approved by the War Manpower Commission at the request of the refrigeration industry, has resulted in training courses which had an enrollment of 373 on January 31, and increased to 2,136 by June 30, 1944.

Services for the Blind

The Services for the Blind was established under an Act passed by the Congress in 1936 to provide for the licensing of blind persons to operate vending stands in public and other buildings, to make surveys of the possibilities for industrial employment, and otherwise to enlarge the economic opportunities for the blind. It has continued its pioneering work during the past year.

Services to the States

A small staff with a limited travel budget conducted one intensive industrial placement demonstration. The Specialist on Industrial Placement spent 2 months in Louisiana, placed 7 blind persons, and trained a member of the State agency staff in the technique of industrial placement. This was the first time the blind had been given employment in competitive production industry in that State, it is reported.

As a result of a similar demonstration last year in Denver, Colo., the State agency for the blind has added an industrial placement specialist for the State. The person appointed was also a trainee of the Federal Service.

The State Commission for the Blind in Iowa employed an industrial placement agent who had been trained by the Services for the Blind. He began work July 15, and as a result, 34 blind persons are now em-

ployed in the production industries of that State. The industrial placement program began in Delaware in February 1943, and continued to develop during the year; 45 blind persons are now employed in industries. The agency has engaged a full-time industrial placement specialist. In Maine, the placement agent, trained through the direction and guidance of the Services for the Blind, has placed 34 blind persons, and a second industrial placement specialist has been employed by the Department of Public Welfare.

As a result of the continuous educational effort on the part of the Service's staff, 19 State agencies now employ stand program supervisors, and the number is increasing. Requests are being continuously received for information, suggestions, advice, and practical guidance in the development of the stand program on sound business principles.

There are 348 stands now in operation in Federal buildings. Fifty-two stands are in operation in the District of Columbia in Federal buildings and 8 in non-Federal buildings. The District of Columbia program is used as a laboratory for the training of supervisors of State agencies. The principles upon which it is operated are producing comparable results wherever they are applied.

A primer in personal adjustment for newly blinded persons was prepared for publication under the title, "An Open Letter to My Newly Blinded Friend." Workers for the blind have acclaimed this document as the first item they can use in their work with newly blinded persons in aiding these individuals to achieve satisfactory personal and social adjustment. Workers recognize that blind persons succeed best in normal employment when they are adjusted to the loss of sight.

Cooperation With Federal Departments

The Services for the Blind staff has been called on by the Office of the Surgeon General, War Department, as consultants in the planning of rehabilitation services for blinded veterans while still in the hospital, and for assistance in recruiting staffs for State hospitals and a training center.

The Veterans' Administration is recruiting placement agents trained by the Service staff for the various public and private agencies for the blind. The training courses that have been devised for these placement agents are approved as sufficient qualification. These agents will be responsible for the training and placement of blinded veterans after they are discharged from Service.

Consultant service has been provided upon request of the Library of Congress in the selection of material which will be put into Braille and on talking book records. These new materials are designed to provide practical information in the pursuit of various vocations both by blind civilians and veterans.

The employment of blind persons in Government agencies has been conducted in a very satisfactory manner and the Civil Service Commission reports that more than 450 blind persons are employed in Government departments. These include production workers in munitions industries, dictaphone typists, clerks, attorneys, and administrators.

Visual Aids for War Training

The U. S. Office of Education, through the Division of Visual Aids for War Training, continued during the fiscal year the production and distribution of visual aids designed to assist instructors in the training of war workers.

At the beginning of the year there were 48 motion pictures completed and in use in war plants, vocational schools, and the Army and Navy. During the year the Division of Visual Aids completed 114 additional motion pictures, 146 filmstrips, and 110 instructor's manuals.

In addition to the visual aids already completed, there were at the end of the year 319 motion pictures in various stages of production, 315 filmstrips, and 371 instructor's manuals. The entire 481 visual aids units completed and in production (each unit consisting of a motion picture, a filmstrip, and an instructor's manual) cover the following subjects: Machine Shop Work, 130; Aircraft Work, 77; Shipbuilding Skills, 43; Precision Wood Machining, 40; Engineering, 31; Electrical Work, 30; Problems in Supervision, 25; Nursing, 15; Foundry Work, 15; Refrigeration Service, 15; Farm Work, 17; Automotive Operation and Maintenance, 10; Plastics Processing, 10; Optical Craftsmanship, 6; Welding Procedures, 5; Bus Operation, 5; Safety Practice, 5; and Accessory Assembly, 2.

All visual aids of the Office of Education have been planned and developed by technical and visual education specialists. The subjects have been approved by the War Manpower Commission. Motion picture production has been done by 35 commercial film producers awarded contracts by Treasury Procurement under competitive bidding. Production of Office of Education films is supervised by a team of specialists—one technical and one visual education specialist.

Moreover, every Office of Education visual training aid is checked throughout production by a Vocational Advisory Committee in the locality in which the film is produced. These committees include master machinists and tool makers, industrial training directors, vocational teachers, and members of the Armed Forces. They have functioned in California, Kansas, Missouri, Illinois, Wisconsin, Minnesota, Ohio, New York, Connecticut, Rhode Island, Louisiana, New Jersey, Pennsylvania, Texas, Massachusetts, and Michigan.

The distribution of completed films has been handled through a commercial organization experienced in the distribution of 16-mm motion pictures awarded the distribution contract by Treasury Procurement upon a competitive bidding basis. During the fiscal year 1943–44 sales totaled 3,038 motion pictures and 1,250 filmstrips. Schools and colleges purchased approximately 45 percent of all prints, industries 25 percent, dealers 15 percent, Government 10 percent, and foreign countries 5 percent.

In accordance with the proviso "That 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," a return of $5.75 per motion picture sale and 35 cents per filmstrip sale was incorporated into the distribution contract awarded October 1, 1943. This rate was based upon an estimated sale of 1,000 prints per subject over a 5-year period

and would return $6,100 per subject. From October 1, 1943, to June 30, 1944, a total of $12,951.75 was returned to the Government.

Through the courtesy of the Army and Navy, the Division of Visual Aids has released to civilian purchasers over 100 motion pictures and 100 filmstrips nonconfidential in character which cover subjects of study in the public schools. During the year more than 4,000 prints of these subjects were purchased by schools and educational film libraries.

At the present time the Division is engaged in completing the production of all visual aids under contract before June 30, 1945, at which time, according to plans, there will be available to schools more than 450 visual aids units.

Radio

Promotion of the national war program continued to occupy a major portion of the efforts of the Radio Service throughout the current year. Another 25 transcribed programs were acquired by the Transcription Exchange, raising to 275 the number of transcribed educational programs available to schools. Similarly, another 50 educational radio scripts were added to the Script Exchange. In addition, when the radio section of the Office of Civilian Defense was discontinued, the Office of Education Script Exchange was asked to take over their script library, consisting of approximately 150 additional wartime educational radio scripts not previously available from its own library.

Shortly after the beginning of the 1943–44 school year, it became evident, from the noticeable increase in the volume of requests to the Radio Service for assistance in planning educational FM (Frequency Modulation) broadcast stations, that the presently assigned five FM channels could not possibly meet the demands already in sight. From an analysis of the demand for operating frequencies in the Atlantic Coastal Area from Boston to Washington, D. C., it was found that a minimum of 15 consecutive 200-kilocycle channels would be required in order to permit the construction of the educational FM broadcast stations for which plans were being developed at that time. Accordingly, in January 1944, the U. S. Commissioner of Education transmitted a formal request to the Federal Communications Commission, asking (1) that a band of 15 consecutive 200-kilocycle channels be allocated exclusively for educational FM broadcasting; (2) that this band of channels be assigned immediately adjacent to, and continuous with, the commercial FM band (so that homes equipped with standard commercial AM–FM receiving-sets would be able to receive the school broadcasts); (3) that 10 relay-broadcast frequencies be made available for use by educational FM broadcast stations that might want to employ beamed relay transmission to link stations together for State or regional educational network operation; (4) that two television frequencies be made available for educational use wherever so desired; and (5) that the Federal Communications Commission recognize the need for protecting any existing regional and State-wide educational-station allocation plans when considering individual educational-station applicants.

On January 26, 1944, a conference was held in New York City, under the auspices of the Radio Service of the U. S. Office of Education (at which the State Departments of Education of Massachusetts, Connecticut, New York, New Jersey, and Maryland, Columbia University and the University of Michigan, and the boards of education of Philadelphia and Stroudsburg, Pa., were represented). The purposes of the conferences were to explain some of the principles of educational-station planning and to show that cooperative planning would be necessary (even assuming that 15 channels are eventually allocated for educational FM broadcasting) in order to permit the construction of enough educational stations to provide program service to all schools and school homes within this area. Resolutions and recommendations which were enacted by those who attended follow:

1. The Radio Division of the U. S. Office of Education was requested by the several State departments of education, colleges, and city school systems represented, to act as their official representative in negotiations with the Federal Communications Commission, performing for them such services as are customarily performed for commercial radio stations by professional station representatives.
2. The Radio Division of the U. S. Office of Education was asked to continue its work of developing State and regional allocation plans (on request) designed to insure the maximum utilization of all available frequency channels assigned for educational broadcasting, and it was specifically empowered to review conditions stipulated in license applications pertaining to frequencies and operating power, and to advise applicants of any changes in requested power and/or frequencies which might be desirable.
3. It was mutually agreed, among the representatives attending, that each of them would act promptly to effect the development of a comprehensive educational FM station planning program, within his own State, and that, when tentative plans had been completed in each of the several States, the Radio Division of the U. S. Office of Education should arrange such meetings of representatives of two or more adjacent States (or of all the States of this region) as might be necessary in order to resolve any allocation conflicts that might develop.
4. It was unanimously requested that the U. S. Office of Education make available to each of the several States, colleges, and city school systems represented, the consultation services of one of its employees to advise on problems of station planning and construction.
5. It was unanimously recommended that the Radio Division of the U. S. Office of Education take whatever steps might be appropriate with the Federal Communications Commission to arrange for the development of a simplified license-application form for use by educational station applicants.
6. It was unanimously agreed that the several State departments of education, colleges, and city school systems represented would stand ready to give their official support to the U. S. Office of Education in efforts to secure additional frequency allocations for educational FM broadcasting.
7. It was requested that the Radio Division of the U. S. Office of Education keep the several representatives attending this meeting continuously informed of any new developments in engineering, licensing regulations, and the like, which might be pertinent to their station planning.

At 15 other regional FM planning conferences in which representatives of the U. S. Office of Education Radio Service participated substantially the same actions were taken.

On the basis of this clearly manifest mandate from State departments of education, colleges and universities, and city school systems, the Radio Service has maintained close contact with all of the fast-

moving developments in technical and spectrum-requirement aspects of the various branches of radio broadcasting. A technical representative of the U. S. Office of Education has served as a member of each of five different panels of the Radio Technical Planning Board—Panel 4, "Standard Broadcasting," Panel 5, "Frequency-Modulation Broadcasting," Panel 6, "Television Broadcasting," Panel 7, "Facsimile Broadcasting," and Panel 9, "Relay Systems." Close contact has also been maintained with the work of the Interdepartmental Radio Advisory Committee and the State Department Telecommunications Conference committees.

As an aid to educational groups and organizations planning the construction of FM broadcast stations after the war, the Radio Service prepared the manuscript for a bulletin, entitled "FM for Education," which is now being printed by the Government Printing Office, and which should be ready for distribution soon after the beginning of the 1944–45 school year.

To date, a total of 26 different State departments of education have requested the Radio Service to prepare tentative charts showing locations, suggested frequency assignments, and calculated coverage patterns of a sufficient number of educational FM stations to provide State-wide service to every school and school home. Detailed maps and cost estimates have now been completed for 12 of these States. (These 12 State-wide plans actually involve the planning of a total of 122 separate radio stations.)

In order to meet the demand for up-to-the-minute information concerning new developments in engineering, licensing regulations, and the like (see Resolution No. 7 above), the Radio Service has issued three mimeographed informational bulletins to a mailing list of about 450 people concerned immediately with educational FM station planning.

In response to repeated requests from leading radio-equipment manufacturers for advice concerning the design of their post-war equipment lines for the school market, the Radio Service, in cooperation with the Cleveland Board of Education, held a 2-day equipment-planning conference, on June 26 and 27, which was attended by some three dozen manufacturer's engineers and production people, and by a like number of educational radio specialists. These conferees were divided up into five separate committees, according to their individual interests and experience, and were assigned the tasks of developing minimum standards for (1) receiving-sets, (2) central program-distribution systems, (3) speech-input equipment, (4) transcription-players, and (5) recorders, respectively, to be produced specifically for the school market. As soon as the final reports of these five committees have been completed, they will be submitted to the Radio Manufacturers' Association for its approval. Once this approval has been obtained, it is intended that these reports will be published to serve, both as a guide to other manufacturers not represented at the conference, and as a guide to school people in purchasing equipment.

In addition to these newer services provided by the U. S. Office of Education Radio Service, its regularly established services were continued.

Federal Radio Education Committee

During the current fiscal year the Federal Radio Education Committee has continued its activities on a very limited budget, supplemented by an appropriation of $2,000 from the National Association of Broadcasters.

Two meetings of the Executive Committee were held during the year. The plan adopted a year ago to formalize the meetings to the extent of asking certain members of the committee to prepare papers on assigned subjects has resulted in the publication of seven FREC reports during the fiscal year beginning July 1, 1943. They are as follows:

"*The Network Broadcaster's Responsibility in Planning Educational Programs*," by Dr. Lyman Bryson, Director of Education, Columbia Broadcasting System; "*How Does Education Regard the Efforts of Radio Networks to Develop Programs for School Listening?*" by Bruce E. Mahan, Director, Extension Division, State University of Iowa; "*The Extent to Which State Departments of Education Use Radio*," by Dabney S. Lancaster, State Superintendent of Public Instruction, Virginia; "*Some of the Extracurricular Uses of Radio*," by Rt. Rev. Msgr. George Johnson, Director, Department of Education, National Catholic Welfare Conference; "*Education's Own Stations*," by the Hon. James Lawrence Fly, Chairman, Federal Communications Commission; "*FM and Its Possibilities as an Educational Aid*," by George P. Adair, Chief Engineer, Federal Communications Commission; and "*Tomorrow's Radio Programs*," by Harrison B. Summers, Manager, Public Service Division, the Blue Network.

On January 3, a committee was appointed to develop a set of standards for college courses in radio. Courses in radio are offered by more than 600 colleges and universities. With an increasing number of students likely to want radio courses at the end of the war, it seemed desirable to begin planning now. It was agreed, therefore, that the FREC might assume some leadership in the development of minimum standards with respect to course content, necessary equipment, and faculty personnel that would give a reasonable guarantee that college courses in radio were of consistent quality. A tentative statement was prepared for approval by the Executive Committee and later mailed to a selected list of 100 college presidents, teachers, and broadcasters for criticism. On the basis of that criticism, the statement was revised and submitted for discussion at the Institute for Education by Radio, Ohio State University, Columbus, in April 1944. Further refinement of the statement followed that meeting. It is expected that the final recommendations will be ready for publication early in 1945.

The FREC Service Bulletin was continued throughout the current fiscal year. Approximately 500 new requests came from persons wishing to receive copies.

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Publications and Related Material

Not since the other World War has there been greater need than now for wide dissemination of factual information affecting education to aid the people of the United States in the "maintenance of efficient school systems." But in no recent period has it apparently been more difficult than now to get such information promptly published and distributed, at least in sufficient quantity to serve the more than a million administrators and teachers in our educational systems.

Paper shortages, inadequate staff, and other conditions caused delays and often detracted from the timeliness and effectiveness of publications. It is hoped that after Victory comes, many of these problems will be relieved within reasonable time, and that education, the foundation of any permanent peace, may be given renewed soundness and vigor through the increased united efforts of local, State, and Federal educational leaders. As one means, publications of the U. S. Office of Education—containing helpful reports on educational progress throughout the country, and disseminating results of careful studies and surveys—should be expedited and made more widely available just as soon as conditions permit.

During the 1944 fiscal year, a total of 84 documents for bulletins, pamphlets, leaflets, and periodicals were completed and sent to the Printer for publication. A total of 63 such publications came from the press for distribution during the year. Other types of printing brought the total of printing and binding requisitions for the Office to 269. Processed documents (other than printed) totaled 976.

Education For Victory continued during another war year, as the official biweekly periodical of the Office of Education. It carried to its readers information from practically all educational fields and levels. In addition to reports and articles by the Office's professional staff, the periodical published information affecting education from many Government agencies, particularly the war agencies, and from many reports sent in by State and local school officials. A number of documents of the type that in previous years had been printed as separate pamphlets and leaflets, have been published as feature articles in Education For Victory. Each issue of the periodical reached approximately 72,000 addresses including paid subscribers, which lists are maintained by the Superintendent of Documents.

The 1943–44 Educational Directory was issued in the four parts: Part I, Federal, State and County Education Officers; Part II, City School Officers; Part III, Colleges and Universities; and Part IV, Educational Associations and Directories. (Part II is compiled in the Statistical Division and Part III in cooperation with the Higher Education Division.) Index for Volume I of Education For Victory was also prepared in the Editorial Division. A bulletin entitled "Education in the United States" was revised for translation into Spanish and Portuguese. A total of 413 charts, graphs, forms, and other line drawings were prepared in the Division.

List of U. S. Office of Education Publications Which Came From the Press During the Fiscal Year 1944

Education in China Today. (Leaflet No. 69) 5 cents.
Education in Cuba. (Bulletin 1943, No. 1) 20 cents.
Federal Government Funds for Education, 1940–41 and 1941–42. (Leaflet No. 70) 10 cents.
Inter-American Education: A Curriculum Guide. (Bulletin 1943, No. 2) 15 cents.
Planning Schools for Tomorrow: Our Schools in the Post-war World. (Leaflet No. 71) 10 cents.
Planning Schools for Tomorrow: Some Considerations in Educational Planning for Urban Communities. (Leaflet No. 66) 10 cents.
Recent Reading Materials for Students of Spanish. (Pamphlet No. 96) 10 cents.
School Building Needs. (Leaflet No. 68) 5 cents.
State Provisions for Free Textbooks and Instructional Materials. (Bulletin 1944, No. 1) 10 cents.
Teaching As A Profession. (Pamphlet No. 95) 10 cents.
Wartime Consumer Education. (Leaflet No. 67) 5 cents.

Biennial Survey of Education, 1938–40

College and University Library Statistics, 1939–40. (Vol. II, Ch. VI) 20 cents.

Education and National Defense Series

Schools and Community Organization. (Pamphlet No. 5) 15 cents.

Educational Directory, 1943–44 [1]

City School Officers. (Part II) 10 cents.
Colleges and Universities. (Part III) 20 cents.
Educational Associations and Directories. (Part IV) 10 cents.

Nutrition Education Series

Making School Lunches Educational. (Pamphlet No. 2) 10 cents.
Nutrition Education in the Elementary School. (Pamphlet No. 1) 15 cents.
School Lunch Management. (Pamphlet No. 3) 10 cents.

School Children and the War Series

Juvenile Delinquency and the Schools in Wartime. (Leaflet No. 8) 10 cents.
Recreation and Other Activities in the All-Day School Program. (Leaflet No. 7) 10 cents.
Training High-School Students for Wartime Service to Children. (Leaflet No. 5) 10 cents.

Victory Corps Series

Physical Fitness Through Health Education for the Victory Corps. (Pamphlet No. 3) 20 cents.
Service in the Armed Forces. (Pamphlet No. 6) 20 cents.

Miscellaneous

Annual Reports of the U. S. Office of Education for the Fiscal Years 1941–42 and 1942–43. Free.
Conference Workbook on Problems of Post-War Higher Education. 10 cents.
The Communication Arts and the High-School Victory Corps. 25 cents.
Handbook on Physical Fitness for Students in Colleges and Universities. 25 cents.
Job Instruction for Farm Workers. Free.
Recent General Publications of the U. S. Office of Education. Free.
Survey of the Higher Education of Negroes—Summary. (Misc. No. 6, Vol. IV) 15 cents.

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[1] Federal, State, and County Educational Officers (Part I) had not come from press as of June 30, 1944.

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, 1943. Free.

Directing Vocational Agriculture Day-School Students in Developing Their Programs. (Vocational Division Bulletin No. 225) 15 cents.

Preemployment Trainees and War Production. (Vocational Division Bulletin No. 224) 15 cents.

Professional Nurses Are Needed. Rev. Ed. (Leaflet No. 13) 10 cents.

Supplementary Trainees and War Production. (Vocational Division Bulletin No. 226) 15 cents.

Teachers Are Needed. (Leaflet No. 14) 10 cents.

Wartime Work for Girls and Women. (Vocational Division Bulletin No. 227) 15 cents.

Vocational Rehabilitation

Medical Information for Vocational Rehabilitation Workers. (Vocational Rehabilitation Bulletin No. 27) 20 cents.

EDUCATION FOR VICTORY

Official biweekly of the U. S. Office of Education. 24 numbers issued. $1 a year.

NOTE. Printed publications of the U. S. Office of Education may be obtained by ordering directly from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Free material available may be obtained upon request to the U. S. Office of Education, Washington 25, D. C.

· Part II ·

A Plan of Organization to Improve the Service of the U. S. Office of Education—A 3-Year Program of Development

IN PART I, an account of the various important activities of this Federal agency of service to education has been presented. The various sections were prepared by the appropriate officials in the several divisions of the Office. They are records of devoted and conscientious service by a small staff. The accomplishments reported are more than commensurate with the staff resources available.

In Part II, I shall undertake to set forth certain plans of organization to improve the service of the U. S. Office of Education. This is done in conformity with the basic legislation which established the Office in which it is stated that "The Commissioner of Education shall present annually to Congress a report embodying . . . such recommendations as will, in his judgment, subserve the purpose for which the Office is established."

Frequently members of Congress and many other persons have asked what the purposes, functions, services, and organization of the Office of Education are. In hearings before Congressional Committees, in public meetings, and in various written documents, including previous annual reports of the Commissioner of Education, certain brief explanations which seemed appropriate have been made. These explanations are therefore in the form of separate and necessarily rather fragmentary statements.

In view of the tremendous impact of the economic depression and the war upon American life in general and consequently upon Government services, it seems important that within reasonable limits a fairly adequate statement concerning the agency which the Congress established 77 years ago, the U. S. Office of Education—its problems, its organization, and the needs for improvement in its services to State educational systems and institutions—should be presented at this time in a single document in order to facilitate any consideration which the Congress may desire to give to questions involving significant services to education.

With respect to *services* desired of the Office of Education, attention is here directed to the statements included at the end of this report prepared by designated representatives of several organizations of teachers. These statements are concrete; they are typical of the sincere, professional attitudes of teachers and educational administrators throughout the country regarding the proper relationship of the U. S. Office of Education to education in the States; they show explicitly

how the Office of Education may render services of incalculable value to the "people of the United States in the establishment and maintenance of efficient school systems."

The proposal and plans herein presented have been in preparation during the past year. Although I must take full responsibility for the observations and the proposals made, it should be understood that, in formulating them, I have had the benefit of the thinking and the detailed comments of my professional colleagues, both in and outside the Office, of staff members of the Federal Security Agency and of the Bureau of the Budget, as well as the suggestions of a number of laymen interested in education. Practically all of the recommendations and suggestions of these individuals and groups have been incorporated in the proposals.

An earlier draft of the proposals hereinafter discussed, including detailed explanations, was submitted to the professional staff of the Office in the summer of 1944. It was accompanied by a prefatory note which I wish to introduce here inasmuch as it explains both the spirit and the underlying convictions which actuated the preparation of the report then submitted to my colleagues and now, with certain modifications, presented herewith as a part of this Annual Report.

Prefatory Note

August 12, 1944.

To My Colleagues:

In giving you this statement of a proposed "Plan of Organization to Improve the Service of the U. S. Office of Education," I wish to emphasize certain basic convictions which have been implicit in all of the thinking that has gone into the document you are about to read.

Basic principles of freedom.—The first conviction is that we are all of us, as individuals and as an organization, devoted to the basic principles of freedom upon which our American way of life has been built. We have dedicated our lives to the advancement of those principles. As I write these words I read of the 60,000 men and women of our armed forces who have already given their "last full measure of devotion" in defending them. We too are resolved to do what we can through education to defend, advance, and apply the principles for which those gallant men and women have died.

True education is not partisan or partial.—The second conviction implicit in this document is this—that we are all of us, as individuals and as an organization, determined to insure freedom to learners to learn, to keep the educative processes from being partisan or partial. We know that this safeguard for education in a democracy is essential to the larger freedom which is our American way of life. May I say to you, my associates in the U. S. Office of Education, what I have said many times in many places, namely, that I have never seen even the slightest suggestion of political partisanship on the part of any one of you in connection with your work in this Office. By our philosophy of life for the free man, by our training, by our sense of responsibility to our profession, we are impelled to devote ourselves unswervingly to the high calling of true education. And I believe all of you feel that this singleness and impartiality of purpose on our part has been and will be respected by all of those with whom we deal throughout the country. Any deviation from this high standard of professional service in the cause of education would and should be resented by the public. And any attempted interference with our professional duty for partisan political purposes likewise would be quickly repudiated. These facts in themselves are of tremendous importance as evidence that the spirit of freedom is very much alive in this country.

Education should be real and vital.—A third conviction is that we are all of us, as individuals and as an organization, resolved to continue our efforts to relate schooling to life, to give reality and vitality to education, to cause education to pay increasingly large dividends in terms of individual efficiency and social progress; and that being thus resolved we wish to cooperate fully in developing the Office of Education into an Agency of Service to Education commensurate in its scope and effectiveness with the demands which the modern, complicated world makes upon schools and colleges, our basic agencies of training and enlightenment.

Service Agency of value to both public and private schools and colleges.—Having stated the underlying convictions implicit in this document, it remains for me to ask that you study carefully the proposals presented herewith for improving the services of the U. S. Office of Education. In doing this remember that these proposals do

not involve the difficult questions of new or additional financial grants in aid of education in the States. While the general structure of the organization proposed is capable of accommodating itself to any new responsibilities which may be placed upon the U. S. Office of Education for allotting funds to the States, the purpose now is to create the kind of *Service Agency* for education which the times demand. It will be obvious to those who study the plan and proposals that the services of this agency as contemplated will be of great value to all types of schools and colleges, *both public and private.* What is to be done about additional Federal financial aid to support education in the States is a basic policy question which must be settled by Congress.

Proposed organization parallels general organization of schools and colleges.—Remember that there is no perfect way to arrange any organization. Since the total function which properly belongs in any organization of importance implies many interrelationships, it is always easy to see a number of possible alternative arrangements. The problem, therefore, is not one of establishing an organization whose several parts are not interrelated—parts which can operate autonomously; it is rather one of securing an arrangement in which action can flow continuously, smoothly, and expeditiously, with overlapping and sources of conflict and confusion reduced to the minimum. It is believed that the proposed organization is designed to liberate to the maximum extent the energies and time of employees within their respective divisional authorities. Thus, while adequate provision is made for coordination of policies, programs, and activities, the nature of the organization as planned reduces to the minimum the energy and time required for coordination. This is largely because the organization practically parallels the form of organization of schools, school systems, colleges and universities, and related professional organizations with which the Office cooperates. It should be noted also that a grouping of divisional operations has been secured which divides the burdens of administration and avoids the piling up of detailed administrative duties in any office.

And so, my colleagues, I ask you to examine the proposed organization carefully and impersonally, from the point of view of sound principles of organization, and in the interest of the best provisions for effective Government service to American education. That is the spirit in which the plan has been prepared. I hope that you will send to me personally in *writing* any suggestions you may care to present which you think will improve the organization and the plans for operation presented in the accompanying explanations and charts. I shall also be very glad to discuss with you personally any memorandum you may submit.

John W. Studebaker

Commissioner

The Basic Proposition

The basic proposition with which this statement of plans for strengthening and reorganizing the U. S. Office of Education is concerned may be stated as follows:

> The U. S. Office of Education should be strengthened and reorganized in order that it may be prepared to do its indispensable part in giving national leadership and assistance to the educational systems and institutions of the several States and their local communities in meeting the long-term educational demands of the post-war period.

This proposition clearly recognizes that in the United States the control and administrative direction of education are proper functions of the States. It recognizes also that the quality and effectiveness of these educational programs in the States are matters of vital interest to the Nation. Especially in time of war emergency does it become clear that the education or the lack of education of the citizenry of one or another of the States becomes a vital source of national strength or of national weakness.

This proposition clearly recognizes also that the post-war demands upon the educational systems of the States and their local communities are likely to be greater than ever before. First, education must provide the solid foundation for understanding many complicated international and domestic problems of post-war reconstruction and recovery. After the last war great hopes were entertained by many people of building a better and more secure and peaceful world. But we were disappointed then and disillusioned later. Education had a share in that disappointment and disillusionment because education had a part in the failure of our people generally to understand the role the United States was called upon to play in a world society of which we had become irrevocably a partner. Education must not fail again in this particular. Education must be prepared, not alone to equip youth and adults to understand world problems, but to understand also the many difficult domestic issues that will arise after the war is won—problems of retraining, re-employment, reconversion and readjustment, and a host of others as they affect individuals in their capacities both as citizens and as workers.

Second, this proposition recognizes that the people of the Nation acting through their National Government can give valuable assistance to education in the States. As a matter of fact the Federal Government has, almost from the beginning of the Nation, encouraged education in the States. The Congress has repeatedly provided aid and encouragement to the several States in the founding and improvement of their educational systems. Before the 1860's such assistance and stimulation were generally given in the form of public lands for educational purposes. Since then the aid has usually taken the form of money grants for special types of education, sometimes matched by the States, sometimes unmatched.

Federal Assistance Through the U. S. Office of Education

Federal participation in education in the United States has not, however, been confined to land grants and financial aid. For many years the Government has furnished the States with assistance in the form of educational information resulting from the national collection of facts, the national investigation of educational problems, national leadership in the promotion of improvements in education. For the most part this service has been provided through the Office of Education. Originally established by Congress in 1867, the present U. S. Office of Education has existed

"for the purpose of
(1) "collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of
(2) "diffusing such information respecting the organization and management of schools and 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."

In 1933 the functions and personnel of the Federal Board for Vocational Education, established by Congress in 1917 as an independent agency, were transferred to the Department of the Interior which in turn assigned them to the U. S. Office of Education.

In 1939 the U. S. Office of Education was transferred from the Department of the Interior to the Federal Security Agency. Since 1940, in addition to its regular peacetime responsibilities, the Office has been charged with responsibility for the administration of emergency programs of vocational and technical training in schools and colleges as a part of the Nation's war effort, as well as for important aspects of several other emergency educational activities.

Previous Proposals for Strengthening the U. S. Office of Education

In 1937, the Commissioner, in the annual budget estimates to the Bureau of the Budget, outlined in detail many new activities which he believed the Office should be prepared to undertake for the promotion of the cause of education throughout the country. Some of the activities proposed were designed to assist the States in meeting educational problems that had become manifest during the depression years. Others were the outgrowth of recommendations made by many conferences of educators and laymen assembled by the Commissioner in 1936 to counsel with the Office concerning ways in which it might better serve the interests of educational progress in the several States. Only a few of these proposals of 1937 were transmitted by the Bureau of the Budget to the Congress and there approved. During the years from 1935 to 1940 the answer to requests for expansion of service in the Office was largely in the allotment of emergency funds with which to enable the Office to carry on a number of important projects, several of them in close cooperation with State and local educational authorities and with colleges and universities.

War Emergency Delays Plans for Office Reorganization

Then came the defense period; later the war and with it a piling up of problems incident thereto, accompanied by a deep anxiety of the

people generally for the welfare of our country. The U. S. Office of Education turned its full energies to helping in such ways as it could in the prosecution of the war. Many arduous wartime services were undertaken and are now being rendered by staff members. The Office was entrusted by Congress with the administration and supervision of the expenditure of many millions of dollars in assisting the schools and colleges to train men and women for their part in the war of production. During recent years, therefore, the time was not propitious for considering, much less proposing, plans looking toward the long-term strengthening of the U. S. Office of Education as the effective educational service agency of the Federal Government which ought now to be developed.

Why Renew Proposals Now?

The question then arises: Why undertake the general reorganization and strengthening of the U. S. Office of Education now, at this particular time (1945–46)? The answer is that although the U. S. Office of Education has grown slowly through the years, and although it has satisfactorily met the demands of a grave war emergency by *temporary* additions of staff to assist in the administration of special war training programs, now, in view of the imperative needs of the future for greater efficiency and effectiveness among all schools and colleges throughout the country, the time has come to put the house of the U. S. Office of Education in order, so to speak, to carry its full share of the responsibility for long-term improvements of American education.

That is precisely the objective of the present proposals for the reorganization and strengthening of the U. S. Office of Education as graphically shown on chart I (facing p. 138). We will continue to give our unstinted efforts to the winning of the war until victory comes. But now when there are signs that we are within hailing distance of victory in the European phase of the war, it behooves us to begin to look ahead to the cessation of hostilities and to see how we may strengthen our services to the Nation as it faces the long-term problems of post-war reconstruction, readjustment, and progress.

It is in no way assumed that the U. S. Office of Education is synonymous with all of public and private education in the United States. But it is imperative that it be an effective and efficient service agency of the people to assist the schools, school systems, and higher educational institutions in the States in strengthening their educational programs; not necessarily by means of financial assistance, but by means of such time-honored types of activities as giving professional guidance and counsel to the schools, colleges, and citizens in general, serving as a clearinghouse for professional information, conducting studies, and making reports on important educational problems and the means taken by the various States in attempting to solve their problems.

In brief, the proposals hereinafter made are intended to help get the U. S. Office of Education ready to do its full part in aiding the people of this Nation through their schools and colleges to make the long and difficult adjustment from war to peace, prosperity, and individual and social progress. During the war the Nation very properly has spent money without stint in preparing its citizens

to become more efficient in those technical processes necessary to the successful prosecution of the war. Now it is imperative that the Nation spend whatever sums are necessary to prepare its citizens to render equally competent service in the successful prosecution of the manifold efforts for peace and human betterment.

Only Extension of Time-Honored Office Services Proposed

For many years the Office of Education has conducted researches, carried on studies, made surveys and investigations, published reports, and otherwise sought to disseminate its findings in order to help the people of the States to improve their systems of education. It has issued numerous bulletins and other publications dealing with a variety of educational problems. It has helped to secure a more general appreciation of education's importance to the national welfare, and to some extent it has been instrumental in bringing about gradual improvement in educational programs and practices. Nevertheless it must be admitted that its influence has been altogether inadequate and its work extremely limited when measured against the need for educational leadership in a great Nation. It has necessarily fallen far short of the beneficent influence it might have exerted had it been more adequately staffed.

Although the U. S. Office of Education should not be permitted to interfere with the administration of education in the several States, it could, if properly organized and maintained with sufficient staff, greatly facilitate the educational work of the States by supplying them with the successful results of its effort to become a veritable storehouse or fountain of valuable professional information on the various problems of education with which the States are all and severally confronted. Studies and investigations dealing with problems of taxation in relation to education, equalization of financial support of education within States, improved organization of units of school administration, building standards, tenure of office and teacher salaries, pension and retirement systems, special methods of teaching, size of classes in relation to efficiency of instruction, comparative costs of instruction per pupil in schools of different types and sizes and in the different subjects at various grade levels, time allotments devoted to various fields of subject matter such as United States history, geography, civics, English, sciences, mathematics, health, and physical education, agriculture, trades and industries, business education, and home economics, together with the evaluation and interpretation of the best practices with respect to numberless instructional problems—these are only a few of the types of studies that ought periodically to be reported to the public, educators and laymen alike. Such studies do not represent new departures in the services of the U. S. Office of Education. They represent needed improvements and extensions only of familiar and time-honored types of service.

It is, of course, conceivable that any further development of staff in the U. S. Office of Education to serve the schools and colleges of the Nation in the field of instructional problems may be opposed by some persons on the ground that the Federal Government ought not to influence in any way the character of instruction in the schools and colleges. Such persons either knowingly or unwittingly confuse the

term "influence" with the term "control." Unless it was expected that the U. S. Office of Education would have some degree of influence in "aiding the people of the United States in the establishment and maintenance of efficient school systems" and in the promotion and improvement of education throughout the country, it is unlikely that the Congress would have established the Office at all. In so establishing it and giving it powers largely advisory and hortatory, the Congress made clear its intent that the U. S. Office of Education in the Federal Government should exert a wholesome influence on American education without interfering in any way with the control of the schools by the people themselves acting through their State and local governments or boards of trustees.

It is not inappropriate at this point to note that the Department of Agriculture was constituted about the same time as was the U. S. Office of Education. When chartered the Department of Agriculture had very similar functions, i. e., to act as a national research and advisory agency devoted to the improvement of agriculture. Its beneficial influence in these fields in the improvement of our agricultural practices through the years has been correlative with the development of an adequate staff of qualified professional workers to carry on agricultural research and to diffuse the findings thereof on a *national* basis.

Present Organizational Shortcomings of the U. S. Office of Education

The present U. S. Office of Education is meagerly staffed for the task of providing the needed leadership to the cause of education in a great Nation. While the present organization of the Office has been modified in a number of respects in recent years and adjusted to meet emergency needs, it, nevertheless, is still largely based on traditional groupings of personnel and functions rather than on sound principles of efficient organization which can be applied only by a thoroughgoing reorganization. If it had not been for the unexcelled spirit of devotion to the cause of education on the part of the staff of the Office, the indefatigable efforts of its members, and their readiness to adapt themselves to new and constantly changing demands, the record of the Office would not be the relatively creditable one that it is. But under existing conditions, in spite of the tireless work and adaptability of personnel, the Office cannot sustain the energy and apply the varieties of abilities that are needed if the Office is to perform its proper function of "aiding the people of the United States in the establishment and maintenance of efficient school systems."

As one example of meager staff provisions in the U. S. Office of Education may be cited the fact that only one position as specialist for secondary education exists in the Office, even though the outstanding educational development of the twentieth century has been the growth of American secondary education. Probably four or five additional professional people could be found in the Office who because of their training, experience, and special interest would choose to work in the field of secondary education. But these professional people have necessarily been engaged in many other duties in other fields. Approximately the same condition exists in the broad field of elementary education; and with only slight modification, in the field of general school administration and in higher education.

Moreover, at the present time there is a serious lack of balance in the staff provisions of the U. S. Office of Education for making studies of elementary, secondary, vocational, and higher education—to the detriment of service in all of these fields. Large and important areas of education are represented by no staff specialists whatever. For example, although the study of our English language and literature is one of the most important areas in the schools at all levels, the U. S. Office of Education has no personnel to study instructional problems in this field. The same situation exists with respect to history and the other social sciences, mathematics and the natural sciences, the foreign languages, and the arts. There is only one regular professional person to represent the broad and vitally important fields of health services, health instruction, physical education, and athletics. The unbalanced staff structure of the present Office is graphically shown on chart II (facing p. 138).

Chart II shows by blocks of varying length drawn to scale the approximate present and proposed personnel as detailed on Chart I. The black portion of each block represents the staff now available in the Office; the white space within each block represents the additions that would be required to provide the more nearly adequate staff as shown on chart I (facing p. 138).

Some factual comparisons of existing provisions of professional staff in three fields of Vocational Education with the proposed professional staff as shown on Chart I in three other important fields in which no service is now available in the Office of Education will be helpful in making clear both the present lack of balance in the services of the Office and the need for the relatively modest staff provisions in certain fields recommended in the proposals herewith presented. Column A shows the number of professional staff members now at work in the Office of Education to assist in the improvement of instruction for the specified numbers of full-time students enrolled in day vocational classes in these fields in the secondary schools. Column B shows the number of professional staff members proposed to assist in the improvement of instruction in three of the important fields not now served. All enrollment records are as of 1940, a fairly normal pre-war year.

Column A		Column B	
Agriculture		*English*	
Students	318,223	Students	[2] 4,976,250
Present staff members	[1] 10	Proposed staff members	4½
Home Economics		*U. S. History and Other Social Sciences*	
Students	497,139	Students	[2] 4,976,250
Present staff members	[1] 9	Proposed staff members	6
Trades and Industries		*Science*	
Students	206,922	Students	[3] 3,317,922
Present staff members	[1] 6	Proposed staff members	4½

[1] These numbers do not represent all of the professional staff members in the Office of Education in Vocational Agriculture, Home Economics, and Trades and Industries, but rather that proportion of the staff serving these Vocational Education fields as indicated by the proportion of the Federal appropriations spent for day-school classes in these fields.

[2] The total enrollment in the last 4 years of the public secondary schools was 6,635,000 in 1940. The enrollments in English and in United States History and other Social Sciences are arrived at by estimating that three-fourths of all high-school students are enrolled in English and in the Social Sciences. Many of these students are also enrolled in Vocational Courses.

[3] This number is derived by estimating conservatively that half of all high-school students are enrolled in the Sciences.

Many Groups Have Urged That the U. S. Office of Education Be Strengthened

Perennially, various groups and organizations have urgently requested that the U. S. Office of Education be strengthened to enable it to render the services desired. A collection of the written recommendations and resolutions to this end would fill many pages. But only a few of the recommendations or references to such action are included here.

From the Report of the Advisory Committee on Education appointed by President Hoover in 1929:

> This type of service (sic "educational research") is now attempted by various Federal agencies but more particularly by the Office of Education in the Department of the Interior, and by the Federal Board for Vocational Education in its research activities. With quite inadequate facilities these agencies have performed a remarkable service in gathering and compiling educational statistics and in making special studies which have served to record and interpret educational development in this country. That this task is not adequately performed is partially due to the fact that these agencies are dependent on the voluntary cooperation of institutions and States for the reports on which their statistics are based. Furthermore, they have lacked the resources to employ adequate and sufficiently expert staffs in all the fields they should cover. They lack appropriations to publish and otherwise diffuse information. In short, they have in this respect been minor agencies of the Government attempting to cope with a major interest and to meet a major demand.

From the Report of the Advisory Committee on Education appointed by President Roosevelt in 1936:

> The United States Office of Education should remain predominantly an agency for research and leadership; its administrative duties should be confined primarily to the administration of grants. Provision should be made for an adequate staff of highly competent leaders in the various educational fields who can cooperate effectively with the States on an advisory basis in the planning of programs (p. 191).

In 1943 at its annual meeting the National Council of Chief State School Officers, reiterating its frequently expressed recommendation, in adopting the Report of the Planning Committee of the Study Commission, said:

> The U. S. Office of Education represents the national Government in matters pertaining to education. As education becomes a problem of increasing national concern, this Office should represent and advise the Congress on all matters affecting public education.
>
> The U. S. Office of Education should plan to coordinate federal activities in the field of education and improve its own administrative and consultative services to the several states.
>
> The U. S. Office of Education should offer consultative services in the field of planning to the state departments of education and should assume primary responsibility for coordinating state educational plans which may require federal action.
>
> The U. S. Office of Education should aid in interpreting the needs and plans of education to the lay public at the national level.

The National Education Association, the American Association of School Administrators, the National Congress of Parents and Teachers, the National Association of Secondary School Principals, State Teachers Associations, and many other organizations in various ways, formally and informally, have recommended an adequately staffed and supported U. S. Office of Education. Committees and groups of

school administrators have especially urged the organization of a strong Division of School Administration, while others have felt, and justifiably so, that the great fields of elementary, secondary, and higher education are very much neglected in the present organization and number of persons in the Office to assist in the development to these vitally important parts of our school systems.

Special Need for Studies of Instructional Problems and Related Services

Especially is there need for a well-planned program of studies to be carried on by staff specialists of the U. S. Office of Education with respect to instructional problems in the various fields of subject matter generally offered in elementary, secondary, and higher schools—such studies as are now made in the Office only for the various fields of vocational education of less-than-college grade. Such a program in broad outline would include: (1) The identification of instructional problems upon which help is needed by the schools and colleges; (2) periodical appraisals of the various fields of subject matter with respect to trends in enrollments, costs, and the organization of the substantive materials of instruction, including courses of study and outlines of instruction, textbooks, and other teaching aids; (3) evaluative studies with respect to objectives and the outcomes of instruction in the various fields of instruction.

As an example of needed studies of instructional problems consider the social sciences at the high-school level. First there is need of accurate and reasonably frequent published statistics of enrollments in United States history, geography, and the other social sciences in the Nation's high schools. There is need of enrollment statistics in such subjects by grade levels and by size of high schools, of statistics concerning average size of classes in high schools of different sizes, per pupil costs of instruction, the relation of adequacy of instructional supplies to instructional outcomes; of trends in the fusion at the different grade levels of content drawn from several social sciences; of trends in the methodology of instruction; of the results achieved; and similar matters. All such facts as these and their interpretation, to result in current and comparable knowledge, are nowhere now available for the guidance of school officials, teachers, and the public. Such facts should be accumulated, studied, and interpreted by competent staff members of the U. S. Office of Education so that the status and trends may be clarified and innovating practices identified and appraised. The public having such facts at hand would be saved the disquieting clamor and confusion that are now occasioned when persons or organizations, not equipped to do so, attempt from time to time to improvise some limited investigation of the teaching of some particular subject in some schools and then try to draw national inferences therefrom.

Need for Studies of School Organization and Supervision and Related Services

Closely related to many instructional problems in the various fields of subject matter are problems of school organization, and supervision. The programming of teachers and classes, the determination of time allotments, the distribution of instructional supplies, the planning of teachers' meetings, and other means of improving teach-

ing service—all these are matters of school organization and supervision that have a close relationship to the improvement of instruction in the respective levels of education. Such matters should be made the subject of study by staff specialists in a Federal Office of Education. Where today can one find accurate basic facts concerning the extent of departmentalization of instruction in elementary schools of different sizes and in different States; the responsibilities of home-room teachers; the extent of student participation in school government; students' extracurricular activities; and a host of similar matters? Concerning these and similar matters the U. S. Office of Education receives many inquiries—inquiries which cannot now be properly serviced because the Office is not staffed to make the studies that would be required to give authentic, up-to-date information. Surely such studies and services related thereto are a proper professional responsibility of the U. S. Office of Education under the terms of its present legislative charter.

Summary of Broad Functions of a Federal Office of Education

In sum, bearing clearly in mind that the control and administration of education are State and local functions, and assuming that a spirit of cooperation and mutual helpfulness continues to exist between the States and the Federal Government in the field of education, the broad functions which the U. S. Office of Education should be prepared to carry on will include:

1. The collection of information with respect to education in the States and in other countries so as to make possible intelligent comparisons and conclusions regarding the efficiency of educational programs.
2. The formulation and recommendation of minimum educational standards which ought to be made to prevail in the schools and colleges of all the States and the preparation of suggested proposals and plans for improving various educational practices, arrived at by cooperative planning among private and public educational organizations and lay groups, such recommendations and proposals to be influential only if their merit and appropriateness warrant voluntary acceptance by the States and institutions.
3. The provision of services of a national character that cannot well be undertaken by single States acting alone, e. g., the collection, interpretation, and dissemination of national statistics, the conduct of national and other important surveys, the convening of conferences of national significance.
4. Pointing out desirable educational ends and procedures, evaluating educational trends and giving educational advice and discriminating praise.
5. The offering of consultative services to States, school systems, and higher educational institutions on problems of reorganization, finance, administration, and curriculum.
6. The coordination of government activities relating to education through schools and colleges.

In all such functions it will be apparent that encouragement and stimulation rather than control are envisaged as the objectives of the Office of Education with respect to education in the States.

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General Explanation of the Proposed Organizational Pattern

Education Deserving of Strong Government Backing

For the efficient performance of its distinctive functions with respect to education in the States it is obvious that the Federal Office of Education must have an effective professional staff organization through which to work.

Public education is in itself one of the major enterprises of State and local governments. In peacetime it employs more people (more than 1,000,000), it spends more money annually (more than $2,500,000,000), and it directly affects more homes (about 25,000,000) than any other single enterprise carried on by the people through government. It is more immediately and intimately a concern of parents, of taxpayers, and of citizens generally than any other public service. And it is of great importance to the future felicity and the progress both of individuals and of the Nation.

Education merits and needs the strongest backing and the highest prestige that the people of a great Nation can provide through their Government. It needs the ablest leadership that the Nation can command. The Federal service should be in a position to attract and to hold outstanding leaders of the educational profession, both because of the prestige of the Federal education service and because of the broad opportunities afforded for a career of beneficent influence. The scale of salaries paid to professional employees of the Office will be one important index of the high regard in which the work of the Office is held. Another index thereof will be the adequacy and competency of the staff provided to the Office with which to perform its major functions of national research and leadership.

Structural Pattern of Recommended Organization

The recommended organization and expansion of the staff of the U. S. Office of Education, shown in chart I (facing page 138), is designed to fill out numerous gaps in the present staffing of the Office and thus to enable it to act as a *Service Agency* to education, both private and public, in *all* of its important aspects. The recommended organization is designed also to implement sound structural principles as applied both education-wise and government-wise.

Education-wise, the organizational structure parallels in its general outline the different levels and types of educational institutions commonly found in the various States and communities of the Nation together with their various educational interests and activities. It provides a service base for all types of educational problems upon which schools and colleges, or groups interested in education may and do seek information and consultative assistance. It thus enables the members of the staff of the Office to be readily and directly related to the major constituencies they are prepared to serve.

From time to time various educational groups have recommended this type of organization. For example, the National Association of Secondary School Principals in March 1944 "recommended that there

be established a department or division of secondary education in the U. S. Office of Education that will, in every way, be comparable in status, personnel, aim, and purpose with such other divisions as are now in existence, as the Division of Vocational Education and the Division of Higher Education. We are further recommending that all the professional services that are now available, through the regular staff of the U. S. Office of Education, that are concerned with education on the secondary school level in the different subject areas and those that are needed additionally be coordinated in the division of secondary education and operated under the direction of a well-qualified director or assistant of the division of secondary education." At one time or another similar recommendations have been received from the American Association of School Administrators, the Department of Elementary School Principals, of the National Education Association; The National Councils of Teachers of English, of Mathematics, of Science, of Social Studies; the American Association for Health, Physical Education, and Recreation; and other professional organizations of educators.

Government-wise, the organizational structure gives effect to sound principles of public service administration, viz: (1) Provision is made for what is usually referred to as "unity of command," i. e., proper centralization of administrative and supervisory responsibility and authority for the operations of the Office as a whole. A wise executive will, of course, delegate much of his responsibility and authority to others and arrange for the orderly flow of both through definite channels to all workers in the organization. (2) The organization provides for a clear-cut assignment and checking of duties. It guards against any indifference born of the intellectual isolation of specialization on the one hand and against the friction which tends to result from conflicting jurisdictions and "too many bosses" on the other. (3) The organizational set-up facilitates cooperation and coordination of effort among its various Divisions themselves and with outside groups and organizations, governmental and nongovernmental. (4) The organization provides for a sufficient degree of flexibility in operations to utilize to the maximum possible extent differences in the special training, competence, and native ability of staff members. It is designed to encourage staff initiative, imaginative planning, and the creative action necessary to meet changing needs.

The efficiency of the Directors of Divisions and of professional workers in the various echelons of each Division will be increased as they are given opportunity for initiative, with clearly defined responsibility for the success of their plans and for divisional operations. It is proposed that the Directors of Divisions will be given the major responsibility, under the supervision of the Commissioner and Assistant Commissioners, for the preparation and justification of divisional budgets and for the most prudent and fruitful expenditure of such appropriations as are made to the Office of Education by the Congress.

It is expected that requests for appropriations to be submitted in future years by the U. S. Office of Education will follow the organizational patterns of Chart I, with such modifications as experience

and changing conditions may require, until such time as the Office is adequately staffed. This may take 2, 3, or more years to consummate.

While, in general, the staff proposed in chart I is quite complete, it would not be adequate with respect to certain educational activities for which the Office of Education may be called upon to carry heavier responsibility in the future, such as aviation in colleges and universities or the administration of grants-in-aid for lunchroom services.

General Administration

The general administration and direction of the entire Office will be the special responsibility of the Commissioner and of his immediate staff consisting of two Special Assistants and two Assistant Commissioners, together with the necessary professional and secretarial assistance. This organization of the general administrative overhead is simple and clear-cut. It is designed to free the Commissioner from the pressure of many details to such an extent that he can devote more time and attention to major planning and policy considerations as they affect education in general and the efficiency of the entire Office organization and its operations in particular. By relieving congestion in the Office of the Commissioner, efficiency of operations throughout the Office should be improved, more prompt and thorough consideration given to proposed plans of work, and more vigorous execution of approved programs of work assured. Moreover, by making provision for the proper devolution of authority and responsibility toward the periphery of the organization, administrative control will be made more consistent with the pooled thinking of professional workers at all levels.

Some Essential Means of Coordination

Proper delegation of responsibility with attendant subdivision and specialization of work is necessary in any effective organization. So likewise is coordination essential. Coordination involves a meeting of minds, agreement as to purposes, and cooperation in action. Coordination will necessarily be a central concern of the general overhead administration of the Office. The Commissioner and his staff must devise means by which the Office will operate as a unit, without friction or conflicts of jurisdiction.

Coordination of divisions will be attained in several ways. For example, arrangements will be made for the Directors of Divisions to meet frequently with one another, and with the Commissioner, the Special Assistants, and Assistant Commissioners. *An Administrative Council* will be created consisting of the Commissioner as Chairman, the Special Assistants and Assistant Commissioners, the Directors of Divisions, and any others in the Office whose assistance is required. This Administrative Council will consider together the general program of activities and services of the entire Office, and, by appropriate means, provide for cooperative planning and for the avoidance of duplication and conflict in the work of the several Divisions.

Similarly, arrangements will be made for a *Personnel Council* of the Office, made up of the Special Assistants, the Assistant Commissioners, and the Director of the Division of Central Office Services, with the Chief of the Administrative Service as secretary. This Personnel Council will review all available registers involving positions,

Grade P–5 or above, from which appointments are being considered, and will provide for the Commissioner's consideration such analyses of the qualifications of candidates as will guide and assist him in recommending persons for appointment.

Arrangements will also be made for *various interdivisional planning and working committees* to develop cooperative studies and to tie together related elements of work in the different Divisions. For example, an Interdivisional Committee on Nutrition will be set up consisting of representatives of school lunch programs, health services, health instruction and physical education, home economics, and natural sciences at elementary, secondary, vocational, and higher education levels. This Committee will prepare a program of studies and services for consideration by the Administrative Council. In terms of the program developed and finally approved by the Commissioner, appropriate action will be undertaken by the Committee and by the various operating Divisions and units of the Office in carrying out the program. Such a Committee and its program will, of course, need to be properly related to the work of other agencies, in and outside the Government, interested in nutrition education in order to guarantee the most intelligent and expeditious transfusions of significant scientific findings of such agencies into the "blood-stream" of American education at its various levels.

Similarly, *an Inter-Divisional Committee on Statistical Studies* will be formed under the chairmanship of the Director of the Division of Central Office Services, with the Chief of the Statistical Service as secretary. This Committee will carry on continuously consideration of ways of improving the statistical services of the entire Office, making periodic recommendations to the Administrative Council. This Committee, too, through its secretary, will relate itself to various other statistical agencies, in and outside the Government, in planning for the improvement of the statistical services of the Office.

Coordination within Divisions will be attained under the direction of the Directors thereof by means of intra-divisional committees and divisional planning conferences. The fact that the professional workers in each unit of the Office will be in frequent touch with their chiefs, and the further fact that jurisdictional boundaries have been rather clearly defined in the organizational structure itself, will also help to facilitate coordination within Divisions.

Coordination with extra-Office groups such as the State departments of education, professional organizations of teachers, principals, and school administrators, with other governmental agencies and with nongovernmental agencies interested in educational improvement, will also be essential. In some instances such coordination will be attained by assigning special liaison responsibilities to various staff members or to committees of the Office. Generally speaking, however, better machinery will be worked out than now can be operated, because of inadequacy of staff, for making practicable effective cooperation between various outside groups and organizations and the U. S. Office of Education. Plans for such machinery are presented in considerable detail later under the heading "Strength Through Sharing Experiences and Ideas."

Major Divisions and Their Organization

Divisions Under Assistant Commissioner A

Reference to chart I (facing page 138) makes clear how it is proposed to organize the staff of the Office in eight major operating Divisions—four of them under Assistant Commissioner A and four of them under Assistant Commissioner B. The four Divisions under Assistant Commissioner A, namely, the Divisions of Elementary Education, Secondary Education, Vocational Education, and Higher Education, respectively, parallel the levels and types of educational organization generally prevalent in the States and local communities of the Nation. The experience of the U. S. Office of Education over many years in attempting to relate its services to the problems of schools and colleges throughout the Nation definitely recommends this grouping of staff experts by educational levels.

One important advantage of such a grouping is that it facilitates the coordination of policies and of studies and investigations bearing upon the various aspects of the several levels and types of school programs in both public and private schools. The typical school organizational pattern in the United States consists of a 6-year or an 8-year elementary school from which children pass at the age of about 12 or 14 years to a 6- or 4-year secondary school. This is followed by a 2-year junior college or a 4-year college leading to professional courses of from 2 to 4 years in length on a post-graduate level. In this system, the instructional problems of the secondary school are related to those of the elementary school on the one hand and to those of the colleges and universities on the other.

Within the schools themselves provision has been made, especially at the high-school and college levels, for courses of instruction of great variety. Some of these courses are general and "cultural," and some are specialized and vocational in character. Even after definite vocational specialization has begun, whether during the secondary school period or later, most students devote a considerable segment of their school time to a continuation of general studies designed to develop common social-civic and personal-cultural attributes. For example, the prospective tradesman and industrial worker, concerned as he is with labor legislation as affecting wages, hours of work, safety, collective bargaining, and other labor-management relations, is also concerned as a prospective citizen with understanding our history and government, foreign policy, and social and economic problems. Basic courses in the social studies field should give him the knowledge he needs for effectiveness both as a worker and as a citizen. Similarly, he is in need of opportunity for liberal cultural studies to introduce him to the resources of intellectual and æsthetic interest and enjoyment available for the enrichment of his leisure hours.

In the United States, vocational education, when thus properly supported and supplemented by basic general subject studies, has not been regarded as an inferior substitute for academic education but as coordinate therewith and complementary thereto. The vocational preparatory objective, always present in the secondary school program, usually becomes more prominent in the last 2 years thereof and frequently dominates the later college and professional school programs.

This single-track system, as contrasted with any dual system bifurcating into academic and vocational lines in early adolescence, raises problems of relationships which have been accentuated somewhat by the fact that the Congress has seen fit to provide general grants-in-aid for certain types of education, notably vocational, carried on by colleges as well as by schools of less-than-college grade, and not for other types. This has given to vocational and technical education a strength which has seemed to set it apart somewhat from other types of education even though both types are usually under the same general educational administration. What is needed to give even greater unity to the school system is not the weakening or submergence of one type of educational program or the other but their coordination in such fashion as to result in the improvement of both and in the better provision of a balanced, well-rounded education for work and for citizenship and personal growth for all of our people.

The Division of Elementary Education has for its purpose the development of a continuous program of service which will make for the improvement of elementary school programs throughout the Nation. The scope, importance, and problems of this division of American education merit much greater provision for staff services in the Federal Office of Education. It is the beginning level of our system of education. All pupils enter it; approximately one-fifth of them do not go beyond it. For these it represents their basic preparation for adult-life activities.

The program of the elementary school is America's greatest educational undertaking. This program includes 193,397 schools; 20,418,023 enrolled children; 624,340 teachers; and an expenditure of $1,628,926,628 annually.

In order to serve this important segment of American education it is proposed to organize a division of elementary education with four subgroupings or units, namely: Elementary School Organization and Supervision, Teacher Training, Instructional Problems, and Exceptional Children and Youth. The first three of these units represent the functions of elementary school principals, supervisors, and teachers; while the fourth unit represents the special problems of educating socially maladjusted, physically handicapped, and mentally exceptional children and youth.

School Organization and Supervision are so closely related in the successful operation of an elementary school that the combination of these for the purpose of study, research, and leadership looking toward essential improvements seems both necessary and eminently desirable. The form of organization that is found in the first eight grades of school and the extent and kind of supervision provided are so varied, often in apparently similar situations, as to indicate definitely the need for studying the problems involved on a Nation-wide basis by the Federal agency authorized to render services for the improvement of school programs. For this purpose there are needed: (1) status studies on a national scale of current practices that will call attention to the wide variations prevailing and present what appear to be desirable and feasible practices under each of several types of situations; (2) research studies, including demonstrations and experiments in the field, that will have for their objective (*a*) the development of principles and the selection of criteria to be used in

determining desirable forms of organization and of supervisory assistance under various typical situations and (*b*) suggestions as to ways and means for bringing about improved practices in the organization and supervision of elementary education in school systems.

With respect to *Teacher Training* it is an acknowledged truism that instruction can be no stronger than the teacher is effective in developing real learning situations for pupils. Provisions for pre-service and in-service teacher education vary greatly throughout the United States and result in differences in the quality of teaching and learning in the classroom. There is an urgent need for continuing studies, investigations, and reports on this situation, on a national scale, in order that there may be developed a background of information to serve as a basis for planning improvement of teacher-education programs throughout the United States.

The study of *Instructional Problems* is an important category of service to elementary education which the Office of Education should be prepared to render. To the extent that instruction fails in its function, school expenditures both of time and money are wasted. The wide variation in teaching procedures and methods found throughout the United States makes it probable that many children suffer under the handicap of inferior instruction. Here again both (*a*) status studies are needed on a national scale with reference to the quality of instruction; the achievement of pupils in terms of attitudes, skills, and knowledges essential to the good citizen; periodic studies of the distribution within the subject areas making up the total elementary school program; as well as (*b*) research studies, including experimental and demonstration work that will lead to the development of criteria for evaluating the effectiveness of instruction in the different subjects or areas of the school program.

Among the children and young people who are of elementary and secondary school age are some 5 or more millions, or about 1 in 5, who require a very special educational treatment because of a serious physical, mental, or other handicap that makes it impossible for them to progress with the rank and file of elementary and secondary school pupils. Children who are blind or have only partial sight must have a highly specialized technique of instruction; similarly for children who are deaf or hard-of-hearing, those who are crippled, those who suffer from a serious speech handicap, those who are extremely slow to learn, as well as those who are unusually talented or gifted—all need special attention in both elementary and secondary schools. Children who are seriously anti-social or whose behavior threatens to bring them into conflict with the law, should be helped through specialized individual treatment to become socially minded citizens.

Schools and school systems throughout the country look to the U. S. Office of Education for advisory and research services in the education of these exceptional children and youth. At the present time there is only one staff member in the Office of Education to serve these various groups with their different instructional techniques and requirements. The Unit on Exceptional Children and Youth is designed to provide a more nearly adequate service with respect to the education of those exceptional children and youth

whose educational requirements can be met only through special facilities and instruction.

The Division of Secondary Education represents an effort to improve the services of the Office of Education to another segment of American education. The outstanding educational development of the twentieth century has been the growth of American secondary education. In 1900 the public high schools had an enrollment of about a half million pupils, by 1920 the enrollment had grown to more than 2 million, and by 1940 to over 6½ million. In this last-named year 68 percent of those of high-school age were actually enrolled in public high schools. If the enrollments of private secondary schools are added, the percentage rises to over 73, with virtually three-fourths of those of secondary school age enrolled in high school. Our democracy is engaged in the greatest effort the world has ever seen to raise the educational level of an entire people above mere literacy.

While this expansion has been going on, the service of the Office of Education to the broad general movement of secondary education has remained at one specialist and two or three additional specialists who give a small part of their time to work in this field. Only in vocational education have the Office's services been commensurate with the increasing scope and importance of secondary education. In 1940, of the 6,635,000 day-school pupils enrolled in the last 4 years of public high schools, 1,022,284 (fewer than one-sixth of the total) were registered in day-school vocational classes organized under State plans for vocational education. The proposal for the organization of the Division of Secondary Education in the Office aims to provide a service more nearly adequate to the needs of those areas of secondary education not now served by the Division of Vocational Education.

The proposed organization of the Division of Secondary Education is similar to that of the Division of Elementary Education in its three subgroupings of specialists into units for a study of Organization and Supervision, Teacher Training, and Instructional Problems, respectively. Since the organization and the educational problems of elementary and secondary schools are related in important respects, this parallel type of staff organization in the Office will enable the comparable specialists in these two divisions to work closely together on problems common to the two school levels, without neglecting the important differences in educational approach occasioned by the differing maturity of pupils in elementary and in secondary schools.

The Division of Higher Education is designed to serve more adequately the needs of the colleges and universities. These form the capstone of the educational system in the United States. The scope and importance of higher education in the United States are revealed by consideration of the following statistics: There were more than 1,700 legally chartered colleges and universities in 1940. There were more than 130,000 college teachers and 1,490,000 college students in the regular 9-month sessions. In addition, more than 450,000 students took work in summer sessions. The number of students on college campuses in 1940 more than equalled the population of the five States of New Hampshire, Vermont, Delaware, Wyoming, and

Nevada. Of these students in the regular session 745,000 were studying in colleges of arts and sciences; 645,000 were studying in professional schools; and 55,000 were studying in graduate schools. Institutions of higher education in 1940 received a total of $571,000,000 for the support of their educational programs. Of this income $38,800,000 came from the Federal Government, $151,000,000 came from State governments, $24,000,000 came from county, city, and district governments, $200,000,000 came from student fees, $71,000,000 from endowment earnings, and $40,000,000 from private gifts and grants. The total value of the physical property of these colleges and universities was $4,500,000,000 and their endowment funds exceeded $1,680,000,000.

From the above figures it will be clear that higher education in this country is a very sizable enterprise. Its extent, however, is not the principal basis of its importance. The advance made in the social, economic, and civic life of any country is dependent to a large extent upon the high standard and efficiency maintained by those who serve in positions of leadership. Colleges and universities help to develop trained leadership. Anything which will tend to raise the effectiveness of the leaders of this country will pay good dividends. It will increase the output of industry per man-hour of labor; it will increase the yield of agriculture for each acre; it will improve the service performed by business establishments; it will improve the health of the people; and above all it will add to the capacity of the people for happy living and effective government. It would seem, therefore, that the Federal Government could well afford through the U. S. Office of Education to provide a service to higher education in the United States calculated to assist in the improvement of this important educational enterprise.

Freedom from State control or supervision is highly cherished by the colleges and universities. Many of them, however, would welcome professional assistance in their efforts to raise their own standards, to solve their own educational problems, and to improve their own operating efficiency.

The Division of Higher Education could make substantial contributions to the improvement of higher education along three lines: (1) *Research and development.* With the help of committees of colleges and universities, the problems which puzzle the colleges could be identified and research procedures for solving them cooperatively could be developed. Research workers of the Division of Higher Education in the Office could thus become the spearheads in a Nation-wide program for the improvement of higher education under institutional auspices. (2) *Collection and dissemination of information.* The number and types of questions which come to the Division of Higher Education in the Office now are very great. To many of the questions the only reply that the Division can now make is the courteous regret that it cannot supply helpful answers. With the more nearly adequate staff proposed for the Division of Higher Education many of these requests for information could in future be serviced. (3) *Consultant and advisory service.* Increasingly, the practice of self-examination is growing among colleges and universities. Several institutions of a given State may join in examining their problems, in the hope of giving the State a more effective and

economical program of higher education with a minimum of expensive duplications among institutions. Or a single college or university may set up machinery within its own staff to improve its administrative practices and its curriculum programs. Or some one division or department within a college may create a committee to study its problems. In all of these activities the services of the Office of Education are urgently requested.

Usually, the first thing the self-examining group feels the need of is the counsel of a person or persons acquainted with similar undertakings in other institutions. To assist such self-examining groups to attack their problems in the most effective way is a distinct service, the value of which grows as the progress made by these groups in solving their problems is communicated to other colleges. These other colleges in turn set up their own self-examining groups and so the leaven works. The most important key to the success of this movement for critical self-examination is the availability of trustworthy consultants or advisers. An adequate number of specialists should be provided in the Division of Higher Education competent to render expert consultative services to colleges and universities desirous of improving their programs and procedures.

The proposed staff for the Division of Higher Education falls into four subgroupings or units as follows: (1) Organization, Administration, and Finance; (2) General and Semi-Professional Programs; (3) Professional Schools; (4) Colleges of Arts and Sciences. Here again, as in the case of the Divisions of Elementary and Secondary Education, the divisional organization itself closely parallels the major problems and types of programs of higher educational institutions.

Thus the unit on Organization, Administration, and Finance is designed to render a service to college and university officials charged with managing these institutions, not only as educational institutions but also as business enterprises handling great sums of public and private money, employing many thousands of professional and other employees, and providing educational programs for more than 1½ million students. The business officers of higher institutions must insure useful investment of their endowments, receive and disburse funds, operate great plants, including dormitories and dining halls. Other officials must plan and construct buildings and devise intricate scientific apparatus. Faculty members must be recruited, standards of promotion and tenure prescribed, and retirement programs planned and administered. In guiding students and in measuring their progress while in the institution college authorities and directors of student personnel must utilize modern scientific testing techniques such as those used in successful military and industrial personnel management. Counseling and guidance programs must be provided which assist the student in choosing the most suitable courses and in planning a career. Student scholarship and loan funds and campus work programs must be administered. It is proposed that the unit on Organization, Administration, and Finance should be staffed to render helpful services to college and university officials, to associations and to individuals, to the interested general public, and to other Federal agencies with respect to the above-mentioned important matters of organization, administration, and finance.

Similarly, the unit for General and Semi-Professional Programs is designed to render service with respect to teacher education, the education of school administrators, the land-grant colleges and universities, Negro college education, general college education, and adult education carried on by colleges.

The unit on Professional Schools is designed to assist these institutions in the improvement of their programs through research, the exchange of information and consultative services in the fields of engineering education, journalism, library science, commerce and business, agriculture and forestry, home economics, medicine, mining and metallurgy, arts, and architecture.

The unit for Colleges of Arts and Sciences is designed to serve the 750 colleges of arts and sciences in this country and the 500 junior colleges which also provide education in the arts and sciences. One of the most pressing problems in higher education today is that of the role of the basic colleges of arts and sciences in higher education. Many such institutions are now seeking to analyze their functions and to reconstruct their programs. The Federal Office of Education ought to be in position to assist them by (1) stimulating, promoting, and conducting research; (2) collecting and disseminating information about instruction in the arts and sciences; (3) promoting the use of successful practices in education in the arts and sciences; (4) serving as a liaison between agencies of the Government and colleges of arts and sciences; (5) rendering advisory and consultative services; (6) organizing, directing, and participating in national and regional conferences.

The Division of Vocational Education is the only one of the four Divisions under Assistant Commissioner A whose staff at present approaches adequacy. The proposed organization of this Division, therefore, follows the present pattern that has proved satisfactory in use over more than two decades. It has six subgroupings or units concerned with agricultural education, trade and industrial education, home economics education, business education, occupational information and guidance, and research and statistics, respectively. Within most of these units provision is made for regional agents and for specialists, the former concerned with matters of organization and supervision of federally aided vocational education in regional groupings of States, and the latter with teacher-training, instructional, and other problems in the respective major fields of vocational education of less-than-college grade.

Adult Education has not been represented by a grouping of specialists in a separate division. It is expected that appropriate adult education studies and activities may be developed by each of the four Divisions under Assistant Commissioner A. This fact is another indication of the serious effort which has been made in planning the organization to reduce to a minimum the demands for coordination. For example, adult education in the elements of reading, writing, language, history, and civics, including foreign-born adults desirous of qualifying for naturalization, will be the responsibility of a professional staff member in the Division of Elementary Education. Parent education in matters of child care and development will be the responsibility of specialists in the home economics unit of the Vocational Education Division; adult education in agriculture, trades and in-

dustries, and business pursuits will be developed by specialists in the other units of the Vocational Education Division, while general adult education, including education through extension classes provided either by secondary schools or colleges and universities, will be represented by adult education specialists in those Divisions.

Coordination.—Assistant Commissioner A will be responsible for the coordination of the activities of the Divisions of Elementary Education, Secondary Education, Vocational Education, and Higher Education, and all adult education activities. Take, for example, the instructional problems of English in the high schools, especially those of teaching sentence construction, vocabularly, and usage. These are matters within the field of special competence of the Specialist for English. They are also problems for the subject-matter specialist in business education to the extent that basic skills of English are related to the training of competent stenographers and secretaries. A joint attack upon this instructional problem by both of the afore-mentioned specialists might serve (1) to explore any weakness in our present English courses in high schools as evidenced by time allotments and teaching emphasis given to the refreshment and maintenance of basic English composition skills; (2) to discover the particular weakness in basic English composition skills evidenced by students in stenographic courses; and (3) to relate the findings of (1) and (2) above as a basis for recommendations for strengthening both academic courses and vocational stenographic courses.

Another illustration of coordination might be cited from the field of the natural sciences. A joint study might be undertaken by the specialists in the natural sciences in the Divisions of Secondary and of Higher Education together with the subject-matter specialists in Vocational Education to review the content of science courses and textbooks in high schools as this content is or is not related to the needs of students for advanced scientific studies in colleges and universities on the one hand or for vocational education in agriculture, home economics, trades and industries, or business on the other.

As a final illustration of the possibilities for coordination under Assistant Commissioner A, a joint study might be arranged by specialists in the Vocational Education Division working with specialists in the Divisions of Higher Education and Secondary Education to secure data on the qualifications and necessary training of high-school principals and to interpret the findings in terms of the principals' responsibilities for the supervision of vocational courses in the high schools.

In the normal operations of the Divisions of Elementary, Secondary, Vocational, and Higher Education their Directors, Assistant Directors, and Chiefs under the chairmanship of Assistant Commissioner A would constitute a General Committee on Instructional Problems to develop and submit to the Administrative Council for consideration and approval essential over-all policies to govern research programs to be carried forward by various inter-Divisional Committees and individual Specialists. Within each of these Divisions the Directors, Assistant Directors, and Chiefs would regularly be at work integrating policies and plans involving the Specialists in the Division charged with responsibility for the study of Organization and Supervision, Teacher Training, and Instructional Problems.

Divisions Under Assistant Commissioner B

Four of the eight Divisions shown on chart I, namely, School Administration, Auxiliary Services, Central Office Services, International Educational Relations, follow a somewhat different organizational pattern than do those under Assistant Commissioner A. These Divisions, respectively, group together Specialists for educational interests and functions that are common to several educational levels and types of schools. Theoretically, it would be possible to assign these Specialists to each of the four Divisions by educational levels and types of schools under Assistant Commissioner A. Practically, such an arrangement would result in much duplication of staff and functions since questions of school administration, health services, services to libraries, preparation and exchange of materials for use in schools studying international relations, statistics, use of the Office library, visual education, etc., though related to each of the several levels of the school system are likely to cut across or be common to several of them.

The Division of School Administration has for its purpose cooperation with the States and local educational authorities in formulating and carrying on essential studies and services in the field of school administration involving such matters as school organization; pupil transportation, school legislation, school finance, school housing, and the business administration of schools and school systems.

Educational progress to meet the needs of the future requires plans of action evolving from a program of continuous study and evaluation. Particularly during the last decade has it become increasingly evident that balanced planning of administrative policies of various levels and aspects of education is needed to lay the basis for the most economical, efficient, and properly integrated organization of educational opportunities for all children of school age and for youth.

Numerous problems arising in the fields of educational organization and administration, legislation, plant planning and construction, maintenance and operation, business administration, pupil transportation, and the like cannot be solved by the individual school system without reference to area-wide and State-wide needs. The U. S. Office of Education has increasingly been called upon by the States to supply information and advice concerning plans for developing better techniques and standards of achievement: (*a*) in improving local units of school administration; (*b*) in developing sound fiscal plans and improved budgeting methods; (*c*) in planning and constructing new school buildings; (*d*) in providing pupil transportation services; (*e*) in purchasing and distributing school supplies and materials; (*f*) in improving and unifying State legislation and State administrative procedures.

Increasingly in the post-war period the Office of Education should be prepared to give helpful advice concerning such questions as the following:

1. What factors should a State consider in setting up its State administrative organization responsible for a comprehensive State program of education to serve adequately its children of school age, its youth, and adults?

2. What should be the respective responsibilities of the State and the local school administrative units with respect to pupil transportation, school attendance, provision of funds for capital outlay and for current school expense, provision of instructional supplies, determining the need for and the location of educational plants, formulation and enforcement of school building standards?

3. What is the relationship of different types of school organization, such as the district, the town, the county, to the extent and quality of the instructional program, the ability to finance necessary capital outlay and current expense requirements, the efficient and economical administration of the educational program?

4. What legislation is needed within a State for the effective organization, financial support, operation, and maintenance of a comprehensive program of public education?

At the present time, because of limitations of staff, the Office of Education cannot satisfy the numerous requests for information and field service which come to it. For example, in 1943–44 the Specialist in School Plant was able to render consultative services in response to only half of the official requests for his services. An acceptable program of research, information, and field services in the field of School Administration could be provided by the proposed Division of School Administration shown on chart I. Such a program would include the following major elements:

1. Cooperation with State and local educational authorities in planning and conducting essential studies and surveys of problems in the field of school administration.

2. Cooperation with the States in planning and conducting conferences—area, State, and national—for discussion of problems of school administration and for consideration of findings and of possible recommendations resulting from studies cooperatively undertaken.

3. Cooperation with the States in dissemination of research findings on problems of administration through publications, conferences, and consultative services.

As already indicated, the Division would function through three operating units, designated, respectively, as (*a*) General Administration; (*b*) School Housing; (*c*) Business Administration. Although each of these units would be responsible for services in its specified area or areas of service, their several efforts and activities would be closely coordinated so that studies of school legislation, for example, would be properly related to problems of school district reorganization and the location of school buildings; to arrangements for pupil transportation services; and to budgeting, accounting, and purchasing procedures. Such coordination within the Division can be readily assured through a committee of the three unit Chiefs and designated Specialists with the Director of the Division acting as Chairman.

The Specialists in this Division will, of course, need to cooperate with Specialists in other Divisions of the Office in carrying on some of their studies. Such cooperation will give assurance, for example, that Office recommendations regarding functional planning of school buildings will recognize improved methods of instruction in the sub-

ject-matter fields at the several educational levels, will reflect the requirements for the effective use of radio and visual aids, for efficient lunchroom service, for special room lay-outs, for adequate health services and provisions, libraries, and for school-community recreation programs. Cooperation with other Divisions can be organized through an inter-Divisional Office Committee on Building Plans composed of the Chief for School Housing, the Directors of the Divisions of School Administration, Elementary, Secondary, Vocational, and Higher Education, and Auxiliary Services, with Assistant Commissioner B as Chairman. This Committee would be responsible for preparing policies and work programs for submission to the Administrative Council. Following approval by the Council, the School Housing Unit of the Division of School Administration would be responsible for carrying forward the program of work involved.

The Division of Auxiliary Services brings together Specialists in seven Units representing somewhat diverse functions: (1) Service to Libraries, (2) School-Community Recreation, (3) Administration of School and College Health Services, (4) Problems of School Lunchroom Management, (5) Educational Uses of Radio, (6) Visual Education, (7) Services for the Blind. As ordinarily regarded by schools, school systems, and higher educational institutions, all of these services, with the exception of number (7) above, are essential auxiliaries or "helpers" of the school in the educational process. The functions represented by the first six units continuously cut across several educational levels and types of schools and school programs. The seventh unit is a service to blind adults in occupational adjustment. By grouping these various services together in one Division they can be assured the careful and understanding divisional administrative leadership that the proper development of their important service functions requires.

Service to Libraries.—In the United States there are 6,500 public libraries, over 20,000 centralized and 45,000 classroom libraries in schools, 1,700 college and university libraries, 1,500 special libraries, and 250 State and Federal libraries. All are indispensable adjuncts of the educational systems of the United States. They organize and make available with skilled guidance the printed and other library material needed by children, students, research workers, professional groups, artisans, community leaders, and the rank and file of citizens. The purpose of the unit on Service to Libraries is briefly:

1. To cooperate with State library agencies and professional organizations in studies and activities that will increase the effectiveness and extent of library service, with especial attention to the needs of areas now without adequate service.
2. To supply basic data to local, State, and Federal agencies and to others on the services, resources, methods, physical plant, and personnel of libraries.
3. To assist cooperative efforts between school and public libraries, and between college and public libraries.
4. To coordinate library services with other forms of adult education.
5. To further generally library development in the United States.

School and College Health Services.—The Administration of School and College Health Services should furnish to State Departments of Education and through them to the schools and colleges of the several States the following services:

1. Assistance in the establishment of effective working relationships at State and local levels with public health and other agencies and organizations devoted to serving health needs.
2. Assistance in the establishment of suitable State and local educational organizations for effective health service administration and supervision in schools and colleges.
3. Exchange of experience and stimulation of research to discover current practices in all school and college health services and to improve the same.
4. Consultative Service to help in the improvement of policy and practice related to medical and dental examinations in schools and colleges, effective follow-up to secure the correction of correctible defects and the prevention of preventable conditions uncovered by the examinations.
5. Stimulation of the training of teachers in other matters of effective school health service, such as the making of systematic daily observation of all pupils to discover the first signs of contagious disease or other deviations from health.
6. Consultative services on school housing and lighting, ventilation, and sanitation.
7. Assistance to State and local school systems in the development of standards for the selection of personnel to administer school health services.
8. Advisory service to the Commissioner and the Administrative Council.

School and Community Recreation.—The schools today have a large stake in community recreation. In bringing the child into vital contact with many and various developmental experiences, most schools necessarily include a variety of activities leading out into broadening cultural interests of a leisure-time and recreational character. Recreation and play are vital parts of a school experience; the instrumentality through which the school seeks to attain important character-education values, such as loyalty to the team, honesty, perseverance, good sportsmanship, and the mental hygiene values involved in personal status with a respected age-group and the sublimation of repressed instinctive drives.

In addition to their curricular interests in recreation and leisure-time activities for children and youth the schools are potential centers of such activities for adults because of their extensive plant and playground facilities and trained personnel. Some school systems have been alert to the possibilities of using these facilities in a program of community recreation resting upon a broad educational base. But the perfunctoriness and inertia of many school systems with respect to their opportunity and responsibility for school-community-centered recreational programs lead to the conclusion that much needs to be done in the promotion of this phase of educational endeavor. Consequently it is proposed to establish in the Office of Education a small

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unit on School-Community Recreation whose purpose it would be to make studies and investigations of the extent to which and the ways in which schools, school systems, colleges, and universities are now participating in the organization and operation of school-community programs; to advise with school and college officials concerning the ways in which the organized educational systems of the various States and communities may make a larger contribution to the development of integrated school-community programs designed to meet the recreational needs of children, youth, and adults alike.

Problems of School Lunchroom Management.—The Unit on the Problems of School Lunchroom Management is designed to enable the Office of Education to give services now greatly needed in the rapidly extending programs of school feeding of children. The Federal Government is now annually aiding this development in the sum of $50,000,000. Recent statistics reveal that 60,000 schools, serving more than 6,000,000 children, are now providing lunches at school. As yet, however, only about one-fourth of the schools provide opportunity to purchase a nutritious school lunch at cost or less. Since it is increasingly important to the health and welfare of the Nation that adequate food and nutrition instruction be provided for every school child, and since the Federal Government is already investing heavily in the feeding of school children, it is only good business to provide through the Office of Education the professional and technical services that will make the program most effective both physically and educationally.

Carefully controlled studies and experiments in the field of school lunchroom management, the equipment needed, the training of personnel, and similar matters need to be stimulated and guided by this unit, and reported to the schools through publications, conferences, consultative services, and similar means.

Educational Uses of Radio.—Four areas of increasing demand for services by schools in the Educational Uses of Radio are apparent. First there appears to be an increasing interest in obtaining educational programs in recorded form, and in obtaining advance information concerning the availability of "live" radio broadcasts suitable for school listening. Second, there is an intensified demand for advice and assistance from the Office of Education in planning technical facilities for school radio reception and distribution. Third, there is the phenomenal rise in interest in developing school-and-college-owned educational frequency-modulation broadcast stations. Fourth, there is the increasing demand for assistance in planning the actual mechanics of program production and broadcasting—from State departments of education, from individual school systems and colleges and universities planning to begin educational FM broadcasting after the war, and from already established educational program producers. To meet these demands effectively, the proposed Unit on Educational Uses of Radio will be needed to undertake fact-finding and research (including surveys and experimentation), to carry on developmental and promotion activities, to provide continuing aids to schools, to act as liaison with governmental and private groups and agencies concerned with the educational uses of radio, and to stimulate and assist in the training of specialized personnel for the educational uses of radio.

Visual Education.—A phenomenal growth in Visual Education has taken place in the United States during the past 3 years—in the war training programs of the Army and Navy and in civilian training through the Office of Education war training films. For the first time in this country, motion pictures, film strips, and other visual aids have been widely used to teach people how to do things. The number of motion picture films available for strictly educational purposes during the past 3 years is more than 6 times greater than the total of all the educational films made in this country during the previous 30 years. The Army has stated that the use of training films speeds up training as much as 40 percent; the Navy reports that students learn 35 percent faster and that facts are remembered up to 55 percent longer. Reports from experienced training directors who have used Office of Education war training films estimate that these films increase training effectiveness between 25 percent and 50 percent.

There is a real need for leadership to the schools and colleges of the Nation if these training resources now available are to be more generally utilized in civilian training and if educational uses of visual aids to instruction are to result in the development of additional materials. The Office of Education, with the experience acquired in the production of war training films, is peculiarly fitted to provide such leadership. The small Visual Education Unit proposed could well perform the following functions:

1. To conduct research on the techniques which tend to make educational motion pictures more effective in meeting specific instructional and training needs.
2. To conduct surveys, and on the basis of these surveys, to make reports of the equipment available, the average annual budgets, the per pupil expenditure, the administrative set-ups, the organization of film libraries, the average number of titles in these libraries, criteria for the purchase of new visual materials, and other data pertinent to visual education and useful to schools and colleges.
3. To hold conferences of leaders in the field in order to pool the experience of these leaders with respect to programs of production, distribution, and utilization of visual aids in education.
4. To advise organizations and institutions desiring to produce educational motion pictures and other visual aids concerning the needs of schools and colleges, production techniques, etc.
5. To administer the distribution of the 1,000 sound motion pictures and film strips that are now the property of the U. S. Office of Education together with the 20,000 still pictures valuable in certain specialized vocational training areas.

Services for the Blind.—The unit for Services for the Blind is designed to administer the provisions of Public Law 732, 74th Congress, commonly referred to as the Randolph-Sheppard Act, approved June 20, 1936, whose purpose is "providing blind persons with remunerative employment, enlarging the economic opportunities of the blind and stimulating the blind to greater efforts in striving to make themselves self-supporting blind persons. . . ." At present the average public assistance grant in aid of blind persons is $300 per year per person.

Only about 10,000 of the estimated 60,000 to 98,000 employable blind persons are partially or wholly self-supporting. Through the efforts of the enlarged unit for Services for the Blind it should be possible to restore normal incomes to 60,000 blind persons and either keep them from, or remove them from, public assistance rolls.

The Division of Central Office Services, as the title implies, brings together in one Division those services that are necessary to facilitate the operations of the Office of Education as a whole. The Division is made up of four major units: (1) The Statistical Service, (2) Information and Publications, (3) The Office of Education Library, (4) Administrative Service, each of which units under the immediate direction of a Chief would be responsible to the Divisional Director and Assistant Commissioner B for efficient service to the entire Office. The advantage of thus grouping these office-wide service units in one administrative division should be apparent in the closer supervision and administrative control such a grouping makes possible.

The Statistical Service Unit of the Office would be considerably strengthened. In the Act of 1867 establishing the Federal Office of Education, the Congress specifically recognized the necessity for "collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories." Under this legal mandate the U. S. Office of Education has for many years attempted to assemble basic statistical information from the thousands of school systems, educational institutions, schools, and libraries of the Nation—none of which, under the decentralized system of educational administration existing in the United States, was legally under obligation to furnish such information. Besides being unable to require prompt and uniform statistical reporting, the Statistical Service of the Office has worked under another severe handicap in that the staff of the Service has never been adequate to the task of assembling, compiling, and interpreting the basic statistical information that would serve regularly and promptly to "show the condition and progress of education in the several States and Territories."

The size of the task of the Statistical Service of the Office is indicated by the fact that periodic reports gathered must cover: The financial transactions (income and expenditures) for an annual turnover of 3 billion dollars and property accounting for over 290,000 plants (individual schools, colleges, and libraries) valued at over 15 billion dollars; employee data for over 1 million teachers, and in addition the janitors, engineers, bus drivers, repair men, etc.; student data for 30 million pupils in full-time programs and graduation data for over 1,400,000 high-school and college graduates annually. Keeping track of any business of this size requires sound and scientific statistical procedures.

The Statistical Service of the U. S. Office of Education should be prepared adequately to perform the following functions:

1. To develop plans for securing statistical information and collect, compile, and interpret basic statistics of education in the United States annually or biennially.
2. To collate, analyze, and interpret statistical data from other governmental and nongovernmental agencies and organizations bearing upon educational problems, under study or investigation by Specialists in the U. S. Office of Education.

3. To provide expert technical assistance to specialists in the various fields of education in the Office of Education, on research studies and investigations involving statistical method and educational measurement.

4. To provide advisory service and assistance to State and local school officials on problems of collecting facts and maintaining records and to conduct continuous studies for the improvement of systems of educational records and reports.

5. To provide assistance to officials of the Office of Education and State and local school officials in surveys of schools and school systems.

6. To coordinate the statistical activities of the Office of Education.

7. To cooperate with governmental and other organizations outside the Office of Education on special inquiries and investigations.

8. To analyze and interpret statistical information from other sources for use in planning and understanding educational programs and to provide a statistical information service.

A more adequate Statistical Service is highly desirable, particularly at the present time, for several reasons:

1. *Expanded education program requires more extensive statistics.*—The scope of the educational enterprise in the United States has expanded geometrically since the existing pattern of statistical service in the Office was established. In secondary school enrollment alone the increase since the turn of the century has amounted to almost 1,400 percent. Three-fourths of all living high-school and college graduates have graduated in the last 20 years. As educational opportunities have grown, educators have studied problems more carefully and the demand for statistical information has increased. We now have many kinds and combinations of types of schools and classes. The year 1946 will be a critical year. Since World War I, and particularly since the depression period, there have been many increasing social and economic pressures, such as changes in employment, shifts in population, and problems of financial support of schools, which have changed the nature and amount of educational opportunities provided in America. This trend will unquestionably be accentuated in the years of adjustment immediately ahead. Statistical service, if adequate, can assist significantly in effecting economies through providing current facts essential to the intelligent planning of school programs within the States, for the States in general, for local school systems, and for higher educational institutions, both public and private.

2. *Statistical methods proving increasingly useful.*—The science of statistical methods has advanced in recent years so that many types of information hitherto not available may be secured. This has been demonstrated by experience during the war emergency, both by military and governmental war agencies and by war industries. The service of the U. S. Office of Education may be advanced if it is prepared to take advantage

of the scientific progress in this field through strengthening its statistical activities.

3. *Demands for service increasing.*—Increasing demands of State and local school and college officials and of many professional and lay organizations for more facts and information on a wider range of subjects indicates the timeliness of a plan to provide the best possible statistical service.

4. *Central organization more efficient.*—There are highly specialized abilities and skills required in modern statistical methods. It is not economical to provide expert service in several units in the various Divisions of the Office of Education. A central statistical staff makes possible the use of special procedures and equipment and a division of labor resulting in greater output. This is not possible in small units. With the increase of specialists in the Office, the provision of an efficient statistical service, staffed with specialists and experts to take over the technical matters of statistical work related to the various fields of education, should materially assist persons in the various Divisions. A central organization will make possible a more competent professional staff essential to elicit the cooperation of school administrators on a voluntary basis because of the improved service they receive.

The *Information and Publications Unit* of the Division of Central Office Services brings together a number of services of the Office which have previously been scattered and provides expansion of staff to meet the present work load and that anticipated by reason of the reorganization and expansion of the staff and functions of the Office. There are a number of obvious advantages of the plan of organization of this unit detailed on chart I. Related activities are brought together and coordinated under one Chief. Editorial work, graphics and photographic service, and information service are unified. Enough staff members qualified in publishing and modern distribution techniques are provided to disseminate information so generally and effectively that more rapid acceptance of suggestions for educational progress may be expected to take place. It should be remembered in this connection that we have in the United States more than 1,000,000 teachers; that Parent-Teacher Associations enroll approximately 3,000,000 members; that the number of potential users of Office of Education publications is enormous. Obviously the distribution activities of the Office to serve even the leaders of the educational audience must be many and various. Like any other organization, the U. S. Office of Education must compete for the attention of the public it addresses; in this case for the attention of an audience which is subjected to a barrage of printed material from various sources.[2]

The *Office of Education Library* has collected and made available two types of educational materials: (1) domestic and foreign *primary* source materials, such as documents, reports, bulletins, catalogs, circulars, announcements, programs, and other publications of Governments, educational systems, and institutions of learning; and (2) domestic and foreign *secondary* source materials in educational history,

[2] See pages 110 to 113 for detailed proposals for the publication program of the U. S. Office of Education.

theory, and practice in the form of periodicals, general and special works, monographs, theses, textbooks, work books, courses of study, and other literary forms. The expanding range of educational material now available in the form of radio scripts, films, film strips, phonograph recordings, photostats, maps, charts, and pictures comprises an area hitherto relatively untouched by the Library, but rapidly growing in importance and generally recognized as a normal field of library activity. To date the Library has acquired through purchase, subscription, exchange, or gift a collection of over 300,000 pieces of educational material, especially distinctive for its theses, text books, catalogs, reports, courses of study, and foreign publications.

These resources enable the Library to serve, within the limits of its available staff, the reference and research needs of (*a*) specialists in the Office of Education, (*b*) employees of other Government agencies, (*c*) graduate or professional research workers in education and allied subjects, and (*d*) the public at large whose special inquiries may be directed toward the Office Library. The convenient and essential accessibility of a large body of special materials directly related to the field of education is in itself a distinctive and unique service both to Government and the educational profession. These materials make possible direct service to readers by the Library staff through (*a*) answers to reference inquiries in person, by telephone, or by correspondence; (*b*) loans of materials, owned in duplicate by the Library either directly or through other libraries; (*c*) compilation of printed or typewritten bibliographies at regular intervals and on special subjects; and (*d*) preparation of original copy for catalog cards printed by the Library of Congress covering books and pamphlets on educational subjects which are not owned by that library, or for which it is not printing cards.

Provision should be made to strengthen the Office of Education Library to the point where it may represent to educators in the United States and abroad, the field of educational literature and audio-visual materials completely and authoritatively, supporting with competence the services of the specialists in the various divisions of the Office. With an adequate library staff trained and experienced in both library science and education, the Library can take the initiative in locating and providing for specialists and other research workers promptly upon publication materials pertinent to their individual professional needs. Search and research for educational data, essentially time-consuming, may well be a province appropriate to the specialized library staff (currently demonstrated in the many industrial, commercial, and scientific libraries of the country), and will release the energies of Office specialists somewhat for their other important professional duties. Expansion of the Office of Education Library is essential if its distinctive and comprehensive resources are to be utilized fully in the public interest.

The *Administrative Service Unit* has the responsibility for the following activities:

1. Budgets and procedures.
2. Personnel work, including classification of positions, recruitment and placement, appointments, pay rolls, retirement records, and the maintenance of other related personnel records.

3. Maintenance of appropriation and allotment accounts, audit of all vouchers, purchase and distribution of supplies and equipment, maintenance of property control record.

4. Maintenance of central files and responsibility for receipt, collection, and delivery of all incoming and outgoing mail.

5. Maintenance of Health Service Room.

The Administrative Service has been the victim of reorganizations dating back to 1933. At that time when the Federal Board for Vocational Education merged with the Office of Education, the Interior Department centralized certain services. In 1939 when the Office of Education transferred from the Interior Department to the Federal Security Agency, the Administrative Service was required to perform functions for which no positions were made available on the regular staff. The Federal Security Agency then decided to provide certain centralized services and funds from the Interior were transferred to the Federal Security Agency. Later the Federal Security Agency decentralized and again the Office of Education was required to perform functions without necessary help on the regular staff. Through this period of years the minimum required services for budget, fiscal, personnel, and other administrative work have been provided from emergency and defense appropriations made available to the Office. Although additional funds have been requested to provide adequate assistance in the Administrative Service to perform required work in connection with regular activities, in the main these have been denied with the suggestion that as long as funds were made available for defense activities necessary administrative help should be secured from this source. As the appropriations for these defense activities are reduced it will become increasingly difficult to keep the work current in the office. There is now a backlog of work in every unit and with present personnel the Administrative Service Unit is only able to handle the most urgent needs for current reports. It is therefore necessary and urgent that an adequate staff be provided to serve the several divisions of the Office.

Division of International Educational Relations.—The realities of war have served to emphasize the fact that nations cannot by themselves attain security or enjoy high standards of living unless they cooperate effectively. Great distances or differences in language, racial background, and culture are not insurmountable barriers to coordinated effort in time of war. We have demonstrated beyond a doubt that we can understand peoples of foreign lands when it is necessary to win battles. It remains for us to build upon the experiences gained since Pearl Harbor and to enlarge the areas of cooperative action so that we may be equally successful in effecting world political, economic, social, and cultural understanding and cooperation. The Office of Education has accepted responsibility in cooperation with the Department of State for providing a program of services which will assist schools and colleges of this country to meet their obligation in the field of international educational relations.

The program of the Office in the field of international education is designed to aid in interpreting United States life and culture

through educational agencies abroad and to help our people to understand and appreciate the life and civilization of other countries. The Office will assist United States teachers and students who wish to study in foreign countries and will guide foreign teachers and students who come to this country for educational training. The accelerated demands upon the Office of Education for information about educational systems, improved programs for language study, and reliable teaching materials, as well as for the exchange of educational personnel, are evidences of a widespread desire for the development of a true understanding of other peoples.

The Office proposes to meet these continuing and new calls for service in the field of international educational relations by providing a division which will have adequate staff and other necessary resources to insure a service commensurate with the job to be done. This Division, enlarging upon the activities of the present Divisions of Comparative Education and Inter-American Educational Relations, will be comprised of four units, representing major geographical areas with which international educational relations may be anticipated.

American Republics Educational Relations Unit.—The program of the American Republics Educational Relations Unit has as its objectives the continued development of inter-American understanding and cooperation. The necessities of hemispheric defense, the prospect of expanded commerce, the links by Pan American highways and airways have all contributed to a close bond among the American republics. The great strides made toward the goal of the Good Neighbor policy demand that further use of the resources of education be employed to bring about a better understanding of our neighbors to the south and to assist them in their study of the United States.

European Educational Relations Unit.—The great European heritage of the United States accounts for the close relationships—political, economic, and cultural—which have been maintained between this country and the peoples of Europe. Although the mother continent is now stricken and in ruins, there is every reason to believe that interdependence will grow. Not only during the difficult days of rehabilitation and reconstruction but also in the years to come, much will depend upon education as a means of bringing about fuller cooperatiton and friendship between these nations and ourselves.

British Educational Relations Unit.—While the culture of the United States is a composite of the cultures of all peoples of the world, the greatest single influence has come from England. The original 13 colonies which were mainly British gave us not only our language but also many of our institutions. The common language has been a great bond between the peoples of the United States and of the British Commonwealth of Nations, and affords the media through which cooperation and understanding may be expanded and developed to a greater degree than is possible where language barriers exist. The ambitious beginnings so far made in British-American cooperation serve as an index to the possibilities of the future.

Near and Far Eastern Educational Relatitons Unit.—The tremendous populations of China and the Far Eastern countries generally, together with the vast unexplored resources of both the Near and Far East, provide a unique challenge to the genius of our people because of their basic belief in human values and their unique technological resources. The potentialities of education in the development of an understanding between our people and a Far Eastern country are illustrated by the statesmanlike use of the Boxer Indemnity Fund for Chinese scholarships in United States colleges and universities. Many of China's leaders today, including Madame Chiang Kai-Shek, were trained in this country or in United States colleges in China.

The program of international educational relations as carried on in each of the Units will be designed to accomplish its purpose under the following general types of educational services:

1. *Preparation and publication of basic studies of the educational systems of the other countries and the evaluation of credentials.*—Large numbers of students come to the United States each year from foreign countries to study. The academic credentials such as diplomas, certificates, official letters, descriptions of courses, which they offer as evidence for work done in their countries are usually written in the language of their country. United States colleges and universities have long referred these credentials to the Office of Education for evaluation and interpretation in terms of United States educational standards.

For the guidance of college and university registrars, administrative officers, as well as students of international education generally, the Office over a period of years has made and published a number of direct studies of the educational systems of different European and Latin American countries. Specialists of the Office who were familiar with the language and culture of the country in question were sent abroad in order to undertake first-hand research. A beginning has been made in this field, though many studies yet need to be undertaken. Moreover, studies completed some years ago must be revised and made current. The Division will also prepare special articles on education abroad for publication in journals, make summaries of important articles on education which appear in foreign publications, and review significant books on international education.

As requests are received from foreign educational authorities for interpretations of United States education, appropriate studies will be made by the Division.

2. *Exchange of educational personnel, i. e., professors, teachers, and students.*—The exchange of educational personnel has proved to be a most effective means of helping to create and maintain sympathetic understanding among people of differing languages and cultures. In order that programs of study, appointments, and itineraries may be devised and arranged, adequate planning, guidance, and administration must be provided the visitors. The Office receives frequent requests for such services, usually for assistance in selecting schools for visiting students, and in providing foreign teachers with intern training in schools of the United States. Similar services

are provided in voluntary recruiting, selecting, and sending educational personnel from the United States to foreign countries. The Office of Education, for example, since 1939 has been responsible, in cooperation with the Department of State, for the administration of exchanges under the Buenos Aires Convention. Under this treaty, ratified by 16 American Republics, students and professors are exchanged annually.

3. *The preparation and exchange of educational materials for use in schools.*—The teaching materials used in the schools and colleges may be effective means for developing international friendship and understanding. It is essential to include in them adequate and accurate information about foreign peoples and countries. The Office of Education will continue and expand its present service of preparing and distributing bulletins, pamphlets, curriculum guides, bibliographies, loan packets, and exhibits. Similarly, it will undertake to supply to other countries upon request authentic educational materials designed to assist their students and teachers in understanding the United States. The demands, ever on the increase for such services, come from administrators, teachers, and school children from all States of the Union and from foreign countries, and are now being received at the rate of about 2,000 a month.

Related to the exchange of materials is the promotion of extracurricular activities designed to develop friendship and understanding among the students of the various nations. Services of the Division include suggestions for club projects and study programs; serving as a clearinghouse for the exchange of ideas on extraclass activities between student clubs of different regions, levels, and departments; surveys of international student organizations; and promotion of local, regional, national, and international student conferences.

With air travel and radio communication drawing us near to all parts of the world, a practical knowledge of languages becomes a requirement for better international understanding. This Office, in cooperation with the other American republics, for example, has developed intensive Spanish courses for United States teachers in Mexico; has been instrumental in securing native speakers to assist in the language departments of United States schools and colleges; has implemented the use of interpretive materials on other countries; and has encouraged the exchange of significant ideas among the language teachers of the various republics. Requests pertaining to language programs come more and more frequently, and the Division of International Educational Relations, in cooperation with the specialists of foreign language teaching in the Divisions of Elementary, Secondary, and Higher Education, will seek to meet these needs.

Staff Requirements, Qualifications, and Standards

Two important factors enter into the determination of the organizational structure that should be provided to give effective national leadership to education. The first factor is concerned with the identification of the essential functions to be performed. The second

factor is the selection of personnel and the organization of the professional staff needed to perform these essential functions. A continuous adjustment must be made in any going organization between the functions to be performed and the personnel available. Such adjustments have been made by the U. S. Office of Education in the past and will no doubt need to be made in the future. But it should be evident that any important increase in the total services provided to education by the U. S. Office of Education will require corresponding additions to its staff. It is being proposed, therefore, not alone to reorganize the U. S. Office of Education staff, but to augment that staff so as to enable the Office more adequately to perform the duties and to discharge the responsibilities implicit in its legal mandate to "promote the cause of education throughout the country." Instead of continuing quite adequately to promote only a few phases of education, such as vocational education, it is being proposed that the U. S. Office of Education should become prepared to assist the States in the improvement of education in its various phases at all levels through a competent organization adequately staffed.

Every new addition of personnel to the Office should, of course, be made because there are important things to be done. These new staff members should be selected for their special ability to do the things that need doing. And they should receive a salary commensurate with their *individual* competence, attainments, and responsibilities. This means that, on the whole, the training, experience, and attainments of staff members should equal those required for the highest administrative, supervisory, and research positions in schools and colleges.

It has been assumed, therefore, in the proposed reorganization and expansion of the staff as shown on chart I that salaries paid must be high enough in each case to attract and hold persons who are able to help make the U. S. Office of Education the strong, vigorous, imaginative, and influential force in American education that it should become.

Duties of Special Assistants

It is contemplated that the *duties of Special Assistant I will include the following functions:*

A. To follow and to be fully informed about all pending legislation and Congressional considerations, discussions, and action relating thereto directly or indirectly affecting education; to assist the Commissioner in drafting legislative measures and reports to Congressional Committees and others on proposed or pending legislation; and to represent the Commissioner in carrying on negotiations with other agencies, organizations, or individuals with respect to problems involving legislation.

B. Continuously, with the assistance of Assistant Commissioner B and the Director of the Division of Central Office Services to carry on studies of the organization, administration, and personnel utilization within the Office of Education designed to secure the necessary economy and efficiency of all operations; to recommend improvements on the basis of these studies; with the approval of the Commissioner to inaugurate and develop these improvements; and to assist the Commissioner in preparing reports on these matters to the Federal Security Administrator, the Civil Service Commission, or to other agencies to which such reports should properly be submitted.

C. To assist the Commissioner in:

1. Arranging and conducting general conferences and meetings of professional and lay people who work with the Office on various problems,

such as the meetings of the Citizens' Federal Committee on Education,[1] the American Education Assembly,[2] and other conferences whose interests are of a general character.

2. To give general oversight to all conferences initiated and held by Assistant Commissioners, Directors, and Chiefs or Office committees; to keep a record of all such conferences; to receive reports, from those who conduct the conferences, of the results and plans for future action; to keep the Commissioner informed about these activities; and to prepare periodic reports for the information of the Administrative Council and others who may be concerned. (*See* detailed discussion of conferences in later pages of this Part.)
3. To receive, approve, or disapprove proposals by any members of the Office personnel to organize regional or State conferences; to eliminate any possible duplication or unnecessary overlapping of functions for these conferences or their too frequent occurrence; to receive reports on such conferences; and to prepare digests of the reports for the Commissioner.
4. To keep in touch with the many national, regional, and State meetings which deal with or have a bearing on education; and to keep the Administrative Council informed about the significant developments in such meetings.

D. To assist the Commissioner in preparing annual reports to Congress, other periodic reports to Congress, certain reports to or for the use of the Federal Security Agency, certain reports requested by other Government agencies; to assist the Commissioner in securing and arranging material for special messages, addresses, and statements and reports which the Commissioner is constantly being called upon to supply and which usually run across or involve several or all of the divisional operations of the Office.

E. To prepare analyses and recommendations to be used by the Commissioner respecting proposals of a general character which are frequently submitted to him by many agencies, organizations, and individuals, both public and private.

F. To assist the Commissioner in handling a considerable amount of official correspondence which does not properly come within the fields of special responsibility of others in the Office.

G. To supervise the work of a Staff Assistant who is a Public Relations Consultant and to approve all plans, policies, and activities developed by this Assistant in cooperation with members of the Office staff and other agencies, organizations, or individuals.

H. To represent the Commissioner in working with other agencies, individuals, associations, or groups whose interests involve the activities shown under A–G, inclusive.

I. To assist the Commissioner in such other ways as he may from time to time request.

Staff Assistant—Public Relations Consultant

As an assistant to Special Assistant I and under his general administrative direction, the Consultant would render expert technical services to the Commissioner, Special Assistants and Assistant Commissioners, Divisional Directors, and staff members on matters of information dissemination and public relations; he would act for Special Assistant I during the latter's absence; he would serve on interdepartmental committees and committees of national educational and civic organizations at meetings and conferences where it is important that the policies of the Office of Education and its work should be well presented; he would be responsible in cooperation with Special Assistant I for making proposals to the Commissioner for improvement of the Office of Education services as they relate to information dissemination and public relations matters; he would advise

[1] Explanation on later pages.
[2] Explanation on later pages.

with the Divisional Directors concerning relations of the Office of Education with newspaper and periodical press and publishers; he would provide consultative service to State Departments of Education, college and university authorities, school superintendents, and others concerning public relations policies and techniques; in cooperation with Special Assistant I he would keep the Office of Education staff apprised of significant developments in public opinion affecting education as represented by legislative proposals; he would prepare a periodical news letter for members of the Office of Education staff acquainting them with the program of work in progress on legislative matters and in all Divisions of the Office; and otherwise assist Special Assistant I in the performance of functions assigned by the Commissioner.

The duties of Special Assistant II will include these functions:

A. To represent the Commissioner in calling meetings of and in meeting with the Special Advisory Committee on Research.

This committee will consist of nine members, the most competent persons in the country on research, drawn from the field of education and from other fields, representing various interests and sections of the country, to serve in rotation, and to review the accomplishments of the entire Office with respect to research work; to examine the current research activities of the Office; to advise on plans and programs for the future; and to assist this Special Assistant in preparing periodic reports on all of these matters for the consideration of the Administrative Council and an annual report to be included in the American Education Annual (described later). The Committee will meet twice each year.

B. To check, prepare for the consideration of the Administrative Council when occasion requires, and for the approval of the Commissioner:

1. Proposed study or research projects submitted by members of the staff or by other agencies, organizations, or individuals.
2. Proposed publications and plans for their development and manuscripts ready for printing.

C. Aided by a Research Consultant as Staff Assistant, to serve as Secretary of the Administrative Council; to prepare proper records of its meetings; and to assist the Commissioner, as he may direct, in following through on plans developed by the Council. (As previously stated, the Administrative Council, which will serve also as a general planning staff, will consist of the Special Assistants, Assistant Commissioners and Directors, with the Commissioner as Chairman.)

D. To assist the Commissioner, when necessary, in working out plans for field surveys of educational systems or institutions; to direct certain surveys as determined by the Commissioner; and to receive and prepare for the Commissioner's approval proposals from Assistant Commissioners, Directors, Assistant Directors, Chiefs, or Specialists, for surveys which may be directed by them; and to keep all members of the U. S. Office of Education staff currently informed about the significant findings of all educational surveys being made under any auspices. The direction of a number of the surveys will no doubt be assigned as the responsibility of various persons on the Office staff, depending on their abilities and current obligations, or persons from outside the regular Office personnel may be selected for this purpose.

The "educational survey" is an important service for the U. S. Office of Education to render. Through the years the Office has conducted a number of such surveys, except that during the most recent years the demands of the emergency have precluded participation by the Office in this kind of service. It is the policy of the Office to make surveys only upon request by the appropriate officials of the agencies involved and to invest the time and travel costs of personnel in such surveys only to the extent that the results may be of national interest. Any other expenses are met by the agency surveyed.

Many requests for such surveys are received at the Office. The most recent one is from a Chief State School Officer of one of the large State departments of education. He desires a survey of the organization of the entire department. Another urgent request which had to be declined because of the launching of extensive Defense Training Programs, conducted by the Office, came in 1940 from the Governor, the Board of Education, the Superintendent of Schools, and the President of the University in Hawaii for a general survey. We are requested to direct or participate in many special surveys, such as school building surveys for a State, a county, or a city; surveys of the need for improved facilities for the administration of school health services; surveys of the problems involved in securing a better coordination of the higher educational institutions of a State; surveys of the ways in which to improve the provisions for the education of exceptional children; surveys of provisions for vocational education; surveys of transportation facilities; of best plans for State-wide provisions of educational radio stations to operate with the greatest economy and no technical operating interference; of public library facilities; of better plans for State support and equalization of educational opportunities within the State.

All such surveys, when operated under the accepted Office policies mentioned above, are of great value to education generally throughout the country. They:

1. Keep members of the staff of the Office closely identified with the important and practical problems of "establishing and maintaining efficient school systems."
2. Serve to improve the educational facilities of the agency involved, which in its situation is often of wide influence in its part of the country or in its field of education generally.
3. Provide published reports which are exceedingly helpful in similar situations throughout the country.

E. To represent the Commissioner in working with other agencies, individuals, associations, or groups whose interests involve the activities shown above under A–D, inclusive.

F. To assist the Commissioner in such other ways as he may from time to time request.

Staff Assistant—Research Consultant

As an assistant to Special Assistant II and under his administrative direction, the Research Consultant will provide expert technical advice and assistance to the Commissioner, Special Assistants and Assistant Commissioners in matters involving research; he will act for the Special Assistant during the latter's absence; he will meet with the Special Advisory Committee to the Office of Education on Research to review the current program of research of the Office and advise concerning its improvements; prepare reports of the recommendations of this Committee for presentation to the Administrative Council of the Office; give technical advice and assistance to Special Assistant II in reviewing proposals for studies and research submitted by the various Divisions of the Office or submitted by other agencies and organizations; serve as general executive officer for Special Assistant II in relation to decisions of the Administrative Council with respect to the research program of the Office of Education; keep informed concerning significant research projects under way in other governmental agencies, colleges, and universities that may have significant implications for education; give critical review and appraisal of the results of research done by professional staff members in the various divisions of the Office of Education before publication of same; and otherwise assist Special Assistant II in the performance of functions assigned by the Commissioner.

Assistant Commissioner A

This Assistant Commissioner, as shown by the organization chart, is essentially a line officer responsible directly to the Commissioner and under his authority for the general oversight, supervision, and coordination of the activities of four operating divisions of the Office, viz, Elementary Education, Secondary Education, Vocational Education, and Higher Education. In general he will be in charge of the administration of these major Divisions of the Office and perform such duties and assignments as would otherwise require the personal time and attention of the Commissioner; more specifically, he will act as professional, technical, and administrative assistant on problems and policies concerned with the administration of the Divisions of Elementary, Secondary, Vocational, and Higher Education in their relationship to other Federal, State, and local governmental agencies; and will plan and direct appropriate studies and promotional activities for these Divisions; maintain such necessary administrative relationships with State and Territorial departments of education as are involved in the execution of the policies of the Office in carrying on programs through State and Territorial departments of education and higher educational institutions for which the Commissioner is responsible; assist in the administration of policies affecting educational programs established by other governmental agencies with which the Office has official relationships; assume when necessary the duties involved in the Commissioner's membership on interdepartmental and other committees; upon request by government agencies render consultative service on major educational enterprises; assist in rearranging and reorganizing the services of the afore-mentioned Divisions for maximum efficiency from time to time as conditions and needs change; give general direction to the preparation, presentation, and execution of the budgets of the afore-mentioned Divisions and to have general supervision for administrative purposes of the entire staffs of these Divisions; address meetings, conventions, and professional groups on subjects in the field of education; and otherwise assist the Commissioner in the coordination and administration of the work of the afore-mentioned Divisions.

Administrative Assistant to Assistant Commissioner A

The Administrative Assistant, under the general supervision of the Assistant Commissioner, will perform important administrative tasks related to the operations of the several Divisions under the Assistant Commissioner's supervision; be responsible for seeing that required reports are prepared; handle details concerned with the preparation, justification, and administration of the budgets of the afore-mentioned Divisions and the procurement of personnel and their classification, transfer, and efficient utilization; meet and discuss with others, as representative of the Assistant Commissioner, the administrative details of the work of the Divisions for which the Assistant Commissioner A is responsible; maintain proper liaison between the Administrative Assistants of the Directors of these Divisions, especially with respect to informational, statistical, fiscal, personnel, and other administrative matters; and perform related tasks as assigned by the Assistant Commissioner.

Assistant Commissioner B

This Assistant Commissioner, as shown by the organization chart, is essentially a line officer responsible directly to the Commissioner and under his authority for the general oversight, supervision, and coordination of the activities of four operating Divisions of the Office of Education viz: School Administration, Auxiliary Services, Central Office Services, and International Educational Relations. In general he will be in charge of the administration of these major Divisions of the Office and perform such duties and assignments as would otherwise require the personal time and attention of the Commissioner; more specifically, he will act as professional technical and administrative assistant on problems and policies concerned with the administration of the Divisions of School Administration, Auxiliary Services, Central Office Services, and International Educational Relations in their relationship to other Federal, State and local governmental agencies; and will plan and direct such studies as are necessary to the performance of these services; maintain such necessary administrative relationships with State and Territorial departments of education as are involved in the execution of the policies of the Office in carrying on various programs; assist in the administration of policies affecting educational programs established by other governmental agencies with which the Office has official relationships; assume, when necessary, the duties involved in the Commissioner's membership on interdepartmental and other committees; upon request by government agencies render consultative service on major educational enterprises; act as Vice-Chairman of the Federal Radio Education Committee and as such assist the Chairman by presiding at meetings of the various subcommittees, handling correspondence, preparing reports relative to the work of the Committee, and by giving general direction to such technical research studies of the Committee as may be assigned to the Office of Education; assist in rearranging and reorganizing the services of the afore-mentioned Divisions for maximum efficiency from time to time as conditions and needs change; give general direction to the preparation, presentation, and execution of the budgets of the afore-mentioned Divisions, and have general supervision for administrative purposes of the entire staffs of these Divisions; address meetings, conventions, and professional groups on subjects in the field of education; and otherwise assist the Commissioner in the coordination and administration of the work of the afore-mentioned Divisions.

Administrative Assistant to Assistant Commissioner B

The Administrative Assistant to Assistant Commissioner B would discharge responsibilities similar to those previously described for the Administrative Assistant to Assistant Commissioner A.

Directors of Divisions.—The Divisional Director is a key person in the proposed reorganization of the Office. Upon the quality of his leadership will largely depend the successful operations of the Division. Under the general supervision of an Assistant Commissioner, the duties of a Divisional Director will include responsibility for:

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(1) Leadership in formulating the program of the Division and the policies and plans for the most effective operation of the Division in realizing its purposes.
(2) Recommending the appointment of staff for the Division and directing and coordinating the work of the staff assigned to the Division in the central office and in the field.
(3) Providing for and directing cooperative arrangements with and through State and local educational authorities and with other agencies in planning and conducting essential studies of problems that lie within the purview of the Division's interests and functions.
(4) Planning for conferences on problems that lie within the purview of the Division's interests and functions and utilizing the results of such conferences in improving the work of the Division.
(5) Making necessary provisions for consultative service to State and local authorities on problems which come within the work of the Division.
(6) Making necessary provisions for and maintaining liaison with governmental and nongovernmental agencies and organizations whose programs involve or are related to the constituent fields of work of the Division.
(7) Directing the preparation of estimates and justifications of the Divisional Budget.
(8) Representing the Division on the Administrative Council of the Office.
(9) Appointing Divisional representatives on inter-Divisional Committees of the Office.
(10) Writing for publication and reviewing publications prepared by members of the staff of the Division.

Administrative Assistants.—If the Divisional Director is not to be enmeshed in the details of Divisional administration, it will be necessary that he be given such assistance as can be provided by a high-grade Administrative Assistant. Among the types of responsibilities such as an Administrative Assistant would be expected to carry are:

(1) Developing and initiating procedures for the orderly handling of routines of Divisional operations in connection with such matters as the preparation of recurring reports, routing and answering official correspondence, filing of documents, requisitioning of supplies, approval of requests for leave, travel detail, etc.
(2) Conferring with unit chiefs and others from time to time for the purpose of preparing various proposals for improvement in Divisional administrative procedures.
(3) Preparing various documents, including reports dealing with the organization and administration of the Division.
(4) Preparing technical papers and information involved in personnel transactions, including the allocation of positions.
(5) Supervision of the allocation and assignment of clerical assistance within the Division.
(6) Making continuous studies of the most efficient utilization of personnel of the Division, from time to time recommending changes in the organization.
(7) Keeping the Director fully and currently informed concerning the many general regulations based upon laws of Congress and Executive Orders, and regulations issued by the Bureau of the Budget, the Administrator of the Federal Security Agency, the Civil Service Commission, and other agencies.
(8) Representing the Division in planning for community fund and similar drives, for recreation and welfare activities.
(9) Handling of technical matters involved in the form and manner of preparing *Divisional budget estimates* and the justifications connected therewith.
(10) Maintaining liaison with the Administrative Assistants in the other Divisions and especially with the Administrative Service of the Division of Central Office Services.
(11) Handling fiscal and other administrative matters; relieving the Director of important but routine matters; and performing special work as assigned.

Chiefs of units or services.—Although the specific responsibilities of the various unit Chiefs in the different Divisions may vary somewhat in terms of the special area of divisional operations, each Chief will, in general, be responsible for:

(1) Leadership in planning and coordinating the activities of the staff of the Unit.
(2) General supervision of the work of the Field Consultants, Specialists, and other members of the staff of the Unit.
(3) Reviewing and coordinating the studies and activities of the Specialists.
(4) Relating the activities of the Unit to the work programs of the various Units of the Division and with other Divisions of the Office.
(5) Maintaining liaison with other governmental and non-governmental agencies and organizations with respect to the work of the Unit.
(6) Arranging for the leadership of conferences and training institutes and for the provision of field services in the area of the Unit's functions.
(7) Writing for publication and reviewing publications produced by members of the staff of the Unit.
(8) Causing to be prepared such reports and records of the services of the Unit as may be required.

Specialists.—A study of chart I will show a considerable increase in the number of specialists which it is proposed be added to the staff of the Office to enable it more efficiently to serve the cause of education in the United States. Yet when one carefully notes the number of such specialists proposed for any of a large number of important educational areas, such, for example, as Instructional Problems or School Organization and Supervision, the number cannot well be regarded as excessive. One Specialist and two Assistants in the many instructional problems associated with the teaching of English Language, Reading, and Literature in the primary, intermediate, and grammar grades of the elementary schools is barely sufficient to conduct only the most essential of national studies and carry on the many related services. Similarly, a Specialist for Instructional Problems in Foreign Languages with two Assistants in the Division of Secondary Education must devote attention to Spanish, Portuguese, Italian, French, German, and possibly Russian and Scandinavian, to say nothing of Latin and possibly Chinese.

Space limitations will not permit a detailed description in this Report of the particular responsibilities of each of the Specialists shown on chart I. For purposes of illustration, however, the duties of the Specialist for Physics in the Division of Higher Education may be listed as follows:

(1) The promotion and stimulation of research, both technical and educational, in the various fields of physics.
(2) The supplying of information of value to physics teachers, professional physicists, and the industries and governmental agencies which employ physicists.
(3) The maintenance of consultative and advisory services for the improvement of education in physics.

Some of the specific activities of the Specialist in Physics in pursuit of these main objectives will be:

(1) To study instructional problems. For example, the Specialist for Physics would conduct surveys to determine desirable objectives in physics courses in colleges. Or with the assistance of the Specialist for Science in the Division of Secondary Education he would seek to improve the correlation of instruction and subject matter in college and secondary school courses in physics. He would assist in the development of test materials to evaluate the outcomes of physics instruction in col-

leges; and keep abreast of developments in physics instruction in the universities, both of the United States and abroad.

(2) To study curriculums arranged by colleges and universities for the training of physicists, both undergraduate and graduate. He would note the place given to the study of physics in engineering, medicine, and other professional curriculums. He would give special attention to the improvement of college courses for the training of high-school teachers of physics.

(3) To assist in the discovery and encouragement of scientific talent in the secondary schools and colleges.

(4) To establish and maintain continuing contacts with professional societies, such as the American Society of Physics Teachers, the American Physical Society, etc.; with governmental bureaus and with industries which employ physicists.

(5) To provide information to colleges and universities concerning research projects under way in colleges and in industries; significant activities of technical and educational societies in the field of physics; significant developments in secondary, vocational, and technical institute education; significant developments in physical research in governmental agencies and bureaus; new books, theses, and research projects in progress or completed and articles appearing in professional and educational periodicals. Such information would be disseminated to schools, colleges, industry, governmental agencies, and the public by means of publications, correspondence, participation in meetings of educational and professional organizations, conferences, public addresses.

Research assistants.—The Research Assistants shown on chart I are provided in a ratio not to exceed 50 percent of the professional specialists in any Division. The assignment by the Divisional Director of these Research Assistants to the various Unit Chiefs and Specialists in each Division should result in increasing the quantity and the quality of research studies and investigations that can be carried on by the professional staff. Moreover, it will provide opportunity for well-trained younger educators who wish to make a career of government service to enter the employ of the U. S. Office of Education on the lower rungs of the professional ladder with the hope of eventual advancement to more responsible positions at higher salaries. Or it will bring into the service of the U. S. Office of Education for varying periods of time unusually competent younger workers who may in some cases choose to remain only long enough to make particular contributions of a research character and thus to secure invaluable experience.

Equalizing quotas of clerical personnel.—An attempt has been made to equalize the amount of clerical assistance to be provided each of the Divisions of the Office shown on the organization chart I. Clerical personnel in a ratio not to exceed 70 percent of the professional personnel in each Division has been proposed, with the exception of certain units where obviously this ratio cannot be made to apply as in the Division of Central Office Services where, because of the character of the work, the number of CAF positions exceeds the 70-percent ratio or even in some units the number of professional positions. Within each Division the Director would have the responsibility of allocating the clerical personnel to the various unit Chiefs and Specialists in the Division in such fashion as to provide for the greatest efficiency of operations.

An Improved Publication Service

Printed publications are among the most effective means available to the U. S. Office of Education "of diffusing such information respecting the organization and management of 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 otherwise promote the cause of education."(From the basic law establishing the U. S. Office of Education.)

The severe limitation of printing necessary to conserve paper and manpower in wartime will not always be necessary. When the time comes that it is again possible to do so, the Office of Education should undertake a considerable expansion in its publication activities. While reasonable economy should be expected at all times, it would appear to be "penny-wise and pound-foolish" for the Government to invest considerable sums of money in the salaries of professional workers who have as one of their important responsibilities the conduct of studies and investigations to eventuate in publication and then not provide the funds necessary for printing the publications these workers have prepared or might prepare. Moreover, when it is borne in mind that a large part of the cost of documents published by the U. S. Office of Education is returned to the Government through their sale by the Superintendent of Documents, the arguments for a well-considered expansion in the publication program of the Office takes on additional weight.

In order that the Office of Education may better serve the cause of education through printed publications it is recommended that its publication program include the following four types of documents.

Periodic Statistical Reports

Through periodic statistical reports including only statistical facts, a census of American education would regularly be available in detailed and significant statistical form, for the use of all persons. Pertinent interpretations of the facts would be prepared by specialists in their respective fields and would appear in other documents.

The statistical studies would be planned by an Office Committee on Statistical Studies consisting of the Directors of Divisions with the Director of Central Office Services serving as Chairman and the Chief of the Statistical Service as secretary. Comprehensive plans for periodic statistical studies to be carried through on definite time schedules and any special statistical studies proposed by the committee would be considered by the Administrative Council to be finally approved by the Commissioner. The regular and special statistical studies would include State and local public elementary and secondary schools, including city, town, and rural school districts; private elementary, secondary, and special schools; higher education; extension services; school and public libraries; and many special studies.

American Education Annual

It is proposed that the *American Education Annual* shall be published each year in January. It will be published in parts corresponding to the Divisions of the Office, the various parts being prepared by staff members of the respective Divisions under the general supervision of the Assistant Commissioner. There would also be prepared an over-all view of American education as the first part of the Annual. This part would be prepared by the Commissioner. Part 10 would be prepared by the Special Assistants to the Commissioner. The several parts would be printed separately and also in a single volume. About

2,000 copies of the separate parts and the single volume would be available free. All others would be sold by the Government Printing Office. On the basis of the proposed organization of the Office of Education, the American Education Annual would have 10 parts as follows:

PART

1. An Over-all View of American Education (about 100 pages)
2. Elementary Education (about 100 pages)
3. Secondary Education (about 100 pages)
4. Vocational Education (about 100 pages)
5. Higher Education (about 100 pages)
6. School Administration (about 100 pages)
   - A. General Administration
   - B. School Housing
   - C. Business Administration
7. Auxiliary Services (about 100 pages)
   - A. Public and School Libraries
   - B. School and Community Recreation
   - C. School and College Health Education Services
   - D. Problems of School Lunchroom Management
   - E. Educational Uses of Radio
   - F. Visual Education
   - G. Services for the Blind
8. International Educational Relations (about 100 pages)
9. Central Office Services (about 50 pages)
   - A. Summary of
     - (1) Statistical Studies by the Office of Education
     - (2) Other Statistical Studies
   - B. Publications by the Office of Education
   - C. The Office of Education Library
   - D. Work and services of the Administrative Office
10. Reports by Special Assistants to the Commissioner (about 50 pages)
    - A. Federal Legislation and Educational Conferences
    - B. Research and Surveys

While the *American Education Annual* would include a report of the work of the U. S. Office of Education, it would be devoted primarily to reporting broadly on all phases of education of significance to the American public and to educators. *This book should be the most comprehensive, complete, authoritative, and useful single volume on education published annually in the country.*

Periodicals

As a means of disseminating information about education regularly and frequently to those who desire it, each of the Divisions, except the Division of Central Office Services, should publish a 32-page periodical, 8 inches by 11 inches, monthly for 10 months, each school year (September to June) as follows:

1. Elementary Education
2. Secondary Education
3. Vocational Education
4. Higher Education
5. School Administration
6. International Educational Relations
7. Auxiliary Services

Each of these publications would be prepared especially for its particular clientele. The one for Auxiliary Services would show clearly on the cover the various units included.

The periodicals would be made available on a paid subscription basis. There would be a very limited free mailing list. Some of the potential subscribers for the separate periodicals are estimated as follows:

County, town, and city superintendents of schools	19,000
Local school system supervisors	20,000
Secondary school principals, public and private schools	28,400
Secondary school teachers	335,211
Vocational directors, supervisors, and teachers	40,000
Elementary school principals, public and private schools	25,000
Elementary school teachers	624,340
College and university administrators, including deans	2,258
College and university professors and instructors	120,500
Public libraries	6,055

Miscellaneous Documents

As a means of reporting detailed studies and investigations of a variety of educational problems, the several Divisions of the Office of Education should continue to publish many monographs, bulletins, circulars, and leaflets. Upon the basis of past experience it is possible to relate the amount of funds needed for printing such publications to the number of professional persons in each of the Divisions (except for the Division of Central Office Services and for General Administration). By providing printing funds to the Office of Education in terms of amounts based upon an average for each professional person in the various Divisions, the opportunities for service by means of printed publications can be better equalized among Divisions than has been generally true in the past.

Field Service Travel

A genuine and vital service to the cause of education cannot be provided by the U. S. Office of Education on the basis of armchair educationists in Washington, propounding theories and making *ex cathedra* utterances from an ivory tower of seclusion. The members of the staff of the several Divisions of the U. S. Office of Education must be enabled to travel in the field from time to time in order to keep in touch with the real problems and needs of the schools and colleges throughout the country. These staff members must be cognizant not only of the great objectives of American education but also of the varied educational problems as they exist in the States and in the cities, county-seat towns, villages, and rural areas.

Field service travel funds are necessary also in order to enable the staff members of the Office of Education to give helpful service to school and college officials in the various States by "diffusing such information respecting the organization and management of schools and school systems" as their opportunities for Nation-wide acquaintance with the means used by actual schools and school systems in meeting their problems have qualified them to do. They must observe education in operation, participate in conferences and institutes, address educational groups, and give consultative service to officials of State and local schools and educational institutions in the field.

Strength Through Sharing Experiences and Ideas

One of the most basic of our American convictions concerning life in a democracy for free men and women is that there shall be real freedom of expression, freedom for the exchange of ideas. We believe, with our forefathers, and are today demonstrating the staunchness of that belief with our treasure, that freedom is not only the birthright of each individual, but that it holds the greatest promise for a nation and even for a world of attaining security, peace, and progress.

It should be clear, then, that the principle and practice of freedom in exchanging ideas are of fundamental importance in the educative process. Indeed, one way in which to account for the existence of schools and colleges is to say that those agencies represent modern society's most successful means of organizing, of making systematic and dependable our method of accelerating the rate at which the immature and incompetent are inducted into the ranks of the mature and the competent, not only as individuals and workers but also as social beings and citizens.

Many years ago a sage of old Greece expressed in a few words the efficacy of the principle of strength through shared ideas. He said:

> We decide or debate, carefully and in person, all matters of policy, holding, not that words and deeds go ill together, but that acts are foredoomed to failure when undertaken undiscussed.—Pericles

Those who spend their lives in the business called "education" are constantly engaged in the alluring adventure of making more efficient and fruitful the organized plans and methods by which, in ever widening circles, a stimulating exchange of experiences and ideas takes place. Because this democratic process is not only satisfying to the aspirations of free men as individuals, but because it also is more efficacious in producing the desired practical outcomes for the group as a whole, educators must search for, invent, and develop the practicable means by which in their work as leaders in policy making and as practitioners they can improve the general educative process as it operates in a multitude of schools and colleges of all types throughout the country.

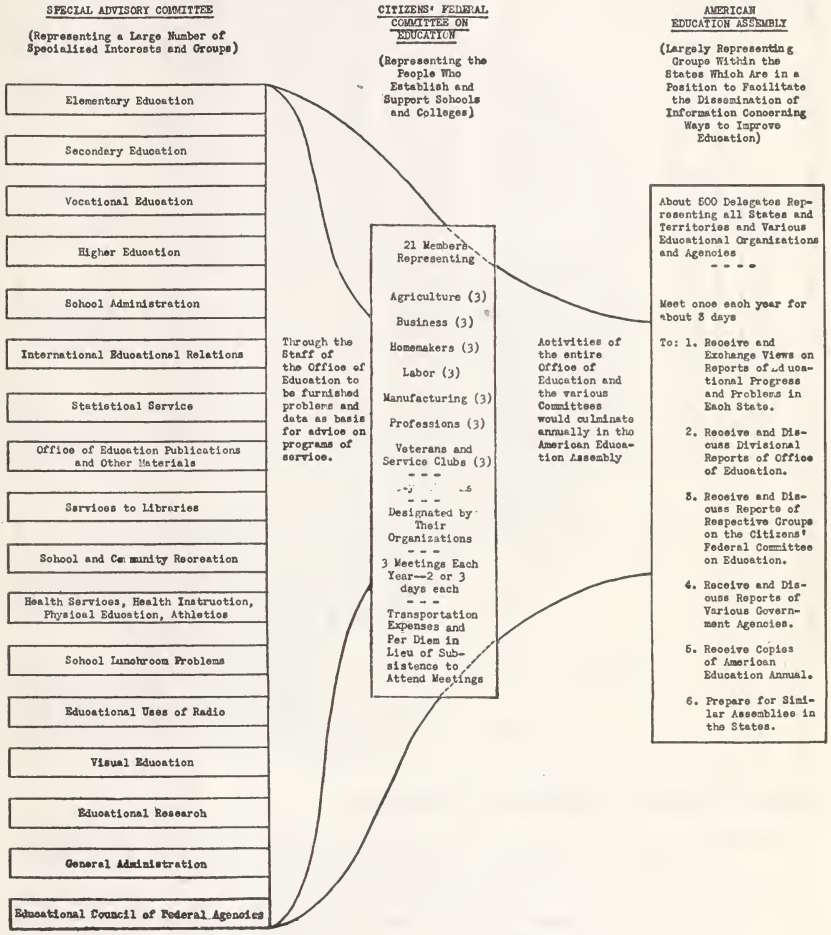
For these reasons, a thoroughgoing system is herewith recommended for putting democracy much more vigorously and completely at work in the operation of the innumerable and frequently intricate relationships of the U. S. Office of Education to the States, to schools, school systems, and higher educational institutions, professional organizations, Government agencies, and the public in general.

On chart III (page 115) will be found a schematic arrangement of the committee organization, conferences, and meetings just referred to. Chart IV presents in a somewhat different form the proposal to utilize dependable and adequate methods of keeping the work of the U. S. Office of Education representative of and alertly responsive to problems of education which it is the duty of the Office to assist in solving. Chart V presents two illustrations of the way in which U. S. Office of Education committees may be related to special advisory committees.

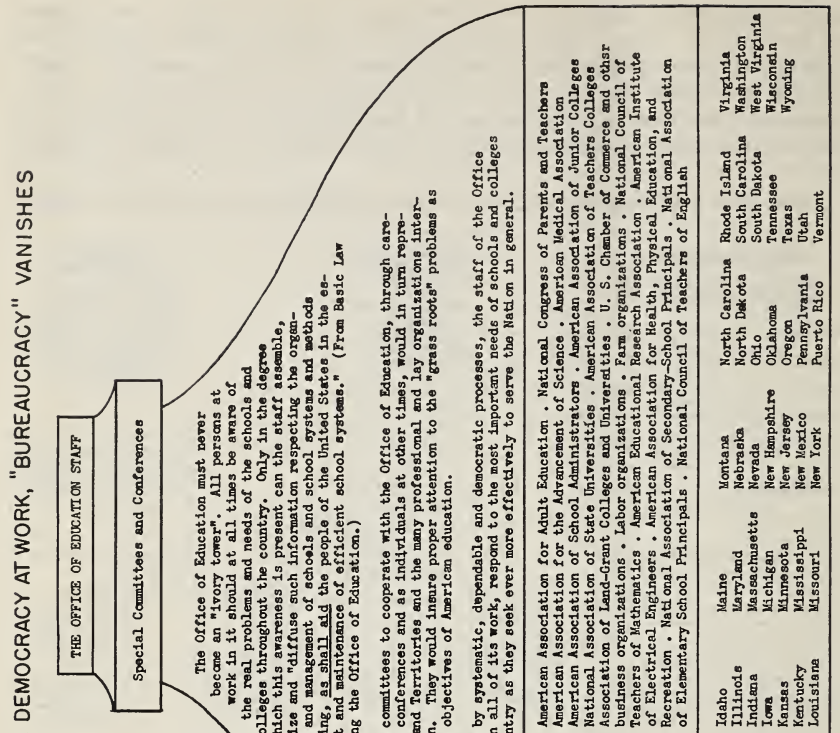
Parenthetically, let it be said here again, that in all of the services of the character anticipated in this proposed reorganization and expansion of the U. S. Office of Education, there is not an iota of inten-

tion to *impose* anything or any ideas upon anyone or upon any agency or institution. Any ideas developed through the Office as a *Service Agency* can be expected to win acceptance only on their merits. Moreover, it should be obvious that all of the plans are designed so to intertwine the interests and activities of the Office with the machinery to facilitate intimate association with many others, that Office policies,

CHART III -- THE GENERAL MECHANISM FOR SHARING EXPERIENCES AND IDEAS



purposes, programs, and products virtually become indistinguishable from the policies, purposes, programs, and products which those associated with the Office and who have a great stake in its influence desire as the outcome of a thoroughly democratic program of action. Is there any better way to put democracy at work in a Government agency of a democracy?



Citizens' Federal Committee on Education

Purpose: To advise the U. S. Commissioner of Education on policies for the U. S. Office of Education and on programs of service to education throughout the country to be carried on by the Office.

Meetings: To meet 3 times each year, not to exceed 3 days for each meeting. Transportation expenses and a small per diem in lieu of subsistence for each person will be provided by the U. S. Office of Education.

Representation: There shall be 3 persons on the Committee representing each of the following groups or organizations. The members shall be designated by the presidents of the respective organizations or by others in the organizations authorized to make such designations. Three persons shall be designated for each position on the Committee. From this list the Federal Security Administrator, in consultation with the Commissioner of Education, wil lselect the person to be appointed. The organizations to be represented are:

A. *Labor:* One person each from the—
American Federation of Labor
Congress of Industrial Organizations
Brotherhoods of Railroad Employees
B. *Business:* Two persons from the—
U. S. Chamber of Commerce
One person from the Business and Professional Women's Clubs
C. *Agriculture:* One person each from the—
National Grange
American Farm Bureau Federation
National Farmers Union
D. *Manufacturing:* Three persons from the National Manufacturers' Association
E. *Homemakers:* One person each from the—
National Congress of Parents and Teachers
Association of University Women
General Federation of Women's Clubs
F. *Professions:* One person each from the—
American Medical Association
Engineers Council for Professional Development
American Bar Association
(From time to time representation among the professions will be rotated.)
G. *Veterans and Service Clubs:* One person each from—
American Legion
Veterans of Foreign Wars
Rotary International
(From time to time representatives from the Service Clubs will be rotated)

Special Advisory Committees

A number of Special Advisory Committees, with rotating membership, should be formed. They are merely listed below:

A. Elementary Education
B. Secondary Education
C. Vocational Education, including the Federal Advisory Board for Vocational Education
D. Higher Education
E. School Administration
F. International Educational Relations
G. 1. Statistical Service
2. Office of Education Publications and Other Materials
H. 1. Service to Libraries
2. School and Community Recreation
3. Health Services, Health Instruction, Physical Education, and Athletics
4. School Lunchroom Problems
5. Educational Uses of Radio, including the Federal Radio Education Committee
6. Visual Education
7. Services for the Blind
I. Educational Research.
J. General Administration
K. Educational Council of Federal Agencies

American Education Assembly

It is proposed that there be convened annually under the auspices of the U. S. Office of Education what is to be known as the American Education Assembly. The meeting will continue for about 3 days and will probably be held early in January of each year. In addition to the activities carried on by the Assembly proper, the meeting will offer an opportunity for a number of groups to meet separately. The general purpose of the Assembly would be to provide an effective means

of facilitating the dissemination of information on important matters pertaining to education. It may be expected that following the annual meetings of the American Education Assembly, the delegates would organize similar assemblies in their respective States. Some of the more specific activities of the Assembly are as follows:

A. The program would be prepared each year by a Committee on Agenda which might consist of one person from each division 1 to 9 *below*.

B. Reports would be presented from the Divisional Directors of the U. S. Office of Education, and by Special Assistants and Assistant Commissioners based upon the Parts of the American Education Annual which should be ready for distribution at the meeting. The Directors and Special Assistants and Assistant Commissioners would present certain problems for consideration of the Assembly and for recommended action.

C. Brief reports equaling about four or five printed pages prepared in advance by each State delegation, under the leadership of the State Department of Education, would be mimeographed by the U. S. Office of Education for the use of delegates to the Assembly. These State reports would point up the most important developments in education in each State during the preceding year. Following the Assembly the reports would be printed by the U. S. Office of Education as the *Annual State Reports on Education* together with a summary of the proceedings of the Assembly. A plan would be developed by which, sometime during the Assembly, a number of significant questions drawn from the State reports could be discussed.

D. Representatives of the Citizens' Federal Committee on Education would present points of view on education for the respective groups represented on the Committee.

E. Representatives of various Government agencies would have an opportunity to present their problems and suggestions with which schools and colleges may be concerned. A plan for this part of the Assembly would be carefully worked out in advance by the Educational Council of Federal Agencies in cooperation with the Committee on Agenda.

It is probable that the delegates in attendance at the Assembly would be approximately as follows:

1. All chief State school officers and one assistant for each	100
2. State directors of vocational education	50
3. Executive secretaries of State teachers associations	50
4. Three city superintendents of schools from each State	150
5. Two county superintendents of schools from each State	100
6. One representative of public colleges and universities from each State	50
7. One representative of private colleges and universities from each State	50
8. One representative of private elementary and secondary schools from each State	50
9. One representative of the National Congress of Parents and Teachers from each State	50
10. All members of the Citizens' Federal Committee on Education	21
11. The chairmen of Advisory Committees	18
12. Two representatives each of a number of educational organizations	80
13. The Educational Council of Federal Agencies [3]	30
Approximately	799

[3] The Office of Education is related cooperatively with other Government agencies in many ways. But it is proposed here to formalize and regularize these relationships somewhat more advantageously to all concerned through this Council.

Conferences

Elsewhere in this Part reference has been made to the various means to be employed in coordinating the activities of the U. S. Office of Education, both within Divisions of the Office, and between the Office

and lay groups and professional educational associations. As was noted, the plan involves the organization of a number of committees and conferences. These committees would be convened from time to time for such purposes as the following: (1) to identify the various educational problems upon which studies and investigations should be conducted by the staff specialists in the Office; (2) to review reports of studies and investigations completed, including findings and the interpretations made thereof; (3) to plan for the dissemination of the results of studies and reports made by the staff specialists by means of publications, radio programs, conferences, addresses, institutes, demonstrations, and any other means thought most appropriate in bringing the results of important studies to the attention of the profession and the public.

The "conference" as conceived in the plans herewith proposed, is of fundamental importance to the most effective service by the U. S. Office of Education. About 1936 Congress established the policy of appropriating a small sum with which to enable the Commissioner to pay the travel expenses and a per diem in lieu of subsistence for conferees to work and advise with staff members of the Office on various problems. This "conference fund," even though small, has proved to be an exceeedingly valuable investment. It has frequently brought together around a table representative people with special abilities from different sections of the country, not only to think together but to work together.

Such conferences are invaluable in helping:

A. To make the U. S. Office of Education a genuine clearing house.
B. To create conditions, at appropriate times, under which varied experiences with the same problems, often problems which press for early solution, may be thoroughly examined and shared as a means of arriving at decisions which by common consent are accepted as improvements in educational policy and practice throughout the country.
C. To enable repesentative people, both professional-technical persons and lay citizens, to exert a direct influence on the policies, program, and output of the U. S. Office of Education, thus democratizing the relationships between the Office and those who support it and are served by it.
D. To bring into the service of the Office and through it to the schools and colleges of the country in general, the abilities of unusually competent people who because of other commitments or interests, are occupied full time in other positions.

In order to relate the services of the U. S. Office of Education to its various clienteles it will be necessary to enable the Office to call together conferees for the purposes named above. Chart III (page 115) previously presented shows a list of the special committees. Chart V presents merely two illustrations of the way in which a U. S. Office of Education Committee may be related to a special advisory committee. (See inside back cover.)

Proposals for U. S. Office of Education Services Made by Various Professional Organizations of Teachers

In the following pages are presented certain proposals as to the U. S. Office of Education services recommended by a number of committees representing several professional organizations of teachers. At one time or another similar recommendations have been received at the Office of Education from individuals or organizations interested in various other educational fields not only of subject matter but of

school organization and supervision, school administration, visual education, exceptional children, libraries, and others. The proposals herewith presented are more or less typical or representative of all such proposals received.

Report and Recommendations by a Committee of the National Council for the Social Studies

The U. S. Office of Education is in a unique position to offer services to teachers of social science at all grade levels. It has a function and responsibility to furnish such services, designed to supplement and fill in the gaps in the work now being done by existing voluntary national organizations, State and local departments of education, and other government agencies. At present, individuals, groups, and local educational associations work alone in their individual bailiwicks with little knowledge of what others are doing. Considerable duplication of work and misdirected energy result from such a procedure. Our present highly decentralized educational systems should be serviced by a central agency which can assist with common problems without, in any way, imposing any pattern on the individual units.

The U. S. Office of Education is in the strategic position where it could, if adequate funds and personnel were available, make a real contribution to the promotion of better offerings in the social sciences at all grade levels, thereby greatly increasing the effectiveness of our citizenship-training program. Generally speaking, this could be accomplished through careful research and investigatory activities of existing practices, reporting the findings through publications, and acting as a clearinghouse for the many decentralized groups now working in the field. In no sense should this be construed to mean that the U. S. Office of Education should attempt to tell the existing autonomous groups what they should, or must, do. In no way should the autonomy or initiative of existing groups at all levels, and of all types, be threatened. Quite to the contrary, the U. S. Office of Education, acting along the lines suggested below, can greatly *strengthen and increase the efficiency and effectiveness of the work* of voluntary local, State, and national organizations, and of local and State departments of education.

General functions.—A division of social sciences in the U. S. Office of Education, representing all levels of education, has a number of distinct functions to perform. Some of these are suggested below:

A. To act as an adequate exponent of the place of the social studies in the total educational program—covering all grade levels, and including adult education.
B. To exercise appropriate public relation functions as a means of interpreting the nature and role of the social studies in the educational program.
C. To provide services and contribute assistance to individuals and groups working in the social studies field.
   1. By acting as a clearinghouse for materials and activities in the social sciences.
   2. By furnishing consultative service to working groups upon request.
D. To furnish advisory and research services to the U. S. Commissioner of Education upon the social science aspects of current educational problems. This is especially important at the present when the Commissioner must represent American education in working with national and international groups on problems of peace. The social sciences have an especially

important role to play in the post-war period, and every effort must be made to keep well informed of developments and possibilities.

E. To assist other government agencies whose work impinges upon the social sciences, and to produce and disseminate teaching and educational materials based upon the "raw materials" or "technical materials" developed by other government agencies. Coordinate the work of other government agencies in this area.

F. To produce materials in the social sciences for use by social science teachers.

G. To assume responsibility for conducting fact-finding surveys and research activities. Conduct regular recurrent research activities to collect useful, continuing, and up-to-date statistics, and also conduct special research work on topics of current importance. Through publications, such findings should be reported.

H. To cooperate with voluntary national organizations and perform valuable liaison work.

In summary, these general functions fall into three categories: (1) investigation and research activities; (2) reporting through publication; and (3) coordination through serving as a clearinghouse. All these functions are important and much needed in the field of the social sciences. Specific suggestions for projects in each of these three categories follow.

Suggestions for some specific projects.—The projects suggested below are stated in terms so that they are, in most instances, equally applicable to the elementary and secondary school levels and also apply to all subject-matter areas. This list is not intended to represent a thorough coverage of the entire range of possibilities, but should at least indicate the rich potentialities in the field.

A. Suggestions for Research and Investigation Activities

1. Study of existing curriculum practices. (A recurrent project.)
2. Continuous study of curriculum trends. (A continuous project.)
3. Study of laws and regulations relative to requirements of teaching in the various subject-matter areas of the social sciences. (A recurrent project.)
4. A study of teacher qualification requirements and of certification laws. This should be followed by suggested recommendations for minimum requirements. (Periodic survey.)
5. A survey of requirements for graduation from various teacher-training institutions, for majors in social science preparing to teach in that area. (Periodic survey.)
6. A survey of types and methods of in-service training of social science teachers.
7. A study of the extent and nature of the social studies requirements in a program of vocational education.
8. A survey of regional, State, and local practices in the teaching of American history. (Recurrent.)
9. Survey of methods of integrating State and local materials into the American history course.
10. Careful study of the particular contribution of the social sciences to the making of better citizens. This should include a thorough analysis and appraisal of just what factors go into the building of good citizens. Define objectively the job of citizenship education.
11. Study of experiences that develop social maturity.
12. Study of the shifts and changes in practices in the various social sciences as a result of the war. Reference here is both to the curriculum and to methods. Development of temporary value and of enduring value should be brought out and differentiated. Those aspects of the experience of the military training program of permanent value should be carefully selected.
13. A special study of the work done by the military in their use of audio-visual aids as a teaching technique.

14. A special study of the teaching of international relations and post-war problems.

15. Preparation of bibliographies on vital current topics, with references to material for pupils and teacher, and references as to ways of introducing the material into the curriculum.

16. A study of integration, methods, and practices, both horizontal and vertical.

17. A study of the work of out-of-school agencies whose work impinges upon the social sciences and is correlated with the work of the social sciences citizenship-building program in the schools.

18. A study of out-of-class activities that contribute directly to citizenship development.

19. A study of types and methods of pupil participation in community activities as a planned part of the pupils' social studies program.

B. Publications

1. All of the above research activities should be reported through publications. This can be done as the occasion warrants, either through special bulletins or articles in the regular periodical of the U. S. Office of Education. Some reports could also be channeled through publications of existing voluntary associations.

2. Preparing teaching materials from the raw material developed by other government agencies.

3. Publishing a periodical with a portion of the space devoted regularly to the social sciences.

C. Coordination

1. By serving as a clearinghouse to individuals and other educational agencies.
   (a) By collecting data on curriculum studies—those in progress as well as those that have issued reports.
   (b) By collecting courses of study.
   (c) By preparing loan packets containing courses of study and reports of curriculum studies, for circularization to groups working on curriculum problems.

2. By furnishing consultants, upon request, to educational, lay groups, and other government agencies.

3. By coordinating the activities of other government agencies desiring to carry out educational work.

4. By acting as a clearinghouse on the research activities of different groups, such as school systems, universities, professional organizations, and State departments of education.

5. By acting as a clearinghouse between many lay organizations carrying on educational activities that impinge upon the social sciences (e. g., The Grange, American Legion, labor groups, Foreign Policy Association, National Conference of Christians and Jews, American Association of University Women, various youth organizations, etc.). Report on their civic education activities.

6. By reporting promising practices to insure cross-fertilzation of ideas.

7. By reporting on methods of utilizing audio-visual aids. Report what is being done in the field. Also furnish data on materials available—a continuous appraisal and listing of films and recordings.

Conclusion.—There is a very real need in the field of the social sciences for some central agency to perform services of the type suggested above. The National Council for the Social Studies has endeavored to furnish a number of such services, but its work has been restricted because of limited financial resources. If a number of its outstanding members had not been very generous with their time and services, the Council would have accomplished even less than it has. We strongly feel the need for assistance and cooperation in our field of work.

Submitted by:

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Report and Recommendations of a Committee of the National Council of Teachers of English

A. Reasons Studies Should Be Made By U. S. Office of Education

1. A study of the functions of voluntary professional associations and those of the U. S. Office of Education reveals the fact that the Office has distinctive services to render the profession.

2. Certain data are essential to intelligent local curriculum revision; voluntary associations of teachers have neither the funds, personnel, nor contacts to collect, analyze, and disseminate these data.

3. 1932 Secondary School Survey made by the U. S. Office of Education revealed status and trends at that time; check-up should be made on present status and needed research in *what* to teach in English and *how* to teach it.

4. Post-war readjustments can be more intelligently made in the light of national data on school population, school plants, school curriculum, shortages in English revealed by the tests and training programs of the armed services, equipment being used by the armed services, and other problems upon which the U. S. Office of Education could and should collect, analyze, and disseminate data.

5. The U. S. Office of Education is a logical clearinghouse for information from every educational institution when the Office has adequate personnel to make these continuous surveys.

6. Certain of the studies listed require equipment and personnel for statistical treatment of data that are most economically provided in a national Office of Education.

7. Lay and professional criticisms of school programs and educational outcomes are often unfounded. Accurate facts, impartially collected and presented by the U. S. Office of Education, should be available to spike unfounded rumors and to avert unwise changes in the school program brought about by such unsound criticisms.

8. Studies by the U. S. Office of Education can help to raise the level of instruction throughout the Nation; the present mobility of the population accentuates the necessity for the quality of education to be raised throughout all areas of our country.

9. The U. S. Office of Education is the logical agency to cooperate with voluntary organizations engaged in studying instructional problems in English and to coordinate the results of these investigations.

B. Studies Proposed

1. *General Studies at All Levels*
   a. To survey the place of English in American education:
      (1) Objectives
      (2) Time allotment
      (3) Types of organization of curricular offerings
      (4) Relationships with other school subjects
      (5) Relationships with extracurricular program in high school
      (6) Relationships with educational and vocational guidance

b. To survey the means being used to articulate English instruction between elementary and secondary schools and between secondary schools and colleges.
c. To survey what audio-visual aids are being used in English instruction and with what effect.
d. To examine environmental conditions in a classroom and in a school which are conducive to effective teaching and learning (floor space, lighting, furniture, files, shelves, books, outlets for radio, lantern, victrola, movies).
e. To survey the English offerings in evening schools for foreign-born adults, for students returning to school to complete a high-school education, for high-school and college graduates pursuing cultural courses in literature, creative writing, and/or public speaking.
f. To survey the types of instructional equipment made available in classrooms on an individual pupil basis, classroom library, school library.
g. To survey administrative aspects of instructional equipment: (1) methods of selecting books; (2) amount of money spent per pupil for textbooks and for library books; (3) amount of time and money spent on locally prepared instructional materials.

2. *At the Elementary Level*
   a. Reading Phases of English
      (1) Study of retardation at primary, intermediate, and upper-grade levels. Might involve such areas as:
         (a) Nature of reading abilities needed at these various levels, based upon *social* demands and school requirements.
         (b) Nature of reading disabilities at various grade levels.
         (c) Reading readiness program—nature, duration, efficacy in terms of speeding up the reading process; typical "readiness" programs.
         (d) Methods of teaching reading and their relation to reading progress—evaluation of the several methods; might also include an examination of visual aids, textbooks.
         (e) Word recognition, and along with this the nature and range of children's vocabularies.
         (f) *Reading content* and its influence on reading progress.
         (g) Sizes of classes as they affect progress or retardation in reading.
      (2) Reading interests of pupils, the net result of which might be the publication of appropriate book lists for pupils in primary, intermediate, and upper grades.
      (3) Relative effectiveness of direct and incidental teaching of study-reading above the primary school level.
   b. Communication Phases of English
      (1) The language *needs* of elementary school pupils, at, say, end of primary, intermediate, and grammar levels (ought to be invaluable in any program of curriculum making).
      (2) Language "shortages" on the elementary school level.
      (3) Language handicaps of children at elementary school level; for example, bi-lingualism in the home; physiological defects.
      (4) Methods of teaching in the field of composition.
      (5) The relation of aspects of grammar to the expressional program on the elementary school level—*What kind?* How? Practices in teaching grammar.
      (6) Speech education in the elementary school.
         (a) The nature of the program where it is accented.
         (b) The improvement of American speech.
      (7) The effect of size of classes on content, methods, effectiveness of the language program.
   c. The Library in the Elementary School: The Relation of the School and Clasroom Library to the Program of English Instruction
      (1) Book selection—basis, procedures.
      (2) Use of the library.
      (3) Influence of the library on pupils' reading habits.
      (4) Organization and administration.

d. Other Problems
   (1) The professional training of the elementary school teacher in the field of English.
      (a) Basic training, including speech and other auxiliary forms of training.
      (b) In-service training in preparation for new demands on the teacher of English, e. g., the use of audio-visual aids, changing emphasis and objectives.
      (c) Cultural outlook and growth.
   (2) Relation of the English program to the over-all objectives of elementary education; relative effectiveness of direct instruction in English and of correlated and integrated programs of instruction; of the activity program.
   (3) Differentiation of elementary English program to accommodate slow, average, and superior pupils.

3. *At the Secondary Level*
   a. To conduct a job analysis to discover what level of competence in reading and in oral and written expression is needed for success in (1) employment available at end of *secondary school training* (secretarial, industrial, distributive) and (2) in higher institutions of learning (contacts with employers and workers will be made in study (1), and professors of English and of other subjects in higher institutions and students in study (2)).
   b. To examine recent courses of study in secondary English to discover curriculum trends.
      (1) Provision for continuous pupil growth toward competence in English?
      (2) What about grammar?
      (3) Laboratory method of teaching composition?
      (4) Individual "free" reading?
      (5) Reading as a study procedure?
      (6) Literature for character development?
      (7) Contribution of the English curriculum to intercultural understanding?
   c. To conduct a survey of the evaluative criteria and techniques *now being used* by secondary schools to measure outcomes in reading, speaking, writing, and listening.
      (1) Which techniques are used to measure which outcomes?
      (2) How adequate are the measuring devices?
      (3) How much teacher labor is involved?
      (4) What outcomes cannot be measured at this time?
      (5) What uses are being made of standardized measuring devices? (Classification, promotion, guidance, etc.)
      (6) What uses are being made of anecdotal records?
      (7) How do these evaluative criteria and techniques facilitate the educational and vocational guidance program?
   d. What adaptations in the curricular offerings at secondary school levels have been made for the slow learner, the nonacademic pupil, the linguistically gifted pupil?
   e. To what extent is pupil failure in secondary school subjects traceable to lack of competence in reading? in oral and written expression? What steps are being taken to remove the incompetence?
   f. To survey the use of radio workshops in the English course.
   g. To survey the use of school and public library facilities.
   h. How has the war affected the English program?
      (1) Time available for home study by employed students?
      (2) Student publications?
      (3) Interscholastic contests?
      (4) Pre-induction training?
      (5) Shortage of qualified teachers?
      (6) Transfer to English department of teachers trained for other fields?
      (7) Necessity for accelerating the program so as to graduate pupils before induction into the services?

i. To investigate to what extent extracurricular activities are being curricularized? Why? How? Of what value?
j. To conduct a job analysis of teaching English
(1) What in-class responsibilities has the teacher?
(2) What out-of-class responsibilities?
(3) What city-wide responsibilities on curriculum committees, etc.?
(4) What responsibilities for continuing in-service training in order to secure salary increment?
(5) What academic and professional training is required in order to carry on a modern program in English?

4. *Higher Education Level*

PREFATORY NOTE: The need of research in problems of English instruction is especially urgent at the college level. We in the colleges have very little idea of what is actually taught in the colleges, and how—and though studies are made, we have the impression that most of them are general, involving the whole college, not college English (Witness the A. C. L. S. Committee reports on the liberal college—the Wreston book and the Van Dorn book, the forthcoming Rockefeller Study of the Humanities in Colleges). All we have now are occasional articles; the Harvard Study of Teacher Training . . . and some academic study of college English at apparently only one university in the country, Teachers College, Columbia University. If the Government is to subsidize large numbers of soldiers seeking college education, it should have some knowledge of the instruction they receive. We have not that knowledge now.

The reason is simple. In college faculties we owe a divided allegiance: To learning rather more than to the art of teaching, and it is essential that learning come first. The U. S. Office of Education can, however, inspire and focus more active interest in and knowledge of teaching which now has, so to speak, no official sponsor.

The following projects suggest the amount of ground to be covered. As they are stated, all but one are inquiries of the fact-finding (and opinion-finding type). The one possible exception (B 3) may already have been taken up by an active professional society in qualitative as well as merely factual terms.

a. Composition

(1) The writing ability of college entrants: How adequate to the college purpose as seen in the levels of instruction to which students are assigned and in what proportion they are required to do subfreshman English.
(2) Achievement tests in writing used for admission, for "sectioning" according to ability, for passing.
What are the tests? What do they measure? How adequate are they considered for these purposes—especially in dealing with veterans of irregular or remote high-school preparation?
(3) The teaching of composition in college: Methods, motivations, requirements, variety of writing prescribed, conference time required, student "load" per instructor, use of writing "laboratory" and results, actual tests of proficiency used, the improvements desired by individual teachers.
(4) The composition requirement: As course requirement, as degree requirement, as recurring—sending deficient student back to remedial work—cooperation of other departments in spotting poor writing—use and value of English "clinic."
(5) Special problems and desiderata in composition teaching in the opinion of former students—especially of professional writers.

b. Literature

(1) The required course in Literature: Aim—kind of reading done and the plan followed—testing of results, supposed value of the results, retesting for continuance of interest, etc.
(2) The English "major": Varying kinds of programs—the content of the writing "major" (and the opinion of it held by professional writers)—the historical or the critical approach, the "creative" requirement—the comprehensive test and its supposed values.

(3) The position of the humanities in technical colleges and other professional schools (business education, dental, nursing) and the special demands on the instructor and how the latter think they meet the demands (joint inquiry with the Society for the Promotion of Engineering Education).

c. The College Instructor

(1) The preparation of the college teacher of English (inquiry addressed to individuals as well as to graduate schools): Extent of historical-literary knowledge required, the expressed need of training in criticism in comparative literature, in creative writing, in pedagogy—the "fields" required and the examination procedure.

(2) The actual extent of graduate training of college teachers (statistical): number holding M. A., Ph. D., etc.

(3) The extent and nature of research done by college teachers as proof of vitality: The incentives and obstacles thereto.

d. Miscellaneous

(1) A bibliography of college English.

(2) The college preparation of secondary teachers of English (qualifying requirements for the certificate; awareness of literature to be taught in the high school; length and nature of practice training).

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Report and Recommendations of a Committee of the American Association for Health, Physical Education and Recreation

A Committee composed of representatives of the American Association for Health, Physical Education, and Recreation recommends that there be provided in the U. S. Office of Education an adequate staff to render services to teachers in elementary, secondary, higher, and vocational education in the fields of health services, health instruction, physical education, athletics, and recreation. The functions of the U. S. Office of Education as a national service agency for the conduct of educational studies and the dissemination of the findings thereof cannot well be carried on in the fields represented by this Committee unless specialists are added to the staff of the Office who are well trained and experienced in these particular fields.

Findings concerning the lack of physical fitness of many of our boys for service to the Nation in the present war clearly point to the need that greater attention be paid to the fields of health and physical education on the part of the school system of the various States. In wartime it becomes clearly evident how great a stake the Nation has in the promotion of more effective programs in this educational field. It has also become manifest that the U. S. Office of Education is the strategic agency of the Federal Government to assist the schools in the endeavor to strengthen these programs.

It is the belief of this Committee, therefore, that there should be added to the staff of the U. S. Office of Education one or more

specialists for health instruction and for physical education at elementary, secondary, and higher education levels, respectively. There should also be added specialists for school health services and for school-community recreation programs. Associated with these staff members of the U. S. Office of Education should be a National Advisory Committee of recognized specialists representing various groups, organizations, and interests in these fields.

Thus prepared to render service, the following types of studies and leadership activities might well be undertaken by the U. S. Office of Education:

A. The conduct of research studies at elementary, secondary, and higher education levels with respect to physical education, health education, health services, athletics, and school-community recreation. Such studies as the following are greatly needed:

1. National statistics concerning the status of existing programs at all levels, including enrollments by grades, cities, States; whether courses carry credit; bases for classifying students in health and physical education courses; school lunch programs; school recreation programs; and the like.
2. Studies of qualifications of teachers, coaches, recreation directors, and other school health personnel.
3. Studies of salaries and school provisions as to tenure, retirement allowances, health insurance of teachers, coaches, recreation directors, and other health personnel.
4. Studies of teacher-certification provisions by various States.
5. Studies of average class-size and teacher-load in schools of various sizes.
6. Studies of school facilities and equipment with respect to health, physical education, and recreation, including the provision of suggestive blueprints and minimum lists of equipment.
7. Studies of per-pupil costs for health, physical education, and recreation in various States and educational institutions.
8. Summary and digest of State and local laws and regulations relating to health examinations, required physical education, vaccination, immunization, dental prophylaxis, and remediation of physical defects.
9. Studies of the organization and administration of school programs of health, physical education, and recreation, including such matters as provision of insurance policies covering accidents in physical education and athletics, programming of students and teachers for physical education, arrangements for extended school services, the organization of school health councils and other safety controls.
10. Studies of teacher education, including such items as the number and location of institutions offering such training, courses and curricula, teacher-placement activities, and the like.
11. The promotion of cooperative research in institutions and agencies prepared to carry on careful scientific studies of such matters as: The physiological effects of physical exercise, physical rehabilitation through physical exercise, nutrition and exercise in relation to weight control, physical standards in relation to various age groups and physiological types.

B. The provision of consultative services: In the fields of health services, health instruction, physical education, and recreation the U. S. Office of Education should be prepared to render consultative services to workers in the field through institutes, conferences, individual consultations, and similar means.

C. Dissemination of authoritative information: The U. S. Office of Education should be prepared to disseminate authoritative information based on careful research studies, investigations, and surveys by such various means as periodical publications, bulletins, monographs, bibliographies, abstracts of significant studies, film lists, courses of study, and letters to individuals.

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Report and Recommendations of a Committee of the National Council of Teachers of Mathematics

A Committee representing the National Council of Teachers of Mathematics recommends that the Office of Education render certain specific services to mathematics teachers. Competency in mathematics is at a low level. It has been for a long time and is likely to continue unless something definite is done about it. The war did not create this regrettable situation—it merely revealed and dramatized it.

The need is Nation-wide. The services that we suggest cannot be done by individual States, cities, or communities without wasteful duplication of effort and without excessive cost. Moreover, the outcomes of such investigations, experiments, surveys, collection of opinions, etc., will continue to be fragmentary and generally unreliable without the aid of some coordinating agency.

It is the conviction of the committee that the U. S. Office of Education should continue to be a service agency to school people and to all citizens interested in the education of our youth. To that end we recommend that the U. S. Office of Education add personnel which will vigorously and continuously support and extend the strong leadership of mathematics teachers that now exists in many regions. Though efficiency in the teaching of mathematics is inadequate there are, nevertheless, many gifted and competent teachers of mathematics. Their techniques and materials should be made generally available. Among the many services that teachers of mathematics want and need is help in organizing demonstration centers in such numbers and in places strategically located so that in the post-war period a goodly fraction of our teachers may see demonstrated up-to-date materials and techniques for a week or two each year.

It is anticipated that at least one institution in each region will be desirous of assuming responsibility for the major portion of the cost of such a demonstration center. However, it is obvious that some travel funds must be made available to the U. S. Office of Education in order that it may work with the local group in each region. Finally, our suggestions will not be effective unless sufficient funds

are assigned to the U. S. Office of Education for securing personnel with the high qualifications that the task requires.

A. Elementary School Mathematics

1. Aid local and regional groups of teachers in their efforts to improve instruction in arithmetic. Among the activities to be undertaken cooperatively are:
   a. Organizing and promoting regional conferences and institutes.
   b. Establishing smaller study groups for the exchange of good practices in the areas of their common interests.
   c. Arranging for short training courses in arithmetic.
   d. Collecting and displaying exhibits of instructional materials (bibliographical summaries, textbooks, yearbooks, etc., teaching equipment, multi-sensory aids, and the like), with some indication as to a functional minimum of such materials.
   e. Demonstrating the uses of new aids and equipment.

   (It is assumed that there may be as many as 20 of these regional conferences, that they will be planned cooperatively with State departments and with local institutions, that they will each last a week or two, and that they will be organized as work groups. The purpose of this program is to improve *immediately* the methods and materials of instruction at points where they are now most defective.)
2. Aid persons who are in charge of the training of teachers of arithmetic in their efforts to improve this training. Possible activities of the U. S. Office of Education in this connection are, among others:
   a. Organizing and promoting regional conferences.
   b. Surveying present practices.
   c. Analyzing status and other pertinent research reports.
   d. Determining the needs and desirable training of arithmetic teachers of the area.
   e. Sponsoring such improvements respecting materials and methods as local leaders consider important.

   (This suggestion looks to a long-time program of improvement of arithmetic instruction, by assuring better trained teachers. The conferences, it is assumed, should meet at least once a year.)
3. Make national surveys. Some surveys which might be undertaken are: The extent and kind of preparation of teachers of arithmetic, practices respecting provisions for individual differences, possible applications to local and community problems, measures taken to assure minimum arithmetical competence, inarticulations of arithmetic courses with later mathematical education, and the like.

   (Such surveys, made periodically and kept up to date, permit the study of trends, help to determine policies, and uncover problems in need of further investigation. It is obvious that, to be most effective and to be adequately coordinated, the direction of such studies must have the cooperation of a Federal agency.)
4. Work cooperatively with professional organizations interested in the improvement of arithmetic instruction. Some functions which the Office of Education might perform are:
   a. Serving as a clearinghouse to collect and disseminate essential data.
   b. Facilitating and coordinating activities and studies of committees.
   c. Suggesting areas in need of joint investigation.
   d. Providing an agency to which professional organizations may turn to get help in connection with problems of national importance.

   (This service would avoid wasteful duplication and assure comprehensive investigations in the place of fragmentary studies, at the same time that it would guarantee the wider distribution and utilization of the results of studies.)
5. Establish and maintain bibliographical service on problems relating to arithmetic instruction. Suggested activities are:
   a. Cooperating in preparing annotated bibliographies and in keeping such bibliographies up to date.
   b. Making such bibliographies widely available.

   (The literature in the field of arithmetic is now so vast that no individual or institution, short of a Federal agency, could successfully supply this service.)

6. Collect and classify such free and low-cost materials prepared by government agencies and by industrial organizations as may be useful to teachers of arithmetic.

   (In the sources mentioned above is a large amount of material which would be exceedingly useful to teachers of arithmetic. The best of this material should be known by and accessible to teachers. In discharging this function the U. S. Office of Education should analyze and select useful methods and materials which have been developed and used in the schools of the armed forces.)

7. Serve as an agency for the international exchange of good practices and materials in arithmetic.

   (Some current practices in the teaching of arithmetic in the United States would be useful in other countries. If these materials and methods are to be shared, some agency must assume responsibility for putting them into useful form and for making them available. This service cannot be performed upon demand and can be rendered only by a Federal agency.)

8. Aid in the re-education of returned service men in the field of arithmetic, by cooperating with other governmental agencies and with industry.

   (A vast program of arithmetic instruction has been undertaken to make enlisted men competent for the emergency. It is assumed that something like this program must be continued, to fit returned service men for new jobs in industry as well as to make them more efficient and intelligent citizens.)

B. Secondary School Mathematics

1. Aid local and regional groups of teachers in their efforts to improve instruction in secondary mathematics. Among the activities to be undertaken cooperatively are:
   a. Organizing and promoting regional conferences and institutes.
   b. Establishing smaller groups for the exchange of good practices in the areas of their common interests.
   c. Arranging for short training courses in secondary mathematics.
   d. Collecting and displaying exhibits of instructional materials (bibliographical summaries, textbooks, yearbooks, etc., classroom equipment, multi-sensory aids, mathematical library, and the like), with some indication as to a functional minimum of such materials.
   e. Demonstrating the uses of new aids and equipment.

      (It is assumed that there may be as many as 20 of these regional conferences, that they will be planned cooperatively with State departments and with local institutions, that they will each last a week or two, and that they will be organized as work groups. The purpose of this program is to improve immediately the methods and materials of instruction at points where they are now most defective.)

2. Aid persons who are in charge of the training of teachers of secondary mathematics in their efforts to improve this training. Possible activities of the U. S. Office of Education in this connection are, among others:
   a. Organizing and promoting regional conferences.
   b. Surveying present practices.
   c. Analyzing status and other pertinent research reports.
   d. Determining the needs and desirable training of mathematics teachers of the area.
   e. Sponsoring such improvements respecting materials and methods as local leaders consider important.

      (This suggestion looks to a long-time program of improvement of instruction in secondary mathematics by assuring better trained teachers. The conferences, it is assumed, should meet at least once a year.)

3. Make national surveys. Some surveys which might be undertaken are:
   a. The extent and kind of preparation of teachers of secondary mathematics, practices respecting provisions for differentiated curricula, possible applications to local and community problems, measures taken to assure minimum mathematical competence, in articulations of mathematical courses with later mathematical education, and the like.

b. Needs and trends as shown in courses of study, enrollments, failures, etc.

c. Discover gaps in the understanding and control of simple concepts and fundamental techniques as suggested by the preinduction needs of the schools of the armed forces; for example, tolerance, mil, slide rule, common and decimal fractions, interpolation, etc.

(Such surveys made periodically and kept up to date, permit the study of trends, help to determine policies, and uncover problems in need of further investigation. It is obvious that, to be most effective and to be properly coordinated such studies must have the cooperation of a Federal agency.)

4. Work cooperatively with professional organizations interested in the improvement of instruction in secondary mathematics. Some functions which the U. S. Office of Education might perform are:

a. Serving as a clearing house to collect and disseminate essential data.

b. Facilitating and coordinating activities and studies of committees.

c. Suggesting areas in need of joint investigation.

d. Providing an agency to which professional organizations may turn for help on problems of national importance.

(This service would avoid wasteful duplication and assure comprehensive investigations in the place of fragmentary studies, at the same time that it would guarantee the wider distribution and utilization of the results of studies.)

5. Establish and maintain bibliographical service on problems relating to mathematics instruction. Suggested activities are:

a. Cooperating in preparing annotated bibliographies and in keeping such bibliographies up to date.

b. Making such bibliographies widely available.

(The literature in the field of the teaching of secondary mathematics is so fragmentary and so widely distributed that no individual or institution, short of a Federal agency, could successfully supply this service.)

6. Collect and classify such free and low-cost materials prepared by government agencies and industrial organizations as may be useful to teachers of mathematics.

(In the sources mentioned above is a large amount of material which would be exceedingly useful to teachers of mathematics. The best of this material should be known by and accessible to teachers. In discharging this function the U. S. Office of Education should analyze and select useful methods and materials which have been developed and used in the schools of the armed forces.)

7. Serve as an agency for the international exchange of good practices and materials in secondary mathematics.

(Some current practices in the teaching of secondary mathematics in the United States would be useful in other countries. If these materials and methods are to be shared, some agency must assume responsibility for putting them into useful form and for making them available. This service cannot be performed upon demand and can only be rendered by a Federal agency.)

8. Aid in the re-education of returned service men in the field of secondary mathematics by cooperating with other governmental agencies and with industry.

(A vast program of mathematical instruction has been undertaken to make enlisted men competent for the emergency. It is assumed that something like this program must be continued, to fit returned service men for new jobs in industry as well as to make them more efficient and intelligent citizens.)

C. Higher Education Mathematics

1. Work cooperatively with professional organizations interested in the improvement of mathematical instruction. Some functions which the U. S. Office of Education might perform are:

a. Aiding faculties of junior colleges in improving their curricula and instructional techniques.

b. Serving as a clearinghouse to collect and disseminate essential data.

c. Facilitating and coordinating activities and studies of committees.
d. Suggesting areas in need of joint investigation.
e. Providing an agency to which professional organizations may turn to get help on problems of nationl importance.

(This service would avoid wasteful duplication and assure comprehensive investigations in the place of fragmentary studies, at the same time that it would guarantee the wider distribution and utilization of the results of studies.)

2. Serve as an agency for the international exchange of good practices and materials in mathematics.

(Prior to World War I there did exist an International Commission on the exchange of ideas in the teaching of mathematics. This Commission operated only a very short period of time, but, nevertheless, rendered very effective service. It is reasonable to assume that a specialist in higher mathematics would be useful in reviving and giving continuity to such a service.)

3. Aid in the re-education of returned service men in the field of mathematics by cooperating with other governmental agencies and with industry.

(During the emergency a great number of men will have been enrolled in the USAFI courses. Presumably the achievement in such courses will need to be evaluated by teachers of college mathematics. Then, too, it is widely recognized by college faculties that courses in mathematics for returning service men will need revision.)

4. Make national surveys of interest to instructors in college mathematics.

(Such surveys, made periodically and kept up to date, permit the study of trends, help to determine policies, and uncover problems in need of further investigations. It is obvious that, to be most effective and to be adequately coordinated such studies must have the cooperation of a Federal agency.)

5. Cooperate with specialists in the teaching of elementary and secondary mathematics.

(College teachers of mathematics feel, and justly so, that they have an important role in the training of teachers of mathematics for the elementary and secondary schools. In a goodly number of national organizations there are individuals vitally concerned with this problem, indeed some of these organizations have standing committees on the education of teachers. They need a national agency in order that they may coordinate their efforts and thus make their constructive suggestions effective. Some of the items in the preceding sections dealing with elementary and secondary mathematics have clear implications with respect to instructional problems in mathematics in higher education.)

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Report and Recommendations of a Committee of the National Council of Teachers of Science

Tragic as the present world conflict is, it has forced us as a Nation to evaluate ourselves—our deficiencies and our capabilities. For example, woefully unprepared as we were at the time of Pearl Harbor, we have in less than 3 years amazed not only ourselves but the world as to our productive genius. This ability to change rapidly from peace to a wartime footing has been in large part due to the mobilization of American science and to our flexible system of democratic education. As a result of this mobilization of education for war, many

traditional offerings have been either displaced or greatly modified. The resulting innovations need to be evaluated.

As an illustration, a considerable proportion of our youth were rejected on physical grounds although we have had some aspects of health education in the schools for years. The need for a study of health education, particularly as it bears on science education, is urgent. Again, we discovered that our youth were unprepared to operate effectively the machines of industry and war although the schools had offered physics and other basic science courses for years. A study on a national scale of physical science in terms of functional needs is likewise urgent.

In the U. S. Office of Education we have at hand the instrument for carrying on these and similar studies and of wisely translating the results into effective action through the medium of the schools.

We treasure the tradition of a free untrammeled system of education in this free country. Having been brought up through and now participants in such a system, we should strongly oppose any attempt to control education by any Federal agency, however beneficent. On the other hand, educational institutions should welcome the benefits of suggestions and advice that could come to them from a central office of the Government.

The services suggested represent needs which, by their very nature, should be rendered the schools of the Nation through an agency of the Federal Government.

A. Serving the Schools

Science Advisory Committee.—Opportunities to examine the science services of the U. S. Office of Education should be put on a regular basis through the establishment of an Office of Education Science Advisory Committee. The membership of this Committee should be rotated in such ways as to represent regions, subjects, and levels. Appointments should be made for 2 or 3 years in order that members may study actual and potential services objectively and comprehensively. Regular meetings would provide for continuity in planning and special meetings would provide for emergency consultation.

Institutes and workshops.—The U. S. Office of Education should encourage and assist in organizing institutes and workshops for the study of local, State, national, and international problems with the emphasis on the role of science teachers in helping to solve these problems. Through the organization and participation in such institutes the U. S. Office of Education will render a real service to the youth of our Nation through the development of closer cooperation between the science teacher and various other educational and community groups.

Liaison between college and high-school science.—The U. S. Office of Education could do much in bringing together college and high-school science. This could be done by transmitting to the high schools a knowledge of personalities and research undertakings in nearby institutions of higher learning. Arrangements can be worked out for bringing scientists to the high-school classroom, laboratory, and science club so that mutual profit and understanding might result.

Transcriptions.—Addresses by competent scientists should be made available to schools through a transcription service. Plans for such addresses may be made by the U. S. Office of Education in cooperation with scientific societies and radio broadcasting services. Furthermore, the U. S. Office of Education should arrange broadcasts and transcriptions for the dramatization of major science developments so that all persons may understand and feel the impact of science on our way of life.

International cooperation.—The U. S. Office of Education can promote and regulate the exchange of scholars and scientists between this and other countries. This exchange may well extend down into the elementary fields. The lifeblood of science is the unrestricted flow of ideas between peoples. Science has the further advantage of being free from nationalistic slants and thus

is an excellent medium for the promotion of international understanding and cooperation.

Post-war planning.—The possibilities of the application of science in the field of post-war planning need to be explored by some central agency. Such exploration involves not merely the applications to national planning, but likewise the full utilization of local resources.

World rehabilitation.—Science is bound to be a potent factor in the rehabilitation of countries ravaged by war. The U. S. Office of Education could transmit to the schools the steps taken by the various countries to utilize their resources and thus build up bonds of sympathetic understanding between peoples.

Science and industry.—With the help of representatives from industry, labor organizations, and governmental services a study should be made to facilitate closer correlation between the science and the vocational departments. This would aid in the development of terminal work-study courses. Instead of training unlimited numbers for the various vocations, statistics should be kept on the number employed in each vocation and on the average annual turnover thus enabling schools to give intelligent guidance to youth. Only through an agency national in scope can such studies be made.

Science and social problems.—The war has brought before us many critical problems. Of special interest to workers in science and education are the problems relating to racial issues, disease, importation, health hazards, delinquency, temperance, nutrition, use of machines, and the like. The U. S. Office of Education should assist in bringing the findings of science as they bear on these problems to all teachers, pupils, and adults in order that there may be a greater tendency to base personal and community actions on facts, and less likelihood that mob actions may lead us into even more critical problems.

Regional needs.—A study of regional needs in science can be utilized by teachers and supervisors in the development of instructional materials adapted to local conditions. The U. S. Office of Education may assist in determining the regional needs from information secured through the various scientific agencies of the U. S. Government.

Discovering the scientists.—Since the future of the Nation is bound up with the future of science, it can be the function of the U. S. Office of Education to aid the colleges in the discovery and the further training of the brilliant high-school science student and through encouragement and guidance to assure him or her of the best possible outcome of his genius so that his potential ability will not be a loss to the Nation.

In-service education.—With the rapid changes that are necessary in the development of a program of science education in our schools that is in keeping with modern needs, a program of in-service education becomes imperative. There are many new developments in science education that have proved desirable but have not as yet been introduced on a Nation-wide basis. As a result of the war and the post-war period we shall have in the United States thousands of new teachers in the field of science. A study, conducted by a national agency, which would evaluate the trends in in-service education would assist greatly in improving the in-service education programs in science.

Test service.—The U. S. Office of Education should assist in making available suggested test items for science at the various grade levels. There should also be distributed to science teachers the sources of published test materials.

Staff needs.—The needs of science teachers and educational leaders cannot be met by the staff now available in the U. S. Office of Education. At no time have there been in the U. S. Office of Education persons who could assist in providing the many services related to science which have been needed.

It is believed that there should be on the staff of the U. S. Office of Education: (1) a specialist in science at the elementary level with two or more assistants; (2) a specialist in science at the secondary level with two or more assistants; and (3) several specialists at the higher education level, with the necessary assistants.

Wherever possible it should be planned to provide competent staff help in the areas of biological, physical (including aviation), and earth sciences.

B. Continuous Study of the Schools

Trends in science.—At present there is no central agency keeping track of the trends in the enrollment in the various sciences for the different regions of the country and for the Nation as a whole. Such continuous studies are highly desirable (1) to guide in future building and teacher-training programs,

(2) as a basis for scrutinizing present offerings and methods of instruction, and (3) so that the output of students may better match the opportunity demands in the different fields.

Curricular studies.—Make a study to determine what courses in science should be offered to those students of different ability levels. In the pre-war era our secondary education was pointed largely toward preparation for college, yet less than 20 percent of our graduates went on to higher education.

Personnel problems.—The evaluation of the personnel problems of science teaching would include an evaluation of the science as taught by the special teacher, by the classroom teacher, and by the science consultant. It would also include an evaluation of departmentalization.

The personnel of science instruction of this country has been profoundly altered as a result of the war. Thousands of science teachers have resigned their positions in school to participate in the war. These positions in many cases have been filled by less competent individuals. The U. S. Office of Education should study the training of teachers and recommend specific methods by which schools may have competently trained teachers for the science program. The Office should also study and make recommendations as to minimum qualifications for teachers and supervisors of science at the various grade levels.

The mechanics of instruction.—The whole subject of the effectiveness of science teaching as related to size of class and laboratory needs clarification. Science entered the curriculum as a newcomer and was obliged to fit itself more or less into the traditional room, the traditional class period, the traditional teacher load, and with the traditional number of students. After all, this may be resulting in wasteful economy of effort and the whole subject merits the scrutiny of an impartial agency that commands Nation-wide respect.

Supervision.—Many plans for pre-service training of science teachers are in operation. Some involve actual student teaching in typical communities while others limit all student teaching to small classes in a special training school. As regards supervision, some teacher-training institutions provide an active classroom teacher with some time for observations and conferences while in other institutions the supervisor seldom teaches pupils at the levels for which teachers are being prepared. The U. S. Office of Education should study student teaching and the supervision of student teachers in science and report its findings to educational leaders.

Science facilities.—The U. S. Office of Education should study and make recommendations concerning how school grounds and environs may be maintained to improve the science instruction. School grounds and environs should be made to play an important part in science instruction.

Information should be complied on science laboratories and classrooms with an evaluation in terms of what type seems to fit best various sizes of schools, various types of schools, and various community situations.

The U. S. Office of Education should study and recommend extension of camp and other outdoor facilities for science study at all grade levels.

Following a thorough study, recommendations should be made for a standard type of laboratory in which all sciences may be taught. This would encourage the teaching of functional science in the small secondary school.

There should be made available, from time to time, lists of visual, auditory, and other aids for the teacher of the sciences. There should also be provided advice and guidance to producers of various aids to instruction.

A study should be made of the standardization of science equipment and supplies, and recommendations to manufacturers, distributors, and consumers of these items.

Curricular practices.—Make a study of and report on the various successful curricular practices in science education at the various grade levels in schools of different size and in different types of communities. This will aid school systems in revising or building new curriculums.

Subject interrelationships.—A study of the relationships of science to the other school subjects and activities should be made with the purpose that the science may be better coordinated in a program of education that looks to the well-rounded development of children and youth.

The U. S. Office of Education should study and evaluate science museums with the end in view of developing area museums for the use of schools in rural districts.

A study should be made of the place and nature of the library in the teaching of science.

Education through Radio.—The radio has become a potent element in education of American people. Its value as a means of influencing world thinking has only recently been understood. The U. S. Office of Education should conduct an investigation of radio techniques and provide materials whereby schools may educate their pupils to become thoughtful listeners so that the constructive influence of radio education may not be outweighed by the nonscientific type of radio programs. The use of radio as a tool in science instruction should also be studied.

Visual aids.—Visual aids for the teaching of science have received a tremendous impetus during the war emergency. A thorough study should be made of the experience and results obtained in the training programs of the various branches of the armed services in their use of visual aids. Another study should be made of the experiences of school systems throughout the country in their use of visual aids. An evaluation of these studies should result in recommendations on the place of the various types of visual aids in our science education programs.

Health education.—Many plans for upgrading health education have come into school practices as a result of schools attempting to meet the challenge of numerous rejections for reasons of physical fitness. Some of these plans have put a greater emphasis on the sciences while in others some science instruction has been replaced by health courses. The U. S. Office of Education should assist in an objective appraisal of these health education practices and assist in determining the place of science instruction in efforts to improve the health of our youth.

Opportunities in science teaching.—In order to stimulate capable young men and women to select and continue in science teaching as a career, the U. S. Office of Education should study the opportunities in science teaching and prepare a bulletin which may be distributed to high-school students for the purpose of challenging their interest in serving the youth of the world through science teaching. Furthermore, the U. S. Office of Education should compare these opportunities with others which challenge capable students and endeavor to implement those changes which, when made, will result in attracting many of our best young persons into science teaching as a career.

Human growth and development.—A review of the studies of child and youth development should be made to determine the contributions of these studies to the teaching of science.

Adult education.—The U. S. Office of Education should make a study to determine the most suitable methods of teaching the sciences to adults. This should include a study to determine the most suitable science courses for the adult in the various types of communities for both the vocational and avocational needs.

Governmental studies.—The U. S. Office of Education should digest and interpret studies made by various governmental agenies which may be of value in the teaching of the sciences. Reports on studies made by the U. S. Office of Education should be made from time to time.

Composite reports.—The Office of Education should compile a composite report of the results of research as these relate to special problems in science education.

Bibliographies.—Annotated bibliographies should be published from time to time of research studies in the field of science education. Such bibliographies might serve to coordinate the efforts of the universities and other agencies of the country that are now conducting research in this area. There is at present no comprehensive clearinghouse in the United States for research studies in science education. The U. S. Office of Education could serve as such a clearinghouse.

Regional information.—A wealth of information concerning the problems and resources of various regions of the United States has been secured by the scientific agencies and services of the United States Government. In general, this information is not accessible to public-school teachers. It is suggested that the U. S. Office of Education prepare bulletins treating the scientific information of specific regions to the end that teachers may make their instruction functional to the communities in which they teach. Publications of the U. S. Geological Survey, U. S. Department of Agriculture, U. S. Bureau of Mines, U. S. Weather Bureau, and other scientific agencies could be utilized in preparing these bulletins.

Continuous science program.—Teachers at the various levels should be made aware of the program of science at other levels. The U. S. Office of Education should prepare bulletins addressed to teachers of specific levels acquainting them with the nature of the over-all program so that the science instruction in public education may be conceived as a continuous program. For instance, a bulletin indicating the trends of science in elementary schools might be prepared for

teachers of science in secondary schools. Likewise a bulletin indicating trends in elementary and secondary science may be prepared for teachers of science in technical schools, colleges, and universities.

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IN CONCLUSION

In the preceding pages of Part II of this Annual Report I have undertaken as Commissioner of Education to set forth recommendations for improving the services of the U. S. Office of Education. The improvements recommended are designed to enable the Office to give national leadership in "promoting the cause of education throughout the country"—in accordance with the legislative mandate under which the Office of Education has operated for more than three-quarters of a century.

There has been maintained in these recommendations the original conception of the Congress which apparently desired that the Office of Education should be an important service agency of the National Government. The sole purpose envisaged in the proposals here made is simply to provide valuable and needed assistance to the educational systems and institutions of the several States and their local communities in meeting the long-term educational demands of the post-war period. Nowhere has it been implied that the Federal Government through its Office of Education should attempt in any way to interfere with the control of educational programs by the States. I have been consistently opposed to such interferences.

Throughout the recommendations it has been assumed that it is a legitimate function of the national service agency to education to influence educational programs and practices by the diffusion of trustworthy information and the exercise of capable leadership respecting "the organization and management of schools and school systems and methods of teaching." The exercise of influence is itself to be exclusively educational in character; hortatory and advisory rather than monitory; stimulative rather than repressive, certainly never coercive.

Whether or not the Congress will see fit to act favorably upon these plans to improve the services of the U. S. Office of Education, I shall not, of course, attempt to predict. It is permissible to express the hope, however, that prompt and favorable action will be taken. The present staff members of the U. S. Office of Education have the firm belief that the recommendations made are sound in principle and such that if accepted will cause the U. S. Office of Education one day to become the strong and beneficent influence in American education that befits the official educational service agency of an intelligent, peace-loving, free, and progressive people.

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CHART I -- PLAN OF ORGANIZATION TO IMPROVE THE SERVICE OF THE U. S. OFFICE OF EDUCATION

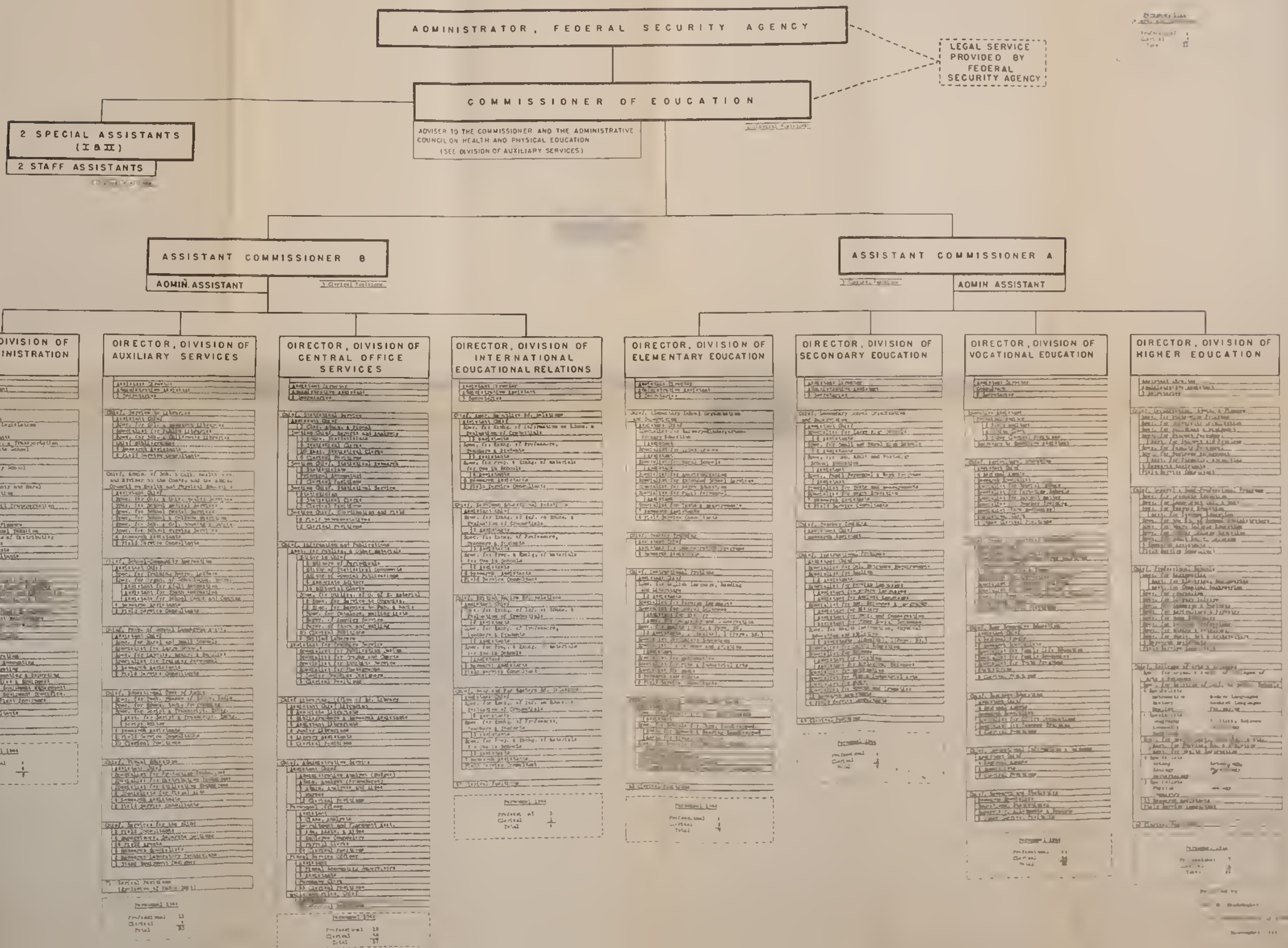


CHART II -- PRESENT AND PROPOSED PERSONNEL

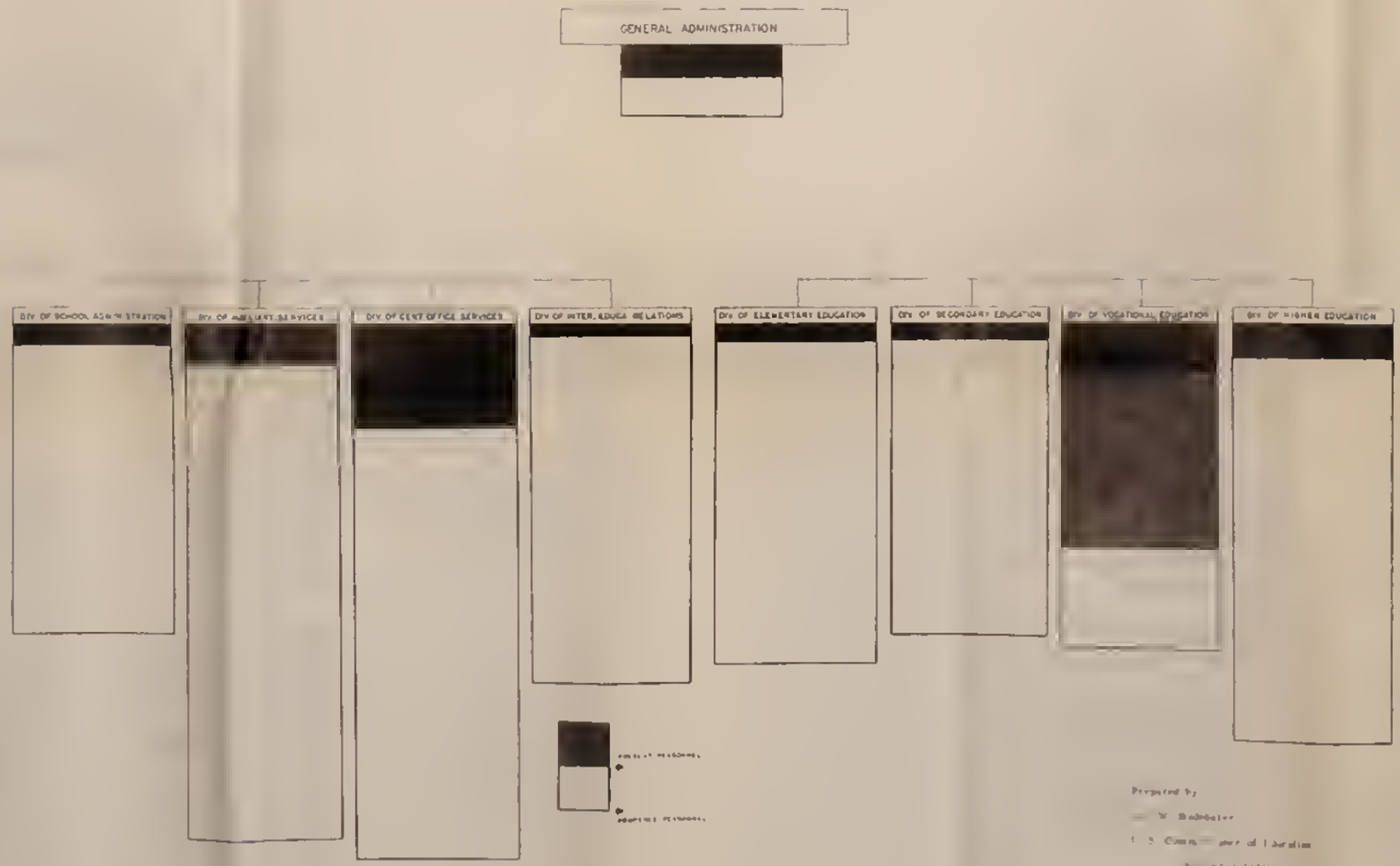


*Chart V. Organization of Office of Education Committees and Their Relationship to Advisory Committees**

Office Committees	*Special Advisory Committees*
Health Services, Health Instruction, Physical Education, and Athletics	*Health Services, Health Instruction, Physical Education, and Athletics*
Assistant Commissioner A, *Chairman.* Chief for Administration of School and College Health Services (1). Specialist for Elementary School Health Instruction and Physical Education and Assistants (2). Specialist for Secondary School Health Instruction, Physical Education, and Athletics, and Assistants (3). Specialist for Higher Education Health Instruction, Physical Education, and Athletics, and Assistants (4).	Fifteen members representing the medical, dental, and nursing professions, the various professional organizations, and educational levels. Part of the time during conferences the entire committee would meet with the Office Committee as a whole. But also part of the time there would be separate meetings of the respective members of this committee with units (1), (2), (3), (4) of the Office Committee.
Natural Sciences and Aviation	*Natural Sciences and Aviation*
Specialists for Elementary School Science (1). Specialists for Secondary School Science (2). Specialists for the various Higher Education Sciences (3). (Chairman to be appointed by Assistant Commissioner A or selected by the group).	Fifteen members representing the various levels (three for Elementary Education) (four for Secondary Education) (eight for Higher Education). As with all other advisory committees, the membership would be drawn in rotation from various professional organizations and sections of the country. The committee would work part time as a committee of the whole and part time in separate groups with corresponding units (1), (2), (3) of Office Committee.

*See paragraph 4 on page 119 for explanation of this chart.

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