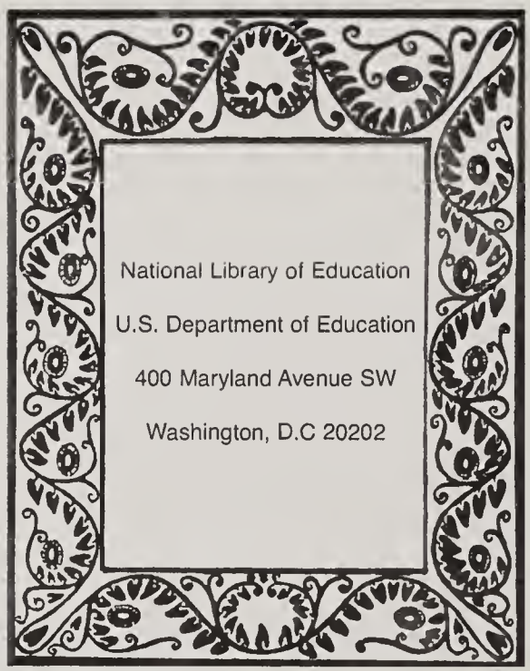

INDEX, SCHOOL LIFE, VOLUME XXXI

October 1948–June 1949 and March Supplement

[S] refers to March Supplement

"Atomic Energy Here To Stay"

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FEDERAL SECURITY AGENCY.....OSCAR R. EWING, *Administrator*
OFFICE OF EDUCATION.....EARL JAMES MCGRATH, *Commissioner*

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★

Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for October 1948

Volume 31 Number 1

Cover photograph from leaflet, "A Career in Teaching," issued by Bureau of Publications, Iowa State Teachers College, Iowa City, Iowa

AS YOU SEE your SCHOOL LIFE has a different look this month. The change of format has been effected to help make SCHOOL LIFE more readable and more serviceable to you as a superintendent, principal, or teacher. Its chief aim: to bring you Federal Government information and aids in education. We welcome your views on SCHOOL LIFE and this policy.

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THE NEXT ISSUE of SCHOOL LIFE will bring you additional high lights from research findings of Office of Education specialists, new educational aids available from your Government, more summary information on important developments in American education. LOOK FOR "Educational Implications of Atomic Energy"—a special supplement to SCHOOL LIFE now being planned for future issue.

Published each month of the school year, October through June.

To order SCHOOL LIFE send your check, money order, or a dollar bill (no stamps) with your subscription request to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. SCHOOL LIFE service comes to you at a school-year subscription price of $1.00. Yearly fee to countries in which the frank of the U. S. Government is not recognized is $1.50. A discount of 25 percent is allowed on orders for 100 copies or more sent to one address within the United States. Printing of SCHOOL LIFE has been approved by the Director of the Bureau of the Budget.

OSCAR R. EWING..... Federal Security Administrator
RALL I. GRIGSBY..... Acting Commissioner of Education
RALPH C. M. FLYNT..... Executive Assistant to the Commissioner
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JOHN H. LLOYD..... Assistant Chief, Information and Publications Service

Address all SCHOOL LIFE inquiries to the Chief, Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

ATTRACTING New Teachers

How Some Communities Are Doing It

WHAT *is* "recruiting" for teachers? Is it going out into the highways and byways and flagging passersby—suitable or not—to come take classroom jobs? This has had to be done, willy-nilly, to meet the emergency. Or does "recruiting" mean developing in young people an informed and emotional attitude that favors teaching as a career?

Jacques Barzun has given us his idea of the three personal qualifications that should be required of teachers—in this order: A sense of vocation, an awareness of the duties and opportunities in teaching, and a predisposition for the work through home-grown familiarity with knowledge and ideas.

If such qualities as Barzun indicated are of first importance—and few authorities would quarrel with them—then of course intelligent recruiting must mean the discriminating attraction of first-class young people who have a talent for human relations and a taste for good hard work.

Nobody can pretend that attracting the right kind of new teachers will be an easy job. It will be an uphill climb every inch of the way—not only because teaching still fails to provide economic security, despite the country-wide salary gains, but also because the need for teachers is more acute than ever. The reason? The babies born in record numbers since 1942 are now of school age. And they are already overrunning the lower elementary grades. Look at this typical example of the need for elementary teachers: Last year one great university had calls for 3,376 elementary teachers but had only 83 to recommend. Is it any wonder that here and there "recruiting" has actually taken on hysterical aspects?

In the long view, however, the prospects for attracting a continuing supply of able new teachers are distinctly encouraging. We say this for two reasons:

First, there has been such an upsurge of public interest in education that eventually, if we are able to stimulate citizens to maintain their concern about their local schools and the quality of teaching provided, we have the possibility of building a system that will be adequate for our needs. Undoubtedly there exists a relationship between the many recent community activities in behalf of schools and the fact that the Citizens Federal Committee on Education, serving as the Office of Education's lay advisory arm, has been waging an intensive press and radio program to present the facts about the teacher shortage to the American people. A highly successful Nation-wide "Improve our Schools" campaign has been made possible through the services of the Advertising Council of America.

Second, the prospects for attracting new teachers are encouraging because there is a new alertness on the part of teachers themselves to their own responsibilities in helping their profession come of age. There is no doubt whatever that increasing numbers of teachers are setting out to prove to their communities, and to themselves, that they represent a profession that may well hold the key to the Nation's future. Their critical needs and aims must be encouraged. And they are daring to say so.

The day of the long-suffering mouse in the schoolroom is gone. The forward-looking teacher is a professionally dedicated, articulate, community-minded, world-minded individual.

While cities and States are making long-needed salary, tenure, leave, and retirement improvements, and while elementary salaries are slowly but surely moving toward the ideal of "equal salaries for equal training," forward-looking teachers and teacher groups are sparking a great variety of activities that bid new teachers to join them.

Here are a few of the ways in which teachers and interested groups all over the country are helping sensitize young people to the duties, opportunities—and yes, the downright pleasures of a warm sense of vocation—that belong so importantly to teaching.

As early as the fall of 1947 lay groups participated in the "Teacher Recruitment Week" program organized by the Tucson (Arizona) Education Association Committee. They helped promote such things as editorials in newspapers, news items, cooperation of Tucson's four radio stations, lectures, letters to civic clubs, parents, and teachers; and posters printed by Tucson Senior High School Graphic Arts Department were displayed in 80 stores. The Junior League put on a radio program, one business woman staged a fashion show in the patio of her local dress shop, and local business establishments ran slogans with their newspaper ads in daily newspapers.

Scholarships

Two students were awarded scholarships—one for teaching in high school, the other in primary grades. One scholarship, providing for $100 yearly for 4 years, was made possible by 60 teachers who put on a play, "Teachers Are People." Awards were made by a committee of five citizens, who evaluated candidates on character, personality, leadership, and social consciousness.

The Future Teachers of America, active in 503 high school clubs, seek to interpret the profession to young people and, to those who develop a genuine desire to teach, foster experiences designed to strengthen that aim. One FTA club lists 20 different activities engaged in by its members in the past year. For example: Acting as guides for eighth-graders on "Recognition Day"; entertaining first-graders in the teacher's absence; making scrapbooks, "Helps for a Busy Teacher," during summer vacation; making posters for a "Better Homes Movement," and helping sponsor two "Parent-Guest nights."

In 1946 Phi Delta Kappa, men's education fraternity, chose teacher recruitment as one of three national projects. Since then more than a thousand speeches to laymen have been made on the subject by members and hundreds of hours of radio time and columns of space have been given to the problem. Through the city schools of Los Angeles, this organization has put out a booklet, "I Choose Teaching," for use in vocational guidance and counseling.

A film, "Our Teacher Mary Dean," was also put out by Phi Delta Kappa, in cooperation with Pi Lambda Theta, to assist in recruitment. The journal of Phi Delta Kappa has sponsored a short story contest with a male teacher as the central character and has put out specimen briefs—affirmative and negative—of a debate on teaching as a career.

Personal Recruiting

The American Association of University Women reports encouraging responses to first-hand contacts with students as part of their 1947–48 "Guidance and Teacher Recruitment" programs in nineteen different communities. The AAUW says, "It is hoped that, with additional money, more can be done next year in the high schools, and selective recruitment can be extended to the younger students in the junior high schools."

Francis L. Bailey, president of the State Teachers College at Gorham, Maine, believes in personal recruiting in the high schools of the State. He says, "Following talks to students in high school, I confer with those who are interested in attending our college or some other teacher preparation institution. We tell the superintendents and principals if they will help us to recruit good people we will send them back good teachers. They seem to think that that is a fair proposition."

In Mt. Lebanon, Pa., the superintendent of schools initiated a guidance program in an effort to lead a larger number of the better students to enter teaching. Out of 161 girls in the spring graduating class, 10 expressed interest in the profession. Nearly all thought of high school teaching.

A committee of 7 teachers, appointed for guidance, met weekly for 6 weeks with the students in their home rooms in order to bring them information about the teaching profession. At the end of this time, 37 students expressed interest. These were given a day each of observation and discussion with some teacher in the elementary or junior high schools of the system. After further counseling, 33 gave choices of work within the profession. Of these, 12 expressed a desire to teach in the elementary grades.

A definite plan for teacher recruitment has now been included in the guidance program of this high school, beginning in the tenth grade.

Some type of scholarship aid for students is now provided for by law in numbers of States, including Arkansas, Florida, Illinois, New Mexico, Ohio, Utah, Virginia, and Vermont.

Posters vs Pamphlets

Virginia's scholarship plan for preservice education provides for regular term scholarships (winter) to residents of the State of $300 each in Virginia colleges approved for training teachers. Scholarships are awarded to persons selected by divisional superintendents, under State Board of Education regulations. In 1947–48, only 189 of the 500 scholarships provided for were used.

One of the few efforts to evaluate types of printed materials for recruiting put out by professional associations and teachers' colleges we find reported is that by M. R. Trabue.[1] Taking the position that "the first step in recruitment appears to be to stimulate an emotional interest in teaching, rather than to supply complete information about the profession," Dr. Trabue draws the general conclusion that "posters tend to be considered more effective than the booklets or pamphlets." He says, "While logically arranged factual material may be desirable reading for one about to make a final decision concerning his life's work, it is decidedly less effective than attractive pictures of children and well-written personal-interest appeals in attracting seniors in general toward teaching."

However comprehensive the program of public relations used to attract new teachers—and local teacher groups are clearly going

[1] Trabue, M. R. Printed Materials in Recruiting Students for Teacher Education. *Journal of Educational Research*, 40: 641–51. May 1947.

Continued on page 4

THIS ARTICLE, written by Christine K. Simmons, Division of Elementary Education, Office of Education, is presented in an effort to help local administrators, members of school boards, teachers, and patrons of the schools attract alert young people into teaching.

Other recommended aids: (1) Reprint of Frances V. Rummell's human interest articles from SCHOOL LIFE (June and July, 1948) titled "What Are Good Teachers Like?" These articles about some of the country's outstanding teachers may suggest feature stories for use in your local newspapers; (2) Brochure, "Why It's Good Business to Improve Our Schools," listing free mats for newspaper and magazine use, available from The Advertising Council, Inc., 11 W. 42d Street, New York 18, N. Y. (3) Office of Education Bulletin 1948, No. 11, "Teaching as a Career" by Benjamin W. Frazier, price 15 cents.

Electronic Magic—Use It or You Lose It

Because of space limitation School Life *presents only selected excerpts from the Convocation Lecture at Indiana University by Wayne Coy, Chairman, Federal Communications Commission. Mr. Coy's address before the Second Annual Conference on Radio in Education challenges all school administrators and teachers to consider radio's role in meeting today's many varied communication needs. Copies of the full lecture are available from the Federal Communications Commission, Washington 25, D. C.*

THE overcrowding of our schools, the teacher shortage, the unprecedented demand for all types of education and training, the deficiencies of our libraries, the informational requirements involved in our position of world leadership, all these problems constitute grave challenges to the educators of America. They are challenges to everyone engaged in the expression arts.

If you could spend a day at the Federal Communications Commission, I can assure you that you would quickly appreciate the extent to which industry is attempting to utilize every advance in the field of electronics. . . . But I regret to say, education, unlike industry, has failed to convert. It has failed to equip itself with the new tools needed to cope with conditions of a new day. It is clinging to the old ways of old days. . . . Radio is still the Dark Continent of American education.

Look for a moment at the great race to establish new stations in the field of broadcasting—a race in which education has been left at the barrier.

Education Straggling

Railroads are converting to radio communication. Taxicabs are converting to radio. Public utilities are converting to radio. Bus lines, truck lines, doctors' autos, delivery trucks, private autos are being equipped with radio. We are in the midst of a communication revolution. Educators are among our chief communicators. In that revolution they should be marching in their rightful place at the head of the column. Instead they are the stragglers.

Educators have a threefold duty in our society:

1. To provide a more effective, more imaginative, more zestful education for those now in our schools and colleges.

2. To reach those who cannot go to college.

3. To provide a continuing educational opportunity for those who have left college.

Every fact of our times cries for the immediate and widespread utilization of this electronic magic for education—the unprecedented enrollments, the shortage of teachers, the shortage of physical facilities, the demand for adult education, the insistent and complex nature of the problems of modern life.

Quick and Inexpensive

Radio will not only magnify the educator's effectiveness; it can mean an actual dollars and cents savings in tax money. Radio can enable our educational institutions to educate more effectively, more quickly, more cheaply.

There are many splendid examples of fruitful cooperation between schools and commercial broadcast stations. WHAS in Louisville, Kentucky, is making radio history by cooperating with the University of Louisville to broadcast the first college course for credit ever offered by any standard commercial station. . . . The plan of NBC for a nation-wide college-by-radio project is a bold approach to the adult education problem. I wish also to compliment Indiana University on its "Indiana School of the Sky" series that was broadcast over 12 commercial stations for 30 weeks to the elementary schools last school term.

Educators should consult with their local radio stations and work out arrangements that will be mutually profitable. . . . Every schoolroom in America should be equipped with its own radio set. It should be freely integrated with classroom work as a major educational tool. As soon as television becomes available in a community, every schoolroom should be equipped with a television screen—the electronic blackboard of the future. Besides the classroom use of radio, educators can help to guide the students' use of radio in the home. This wider, more intelligent use of commercial radio is a joint responsibility of the broadcaster and the educator. But because there are limits to what the commercial broadcaster can do in the field of education, a vast area of opportunity is open to the radio station operated directly by the educational institutions.

First, let us see how educators have availed themselves of the past opportunities to set up their own standard broadcast stations. Today, only 34 standard stations are operated by educational institutions. Of these, 9 sell time. That compares with 2,000 stations operated by commercial interests. There are now only 17 noncommercial educational FM stations in operation. Ten more are under construction. There are only 4 applications pending.

What You May Lose

In view of the possibility of 800 stations and state and regional networks, we can see that we are hardly on the threshold of noncommercial educational FM radio. There are unlimited opportunities ahead. The growth of commercial FM broadcasting is resulting in an increasing distribution of FM receiving sets. Audiences are being created for educational broadcasting. I must point out here that radio channels are too valuable to be left in idleness. *If educators fail to utilize them, they will have lost their second and perhaps last chance to own and operate their own radio stations.* If education should lose out in FM it will also lose its chance for facsimile broadcasting. Facsimile travels over FM channels. Facsimile broadcasting makes possible the electronic newspaper, the electronic textbook. . . . Printed text would be sent into the homes to accompany oral instructions. Maps, photographs,

What Can a Superintendent or High School Principal Do?

1. *Write to the Superintendent of Documents, Washington 25, D. C., for "FM for Education," Misc. No. 7, Revised 1948, price 20 cents.*
2. *Write to your State Department of Education to learn what your State is doing.*
3. *Write to the Federal Communications Commission, Washington 25, D. C., for full text of Mr. Coy's address.*

charts, instructional guides, musical scores—all sorts of informational matter would be sent over the FM channels. But the educational institution that delays too long and wakes up some fine day to find all the educational FM channels in its area gone will also be foreclosed from using this electronic printing press. To lose these opportunities would be a sad commentary on the American educator's ability to adapt himself to changing conditions. The school system without radio must go the way of the little Red School House.

Four Thousand Teachers Report on Their Jobs

"YES, I'M handing in my resignation," the home economics teacher in a small town told her superintendent. "The parents have been very cooperative and I've thoroughly enjoyed working with the pupils. However, the continual criticism in the community of everything teachers do, combined with the inadequate and inefficient equipment in the department makes me feel I cannot do my best work here."

This is but one of the many interesting points of view expressed by the 4,216 home economics teachers taking part in a study recently made by the Home Economics Section of the American Vocational Association in cooperation with the Office of Education and home economists in 46 States. This study dealt with job satisfactions and dissatisfactions and was made for the purpose of learning why home economics teachers leave the profession and what can be done to improve conditions in this field of instruction.

The study has produced significant results, according to Beulah I. Coon, research specialist in Home Economics Education in the Office of Education. It shows that teacher satisfaction on the job is influenced by a wide variety of factors and that many of the dissatisfactions reported by teachers are associated with conditions which can and should be corrected. Situations causing greatest dissatisfactions among teachers relate to (1) community and living conditions, (2) the professional aspects of teaching, and (3) conditions existing in the school.

The report of the study for the Nation gives detailed information on salaries, teaching load, community conditions, and school. Findings indicate that teacher educators, school administrators, lay persons, and State departments of education all need to help improve conditions, if teaching is to be made a more satisfying job than it now appears to be.

Order the full report "Factors Affecting the Satisfactions of Home Economics Teachers," AVA Research Bulletin No. 3, from the American Vocational Association, Washington, D. C. (75 cents)

Status of Students Under Selective Service

HOW DO high school and college students fare under the Selective Service Act of 1948? What exemptions do they have under the new draft law?

Following are excerpts from the law which answer these questions for teachers and students:

"Any person who, while satisfactorily pursuing a full-time course of instruction at a high school or similar institution of learning, is ordered to report for induction under this title prior to his graduation from such school or institution, shall, upon the facts being presented to the local board, have his induction under this title postponed (A) until the time of his graduation therefrom, or (B) until he attains the twentieth anniversary of his birth, or (C) until he ceases satisfactorily to pursue such course of instruction, whichever is the earliest. The induction of any such person shall not be postponed under this paragraph beyond the date so determined.

"Any person who, while satisfactorily pursuing a full-time course of instruction at a college, university, or similar institution of learning, is ordered to report for induction under this title, shall, upon the facts being presented to the local board, have his induction under this title postponed (A) until the end of such academic year or (B) until he ceases satisfactorily to pursue such course of instruction, whichever is the earlier. Nothing in this paragraph shall be deemed to preclude the President from providing, by regulations prescribed under subsection (h) of this section, for the deferment from training and service of any category or categories of students for such periods of time as he may deem appropriate."

Copies of the Selective Service Act are available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., as Public Law 759—80th Congress, price 25 cents each.

To Vitalize Reading Program

READING is so fundamental to the education of everyone that it is the basis of all education. So said Herold C. Hunt, general superintendent of Chicago schools, in addressing the recent eleventh annual reading conference at the University of Chicago. Dr. Hunt stated that reading is every teacher's job, and he called for vitalization of the reading program through use of visual aids, the radio, and other devices.

Stressing the need for careful planning to meet the needs, abilities, and interests of pupils, Superintendent Hunt urged teachers to take time to emphasize reading lesson activities so that learning would be more meaningful and lasting. Each child should have not only the opportunity to learn to read but also the chance to read to learn, according to Dr. Hunt.

Just issued is an 8-page Office of Education bulletin titled "Sources of Materials Dealing With Reading Difficulties," prepared by Helen H. Murray, research assistant, Division of Secondary Edueation, Office of Education. This multilithed publication contains three bibliographies—sources of material to meet the reading needs of the retarded reader; books written for the pupil of low reading ability; and book lists for normal readers. Copies are free in limited number from the Division of Secondary Education, Office of Education, Washington 25, D. C.

Attracting New Teachers

Continued from page 2

ahead with a variety of ways—the program should have solid information as well as inspirational pulling power. The teaching profession has nothing to offer the faint of heart, the bigoted, or the unimaginative. And this should be made unmistakably clear.

In attracting the kind of young people the profession so gravely needs, the eloquence of Pearl Buck's plea for teachers cannot be overstated. "Only the brave should teach," said Mrs. Buck. "Only those who love the young should teach. Teaching is a vocation. It is as sacred as priesthood; as innate a desire, as inescapable, as the genius which compels a great artist. Indeed, a true teacher is a priest and he is an artist. If he has not the concern for humanity, the love of living creatures, the vision of the priest and the artist, he must not teach."

Acts of the Eightieth Congress Relating to Education

(Second Session)

ACTS OF THE Congress of the United States relating to education are of national significance. Some of them affect international educational relations.

While education in the States is governed principally by State laws, numerous bills are introduced each year in Congress bearing upon different phases of education. Most of these bills do not get beyond the committees to which they are referred. Some of them, however, are enacted into law.

Below is a summary of the principal bills relating to education which were passed by the 80th Congress, 2d Session, and signed by the President:

International Education

Public Law 402 (H. R. 3342).—This is cited as the "United States Information and Exchange Act of 1948," and is designed to promote the better understanding of the United States among the peoples of the world. This Act provides for:

(1) An information service to disseminate abroad information about the United States, its people, and official policies relative to foreign affairs.

(2) An educational exchange service to cooperate with other nations in:

(*a*) The interchange of persons, knowledge, and skills;

(*b*) The rendering of technical and other services;

(*c*) The interchange of developments in the field of education, the arts, and sciences.

The administration of this Act is vested in the Secretary of State. The Act also provides that the President shall appoint two advisory commissions of five members each (by and with the consent of the Senate) which commissions shall formulate and recommend to the Secretary of State policies and programs for carrying out the purpose of the Act. (Approved January 27, 1948.)

Public Law 597 (H. R. 5607).—Appropriated to the State Department $3,772,775 for carrying out the purpose of the UNESCO, of which $3,637,545 shall be available for contributions. (Approved June 3, 1948.)

Public Law 647 (H. R. 6407).—This is the "International Aviation Facilities Act." This Act, among other things, authorizes the Secretary of State, the Administrator of Civil Aeronautics, and the Chief of the Weather Bureau to train foreign nationals directly or in conjunction with any United States Government agency, private agency, State or municipal educational institution, or international organization in aeronautical and related subjects essential to the orderly and safe operation of civil aircraft. (Approved June 16, 1948.)

Attention is invited to the international education aspect of Public Law 564 given below under *Military Education*.

Higher Education

Public Law 402, mentioned under *International Education*, known as the "United States Information and Exchange Act of 1948" is of outstanding interest to students and friends of higher education.

Public Law 411 and Public Law 512, particularly applicable to veterans, also affect the administration of higher education. See under *Veterans' Education*, below, for summaries of these laws.

Public Law 796 (H. R. 5710).—This Act provides that the Federal Works Administrator transfer to any educational institution, without monetary consideration, all property rights to temporary houses on land owned by the educational institution, with the provision that student veterans be given prefcrence in filling vacancies in any house for which rights are transferred. (Approved June 26, 1948.)

Research

Public Law 655 (S. 2215).—This Act establishes in the Public Health Service an institute to conduct, foster, and promote research relating to the causes, prevention, and methods of diagnosis and treatment of heart diseases, makes grants in aid to public or private agencies and institutions for research projects, and establishes research fellowships and traineeships in nonprofit institutions. (Approved June 16, 1948.)

Public Law 755 (H. R. 6726).—This Act establishes in the Public Health Service the National Institute of Dental Research to promote research in the causes, prevention, and methods of diagnosis and treatment of dental diseases; provides fellowships in the Institute, and establishes traineeships through grants to nonprofit institutions. (Approved June 24, 1948.)

Military Education

Public Law 564 (S. 1723).—This Act amended Public Law 168 of the 77th Congress, authorizing courses of instruction at the United States Naval Academy and the United States Military Academy to be given to limited number of persons in the American Republics, so as to permit such courses to be given to Canadians. (Approved June 1, 1948.)

Public Law 759 (S. 2655).—This is the Selective Service Act of 1948. It makes provision for the deferment from service of high school and college students under certain conditions and authorizes the President to provide for the deferment of other categories of students as he may deem appropriate. (Approved June 24, 1948.)

Veterans' Education

Public Law 411 (S. 1394).—This Act provides an increase in subsistence allowance to veterans pursuing certain educational courses under the Servicemen's Readjustment Act of 1944. It increased the allowance to full-time student veterans from $65 to $75 per month, if without dependents; from $90 to $105 per month, if with one dependent; $120 per month, if with more than one dependent. (Approved February 14, 1948.)

Public Law 512 (S. 1393).—This Act provided additional subsistence allowance for veterans pursuing on-the-job training courses under the GI Bill of Rights, but limited it so that allowance plus compensation may not exceed $210 per month for veteran without a dependent; or $270 per month for veteran with one dependent; or $290 per month for a veteran with two or more dependents. (Approved May 4, 1948.)

Attention is invited to the preference given in behalf of veterans' education in

Continued on page 15

This summary was prepared by Ward W. Keesecker, Specialist in School Legislation, Office of Education. Copies of the laws are not available from the Office of Education. They should be ordered from the Superintendent of Documents, Washington 25, D. C.

John W. Studebaker Resigns as Commissioner of Education

Rall I. Grigsby Designated Acting Commissioner

RALL I. GRIGSBY, Director of the Office of Education Division of Auxiliary Services, has been designated Acting Commissioner of Education by Oscar R. Ewing, Federal Security Administrator, to succeed John W. Studebaker, who resigned as Commissioner on July 15, 1948.

Mr. Grigsby, a member of the Office of Education staff since 1939, has had practical experience as a high school teacher and principal and as a school superintendent in both Illinois and Iowa. A native of Indiana, he was reared in Nebraska and Iowa. He is a graduate of Cornell College, Iowa, received his master of arts degree from Drake University in Iowa, and has done graduate study in education at the University of Iowa, the University of Chicago, and the University of Washington. Before coming to the Office of Education, Mr. Grigsby was assistant superintendent of schools in Des Moines, Iowa, where he was in charge of the high school and adult education program. He also had responsibility for psychological and visiting teacher services.

On the Office of Education staff, Mr. Grigsby served in the Vocational Division for 3 years. From 1942 to 1945 he was Special Assistant to the Commissioner. Since 1946 he has been Director of the Auxiliary Services Division and Acting Associate Commissioner of Education.

DURING Dr. Studebaker's 14 years as Commissioner, the Office of Education made such gains as the following:

1. During the depression years the Office of Education staff was made available to emergency relief units of the Federal Government in order to direct Nation-wide educational programs in adult and vocational education, parent and Negro education, and nursery-school projects. The Office itself carried forward emergency projects in adult civic education, CCC Camp education, vocational guidance of Negroes, university research, education by radio, and local school administrative units.

2. In 1940, Dr. Studebaker asked Congress for funds to provide defense-training courses in high schools and colleges throughout the Nation. Vocational schools and engineering institutions launched programs which turned out skilled workers needed in industry and by the armed services months before Pearl Harbor. When defense training turned out to be war training, such foresight put American education firmly into the Nation's war effort.

3. Following the war, Dr. Studebaker asked for funds to help schools and colleges strengthen their programs of education for democracy. A year ago funds were made available and the Office of Education launched the Zeal for American Democracy program. This program has assisted schools and colleges in high lighting the ideals and benefits of democracy.

4. The Office of Education is now functioning under a plan of organization put into operation by Dr. Studebaker in 1946.

5. Two years ago the Citizens Federal Committee on Education was established to serve as the Office's lay advisory arm in relation to the broad national aspects of educational problems. Its first task was to present to the Nation the facts about the crisis in education, and this it has been doing through the intensive radio and press services of the Advertising Council of America.

6. Commissioner Studebaker served as a member of the (Osborn) Committee on Postwar Educational Opportunities for Service Personnel. The recommendations made by this committee eventuated in the passage of the Servicemen's Readjustment Act of 1944, commonly called the "GI Bill of Rights."

7. The large-scale Office pilot study dealing with the preparation of materials and personnel for the education of Negro adult illiterates is typical of the policy of the Office of Education in promoting programs that enable the American people to deal intelligently with the problems they face.

As Dr. Studebaker stated in his letter of resignation, he had continued to serve as Commissioner "through the darkest years of economic depression, the period of defense preparation, the strenuous years of war, and three very difficult years of postwar readjustment."

In the letter President Truman wrote in accepting Dr. Studebaker's resignation, the President praised his contributions to the Office of Education and said, "Not the least of these contributions was its part in the training of 14,000,000 men and women for war jobs. It was this program that broke the bottleneck caused by the lack of trained workers and made possible the vast production of planes, ships, tanks, and guns which contributed so much to our victory. You and all the others who helped make this program succeed deserve the everlasting gratitude of the American people."

Landmarks in Vocational Guidance

THIS YEAR is generally regarded as marking the 40th anniversary of the beginning of the vocational guidance movement in the United States. It was in 1908 that Frank Parsons established the Vocational Bureau in Boston, Mass.

An article by Harry A. Jager, Chief of the Occupational Information and Guidance Service, Office of Education, Vocational Division, brings these facts to light. The article, first published in the International Labour Review, April 1948 issue, has been reprinted as a pamphlet by the International Labour Office in Geneva, Switzerland. Under the title "Vocational Guidance in the United States," Mr. Jager presents "historical landmarks" in this field of education, describes the work of principal agencies conducting guidance services, and reports on prevalent principles and practices, training of counselors, provision of equipment, and evaluation. He

concludes with a statement on influence of vocational guidance upon industry and education. Copies of the report are available from the International Labour Office, 1825 Jefferson Place NW., Washington, D. C., at a price of 10 cents.

National Work Conference on Elementary Education

"WE CAME to the conference to get help in writing a curriculum guide."

"We want to exchange ideas with others who are engaged in the preparation of teachers so that we may set up some standards for a forward-looking program of our own."

"I want to review recent publications on arithmetic and talk with a specialist concerning standard tests. I wish to learn what other States are doing because the teachers in our State are going to revise our curriculum in arithmetic and it is my job to help them."

Thus ran the remarks of elementary education leaders, 50 from 21 different States, who attended a summer work conference in the Office of Education. They came in response to an invitation to State directors of elementary education from the Elementary Education Division.

Bringing their problems of program planning or production to the Office of Education, the State leaders in elementary education shared their experiences in consideration of these major projects:

Planning curriculum guides for science, health and physical education, and other phases of elementary education.

Planning ways of helping teachers use curriculum guides.

Organizing plans for developing State-wide curriculum programs.

Studying ways to prepare teachers to understand children and guide them in good modern living.

Formulating standards for evaluating programs in elementary education.

Developing programs of instruction for home-bound children.

"Working groups" of the conferees called upon Office of Education staff members and members of other groups for counsel in special fields. Louis Raths, New York University, guided the whole group as a specialist in evaluation. Willard C. Olson, University of Michigan, discussed phases of child development.

The same type of conference will be repeated next year, from May 16 to 28. For further details on the 1948 conference, address the Elementary Education Division, Office of Education.

British-American Teacher Exchange 1948-49

The United States-British teacher exchange program is a wonderful idea. It has unlimited possibilities for future good . . . If only in practice this idea were not limited to so few countries, if only it could span all barriers of language, ideas, even Iron Curtains . . .

—Jean Ellis, Portsmouth, N. H.

"ALL WENT 'merry as a marriage peal,' " wrote Edith A. Ford to the Office of Education Division of International Educational Relations, reporting on the sailing and arrival at Plymouth, England, of 112 American teachers.

The teachers, from 27 States, embarked for England July 24. They will exchange positions with 112 British teachers during the 1948–49 school term.

As chairman and director of the British Committee for the Interchange of Teachers Between Great Britain and Northern Ireland and the United States, Miss Ford wrote from London: "I met the teachers on behalf of my Committee and the British Government and of the English-Speaking Union . . . the Lord Mayor of Plymouth in his full robes of office greeted them on behalf not only of the citizens of Plymouth but of the citizens of the United Kingdom."

Miss Ford expressed delight in welcoming the American teachers and regret in having to say good-by to the "old friends of the 1947–48 year"—the teachers who returned to the United States in August after an exchange year in Great Britain.

Representatives of both the British and United States Governments welcomed the British teachers. Included in the welcoming group were Mervyn Pritchard of the British Embassy in Washington, D. C., Ellen S. Woodward, of the Federal Security Agency, Francis J. Colligan, Department of State, and Ralph C. M. Flynt, Acting Commissioner of Education.

SCHOOL LIFE presents an exclusive London Times photograph of American teachers being received by England's Queen Elizabeth. British exchange teachers for 1948–49 were entertained August 23 at the White House by Mrs. Marshall, wife of the Honorable George C. Marshall, Secretary of State.

Queen Elizabeth greets American teachers participating in teacher exchange program.

NATION'S SCHOOLS

American Education Week

NOVEMBER 7–13

WORLD WAR I, fought by the Allies to make the world safe for democracy, came to an end November 11, 1918, with the signing of the Armistice. Three years later the first American Education Week was observed to help carry the word of the schools into the home—to gain public support of school efforts to strengthen the fiber of our Nation through education—to attack in peacetime the enemies of national progress and security, illiteracy and ill health, which loomed large on the horizon as we prepared for World War I.

Thus it was appropriate that the three national organizations sponsoring American Education Week—the American Legion, the National Congress of Parents and Teachers, the National Education Association, with the Office of Education—agreed that the observance should be held during that week beginning on Sunday which includes Armistice Day.

Daily Topics

Also interesting for this year's twenty-eighth annual observance of American Education Week is the theme, Strengthening the Foundations of Freedom, which has a strangely similar ring to the World War I battle cry—"making the world safe for democracy," previously mentioned.

Agnes Samuelson of the National Education Association says that the daily topics gear into this theme by pointing up critical areas in which speedy advances must be made if schools and colleges are to be equipped in terms of the size of their tasks. These topics are presented by SCHOOL LIFE in the accompanying box.

American Education Week offers an opportunity for schools and colleges to interpret their programs and needs to the public—to bring schools closer to the public—to bring the public closer to the schools. This year's observance comes at a time when public interest is already roused. It provides an opportunity to develop programs that should reap rich results.

Manual of Suggestions

Cooperating with the other sponsoring organizations, the Office of Education helped prepare the Public Relations Manual which should be a basic guide for American Education Week programs this year. It reports facts which every citizen should know about his schools and offers specific suggestions for mobilizing community support of the schools. This manual, with American Education Week helps available from the National Education Association, should furnish sufficient information to make the 1948 observance appealing and dividend-paying.

The Office of Education has also prepared especially for use during the coming American Education Week a folder titled, "Fostering Democracy Through Our Schools." This publication offers practical suggestions for schools and colleges, pointing out what can be done to help school administrators, teachers, and students plan and carry forward programs for fostering democracy. These suggestions are drawn from the practices and programs of schools, colleges, and communities throughout the country, and they tie in with the Zeal for American Democracy program launched during the past school year by the Office of Education, and now being promoted by States and local communities.

Write to the National Education Association, 1201 16th St., N.W., Washington 6, D. C., for the American Education Week packet which includes, in addition to the folder on Fostering Democracy, brief statements on topics and sponsors for use by speakers and writers, program ideas for Sunday observance for educational and religious leaders, parent and family life suggestions prepared by the National Congress of Parents and Teachers, health projects suggested by the American Association of Health, Physical Education and Recreation, and other American Education Week aids. The packet costs 50 cents.

▶ American Education Week

SUNDAY, NOVEMBER 7. ***Learning To Live T***

MONDAY, NOVEMBER 8. ***Improving the Edu***

TUESDAY, NOVEMBER 9. ***Securing Qualified***

WEDNESDAY, NOVEMBER 10. ***Providing Adequ***

THURSDAY, NOVEMBER 11. ***Safeguarding Our***

FRIDAY, NOVEMBER 12. ***Promoting Health***

SATURDAY, NOVEMBER 13. ***Developing Worth***

Strengthening the Foundations of Freedom

O OBSERVE

United Nations Day

OCTOBER 24

CIRCLE October 24 on your calendar and as you do so you will be calling your own attention to "a day in history" which peoples of many lands will join in observing this year for the first time—United Nations Day.

Never before have the nations of the world set aside one day—internationally—for a common purpose. But they now have agreed that at least one day of the year should be reserved to give special emphasis to the achievement of enduring peace through the United Nations.

Marks Anniversary

United Nations Day, the General Assembly of the United Nations decided, "shall be devoted to making known to the peoples of the world the aims and achievements of the United Nations and to gaining their support for the work of the United Nations." It marks the anniversary of the coming into force of the United Nations Charter in 1945.

Aids for Schools

The Department of State through its Department of Public Information, Research Section, has issued a 15-page question and answer statement titled, "The United Nations and You," copies of which are available to schools. One portion of this publication tells what schools are doing in various United Nations countries to make known the aims and objectives of the United Nations. Other aids for United Nations Day observance are available from the Department of State, including posters and wall charts.

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United Nations Records

To help those teaching about the United Nations, the Office of Education is offering to schools and colleges throughout the country an opportunity to acquire free a complete set of the verbatim records of the First Session of the United Nations Assembly, held in New York City, Oct. 23–Dec. 16, 1946.

Not only do these documents provide excellent source material for teaching history classes, but they could be used through exhibits and special study projects to arouse interest in and understanding of the United Nations among students and in the community. Educational potentialities are so many that we venture to suggest only a few.

1. Study projects for classes in modern history or civics, based on assigned reading in some of these records.
2. Dramatization by the students of a typical United Nations Committee or General Assembly session, using these records as source material to indicate the attitude of each nation on some controversial issue.
3. Constant exhibit of one or more of these documents in a case in a prominent place in a local school, college, or library, changing the exhibit from time to time so as to attract continuing interest from students and their families.
4. Loan exhibits to other schools or libraries in the community, with posters designed by the students to explain the significance of the documents.

Pay Express Only

Teachers or school administrators who could make effective use of one or more sets should send their requests immediately to the Division of International Educational Relations, Office of Education, Washington 25, D. C. Since there is no appropriation available to cover the cost of transportation, the documents will have to be sent by express collect. However, each complete set weighs only about 16 pounds, so that express charges range between $1 and $3 depending upon the distance from Washington, D. C.

Available also as a useful United Nations Day aid to schools is a publication, "Peace Day in The United Nations," an 84-page volume issued by The Committee for Peace Day in the United Nations. 25 Beacon Street, Boston 8, Mass.

United States Educational Developments Reported at Geneva Conference

FORTY-FIVE countries sent 83 delegates to the Eleventh International Conference on Public Education which was held at Geneva, Switzerland, June 28–July 3. Representing the United States at the Conference were Ruth E. McMurry of the UNESCO Relations Staff, Department of State, and Galen Jones, director, Division of Secondary Education, Office of Education. The Commissioner of Education designated Dr. Jones as chairman of the United States Delegation.

"Educational Developments in the United States, 1947–48," a 3,500-word report, was presented to the Conference by Dr. Jones. He also visited the Ministries of Education in France, Belgium, Holland, and the United Kingdom while abroad.

Excerpts from the summary report on United States educational developments presented to the Geneva Conference are offered to SCHOOL LIFE readers as follows:

While America's schools escaped the physical ravages of war, they suffered a considerable degree of deterioration during the war period—a set-back from which they have by no means completely recovered.

The 1947–48 school year witnessed a number of administrative changes designed to extend the services of the American educational system to a larger number of children and youth and to achieve increased efficiency and flexibility. Notable developments included a downward extension of education to provide for children below six and an upward extension to provide for a thirteenth and fourteenth year of schooling.

The decline in the number of very small high schools was regarded as a highly desirable development. In 1938 there were 1,839 high schools in the United States with fewer than 25 pupils; in 1946 the number in this category had declined to 1,209.

The Office of Education reported 162,300 students enrolled in 246 public community colleges in the autumn of 1947. The junior college, or, as it is increasingly coming to be called, the community college, has made marked progress in the United States in recent years.

During the year there were numerous indications of heightened interest in adult education. . . . A Gallup poll taken July 7, 1947, showed 41 percent of all adults interested in participating in adult education activities, in comparison with 34 percent who showed interest in December 1944, when a similar survey was made.

At the same time that they have been trying to inculcate a deeper appreciation of the advantages of citizenship in a free society, America's schools have been attempting to make their pupils world-minded.

One of the most notable developments of the year in secondary education has been a widespread revival of interest in the reorganization of the curriculum. The goal is the development of a program which will serve the needs of all the students who now attend high school.

For some years good elementary schools have been emphasizing programs built around the needs and interests of children, rather than formal subject matter divisions. New impetus was given to this trend in curriculum planning by the publication of a recent American Council on Education report, Helping Teachers Understand Children, and by a Leadership Conference held by the Division of Elementary Education of the Office of Education in June 1947.

In the United States, as in every country, the teacher is at the heart of the educational system. It is, therefore, highly constructive that much has been done during the year to improve teachers' working conditions and enhance their prestige. . . . Observers are agreed that the constructive trends of the year will have to carry a good deal further before teaching can hold or attract as many able people as are needed.

The United States report also dealt with health education and services, education of exceptional children, guidance and psychological services, and exchange of students and teachers.

Other items on the agenda at the Geneva Conference were: The Teaching of Handwriting, The Role of School Psychologists, The Development of International Understanding Among Young People, and Teaching About International Organizations.

Q's and A's

Q: What did the recently completed national survey of high-school graduates reveal?

A: The study indicated a total of 1,016,564 students were graduated from high schools in 1945–46. The estimated number of high school graduates for 1947–48 is 1,056,000. The study shows that fewer students are dropping out of high school before graduation.

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Q: Did the college degree survey disclose anything of significance?

A: Yes—that almost 100,000 more college students received degrees during 1947–48 than in any past year. Because a larger number of women were admitted to medical schools during World War II, there was an increase of 25 percent in number of women graduates in medicine. Bachelors' degrees in business and commerce, which stood at 21,000 in 1939–40, rose to 35,000 in 1947–48, an increase largely due to enrollment of large numbers of veterans in these fields. The number of women graduates in education indicates that there will probably be an adequate supply of high school teachers in most fields, although there will continue to be a shortage of elementary school teachers. Many of those trained for secondary school teaching may have to go into elementary education teaching positions if they wish to continue in the profession. A scaled-down veteran enrollment expected this fall will mean fewer graduates 3 or 4 years hence.

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Q: What will the veteran enrollment be this year?

A: It is estimated that it will be about 1,000,000—about 100,000 fewer than last year.

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Q: How many veterans are going to college in other countries?

A: Between 5,000 and 6,000. About 20,000 students from other countries are enrolled in American colleges and universities. Both of these enrollments are all-time highs.

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Q: How will the draft affect high school enrollment?

A: Hardly at all. The law provides that high school students may have their induction postponed until graduation or until they reach their twentieth birthday, or until they cease doing satisfactory work.

Q: Will the selectee under the Selective Service Act of 1948 be entitled to the same GI educational benefits that apply to veterans of World War II?

A: No.

Second Annual Contest "Voice of Democracy"

THE "Voice of Democracy" contest, which attracted more than 20,000 high school student entries from 40 States and Alaska last year, will be repeated during National Radio Week this fall. College scholarships will be awarded to four students who write and deliver the best 5-minute broadcasts on the subject, "I Speak for Democracy." Details are available from the National Association of Broadcasters, 1771 N Street, NW., Washington, D. C. Other sponsoring groups are the Radio Manufacturers Association and the U. S. Junior Chamber of Commerce. Both the Office of Education and the Department of Secondary School Principals, National Education Association, are cooperating.

Life Adjustment Education Conference

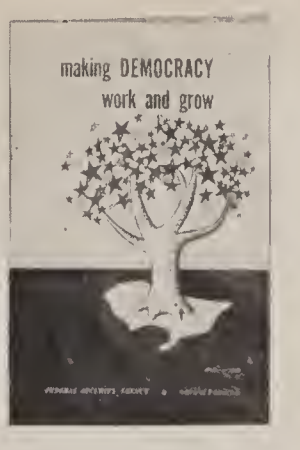
THIRTY representatives of vocational and secondary education from State departments of education and teacher training institutions in Indiana and six adjoining States participated in a work conference on life adjustment education at Indiana University, July 25–31. The conference was sponsored by Indiana University and the Office of Education. Carl G. F. Franzen and Galen Jones were directors.

Chairmen of working groups were Victor M. Houston of Illinois State Normal University, Leon S. Waskin of the Michigan State Department of Public Instruction, and Max S. Huebner of the Northern Illinois State Teachers College. The chief emphasis of the conference was upon effective action programs in improving pupil personnel services and curriculum offerings, organizational patterns at State and local levels, and pre-service and in-service programs of teacher education.

Interesting Comparison

THE NUMBER of students attending colleges and universities in 1947–48 was larger than the total attending public high schools in this country in 1920.

Emphasis Continues on Zeal for American Democracy



AS SCHOOLS and colleges all over the Nation reopen for another year, the spotlight of attention is again turned on the great need for reexamining and strengthening programs of citizenship education. There is no more important area of the curriculum than that devoted to the development of citizens imbued with a zeal for American democracy and ready to defend it against all hostile forces.

Eight regional "Zeal for American Democracy" conferences with Chief State School Officers or their representatives were sponsored by the Office of Education during the summer. These conferences, each of 1-day duration, were arranged to learn the progress of the Zeal for American Democracy program in the respective States, to acquaint State leaders with resource material assembled by the Office of Education, and to lend assistance to States desiring to hold State-wide conferences this fall.

The regional conferences were held at Washington, D. C., Boston, Mass., Atlanta, Ga., Oklahoma City, Okla., St. Paul, Minn., Chicago, Ill., Denver, Colo., and Sacramento, Calif.

More than 35,000 copies of the February issue of SCHOOL LIFE, devoted to the Zeal for American Democracy theme, have been sold by the Superintendent of Documents, Government Printing Office. This basic guide to information presented to help schools and colleges strengthen their programs of education for democracy and against totalitarianism is still available. (Price 20 cents—25 percent discount on 100 copies or more sent to one address.)

Through conferences, addresses, and other publications, the Office of Education has endeavored to stimulate the Zeal for American Democracy program since July 1947, when Congress appropriated funds calling for Office of Education leadership in this phase of education. To date, in addition to the February 1947 SCHOOL LIFE, the following aids for use by school administrators and teachers have been made available, and may be secured from the Office of Education on request:

Report on the National Conference on Zeal for American Democracy—from May 1948 SCHOOL LIFE.

Reprint from the Congressional Record of March 3, 1948—a bibliography of reliable reading matter on communism.

Report of Sub-Committee No. 5—Foreign Affairs—of 80th Congress, 2nd session, House Document No. 619, on "The Strategy and Tactics of World Communism."

Study Outline for High School Classes on "The Strategy and Tactics of World Communism" by Howard H. Cummings.

Study Guide for College Classes on "The Strategy and Tactics of World Communism" by Jennings B. Sanders.

Special issue of HIGHER EDUCATION periodical on Zeal for American Democracy, May 1, 1948.

"Teaching High School History and Social Science for Citizenship Training" by Charles C. Peters, University of Miami.

"Growing into Democracy," a series of pamphlets for elementary schools, prepared by Harriet A. Houdlette. (Supply almost exhausted.)

Two issues of "Pointers" reporting current activities in education for American democracy.

"Making Democracy Work and Grow," giving practical suggestions for students, teachers, administrators, and other community leaders.

In less than a year, the Zeal for American Democracy program has gained Nation-wide momentum. Much progress has been made. State departments of education and local school systems are now carrying the program forward. The Office of Education will continue to regard this activity as a major project. Every effort will be made to assist State and local school systems in promoting and developing effective Z. A. D. programs.

School and College Building Crisis

This statement is presented by Ray L. Hamon, Chief, School Housing Section, Division of School Administration, Office of Education.

THE NATION is faced with the worst school and college building crisis in its history. This situation is due to a combination of factors, related for the most part to World War II.

Enrollments.—The first wave of war babies enrolled in school in the fall of 1947, and it is estimated that the entering classes will continue to increase for several years (see table on inside of back cover for latest estimates). It is expected that 3 million new children will enter school in 1949 and that the 1953 entering class will reach a figure of 3.7 million. Colleges and universities have had unprecedented enrollment increases due to deferred schooling and the veterans' educational program. In many spot surveys the estimated increases based on actual child count show percentage increases three times the national estimate. There are 2 million 5-year-olds and 4.5 million 16- to 19-year-olds not now attending school. With increased interest in kindergarten education and postwar emphasis on continuation and terminal educational programs for youth, it may be expected that the 1954–55 enrollment in public elementary and secondary schools will exceed the 1947–48 enrollment by 6.2 million. This one factor alone will require more than 200,000 new elementary and secondary classrooms.

Population Shifts and District Reorganization.—The war resulted in the greatest population shifts of any periods in American history, and this shifting and reshifting is continuing as the economy adjusts to a peacetime basis and housing becomes available. In many cases the population has moved away from sections which were served by old school buildings into sections where there are few, if any, school facilities. In most States the small inefficient school district is giving way to larger and more efficient administrative units and attendance areas; therefore modern consolidated plants are required to replace the little dilapidated schoolhouses which were running in the red.

Expanding Offering.—Social and economic changes during and following the war have accelerated curricular changes in the schools and colleges. New and broader objectives, new and diversified courses, and new methods have rendered many educational facilities obsolete as well as inadequate. Schools and colleges are becoming more and more community educational, cultural, recreational, and service centers. Greater community use of educational plants requires expansion and alteration of existing facilities and a broader conception of planning new plants.

Deferred Construction and Maintenance.—Relatively few new school and college plants have been erected since 1940, and regular maintenance programs have been neglected owing to manpower and material shortages. Thus, thousands of buildings which normally would have been replaced have been continued in service and allowed to fall into a poor state of repair. As a result many educational plants now in use are obsolete, unhealthful, and unsafe.

Planning Trends.—There are distinct trends in plant planning which point toward: (1) Functional plants which will house more adequately modern educational and community programs, (2) larger sites for recreational use, (3) larger teaching areas to permit more activity in the learning process, (4) facilities for convenient storage and use of more instructional supplies and aids, (5) better seeing conditions by improving interior decoration and natural and artificial lighting, (6) one-story open-

Continued on page 16

School Lunch Funds Apportioned

ALLOCATION of funds to the States and Territories for operation of the 1948–49 National School Lunch Program has been made by the United States Department of Agriculture.

A total of $58,800,000 of the $75,000,000 appropriated by Congress for this year's program has been apportioned to the participating States, the District of Columbia, and to the Territories of Hawaii, Puerto Rico, the Virgin Islands, and Alaska. This is roughly $5,000,000 more than was allocated last year, when appropriations totaled $70,000,000.

Funds allocated to the States are used to reimburse participating schools for a part of their local purchases of food for school lunches. They are apportioned on the basis of a formula which takes into account the number of children of school age and the per capita income of each State. The law requires that Federal funds accepted must be matched by funds from sources within the States.

Conference Plans for Youth Camping Programs

REPRESENTATIVES of a number of national organizations and Federal Government agencies interested in camping programs for youth met in the Office of Education near the close of the 1947–48 school year to consider camping and related outdoor educational activities and their national significance. Included among the organizations represented were the Girl Scouts of America, Boy Scouts of America, the Young Men's Christian Association, the Future Farmers of America, the 4–H Clubs of the Department of Agriculture, the National Catholic Welfare Conference, and the National Park Service of the Department of the Interior.

Agreeing that many learning experiences can be gained by youth outside the classroom, the conference adopted a statement of principles, chief of which is: Public schools should provide opportunity for camping experience for all youth as a part of the educational program. Emphasizing the need for cooperation, coordination, and demonstration, the conference also considered the general areas to which the school camp can make major education contributions at the elementary and secondary school levels. How to provide and finance school camping facilities was discussed. Specific recommendations of the conference are presented in a report, copies of which are available from the Office of Education.

Organizations, other than those previously mentioned, represented at the conference were: National Education Association, American Vocational Association, Federal Inter-Agency Committee on Recreation, National Association of Secondary School Principals, American Association of School Administrators, American Council on Education, Michigan State Department of Public Instruction, and McKinley High School, Washington, D. C. Chairman of the subcommittee which prepared the conference report was Rall I. Grigsby, director, Division of Auxiliary Services, Office of Education, now Acting Commissioner of Education.

HOW NOT TO MAKE HEADLINES

ONE DAY before this year's school term opened, a 5-alarm fire destroyed a Baltimore, Md., school. This same type of fire a day later might have taken many children's lives. SCHOOL LIFE *presents this challenging article to alert you to the need for safe exit practices in your school before it may be too late. Author of the article is William H. Morris, Office of Education staff. The publication referred to in the article is School Fire Drills, by Nelson E. Viles, Office of Education Pamphlet No. 103. It may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at 10 cents a copy. Also available is A Curriculum Guide to Fire Safety for Elementary Schools, by Helen K. Mackintosh, Office of Education Bulletin 1946, No. 8, price 10 cents, from the Superintendent of Documents. The photographs illustrating this article were furnished by the National Fire Protection Association, Boston, Massachusetts. The first photograph was taken by Acme Photo, New York City. It shows pupils looking at what remained of their 3-story school building in Bethel Township, Pennsylvania, after it was destroyed by fire. Forty children were led to safety by their teachers. The second photograph, taken by Bill Wilson, Atlanta Journal staff photographer, shows an Atlanta, Georgia, elementary school burning. The loss was $60,000.*

DISASTERS that don't happen make no headlines. Sometimes they don't happen even though hazardous conditions have existed for decades. That's sheer luck. Sometimes they don't happen when danger does arise because proper precautions have been taken. That's good management. But in neither case do they make headlines. They should.

An exception to the rule was the incident in Texas City, Tex., last year. What happened in the Danforth Elementary School was only a footnote to the searing story of the disaster that struck the city. But the National Parent-Teacher Magazine thought it was worth the telling. When a merchant ship exploded in the harbor and detonated the industrial plants nearby, the walls of the Danforth School crumbled. Debris obstructed corridors and exits. Children were cut by flying glass. Yet, to the lasting glory of Principal Ray Spencer and his teachers, 900 children left the school in safety. The story of their orderly departure was told by the lines of blood along the hallways. Because they hadn't time to think, they acted through habit. There was no panic. It was the perfect fire drill.

Contrast that with the incident at another school, where 36 died one Christmas Eve. A candle set a Christmas tree afire. Everybody in the 1-room school tried to get out through the only door in the building at once. Because the danger of panic is ever present under such circumstances, *School Fire Drills*, a bulletin recently published by the Office of Education, commands the attention of school administrators in every State. The bulletin was written by N. E. Viles, specialist in school-plant management in the Office's Division of School Administration.

The fact that school attendance is compulsory places special responsibility on school administrators for preventing disaster through fire and panic. Present overcrowding of many schools gives the subject even critical importance. It can almost be put in a formula: (Undrilled pupils) × (overcrowded schools) + fire = panic (death by suffocation, trampling, or burning). A few illustrations of crowded conditions selected from files of the Office of Education may point up the danger.

A school in C ..... County, built for 700 pupils, has over 1,000 enrolled. Rooms built for 25 are crowded with 40, two to a seat. In the same county is another school with 35 pupils in each of two dressing rooms off the stage. The rooms have floor space for 20. In a basement storage room, from which the only exit is up steep wooden stairs, are another 40 pupils.

A school in a small town in the State of ..... has over 600 pupils enrolled in an old building. The route to the girls' washroom, in the basement, is down wooden stairs and past an open furnace room. The furnace room has oil-soaked wooden floors, so old one can see through the cracks. The washroom windows are fastened tightly with heavy wire screens. If a fire should break out in the furnace room, the washroom would make a perfect trap.

A university in the State of ..... uses the second floor of a building as an auditorium seating up to 600 persons. The only exits are two wooden stairways to a common landing on the first floor.

Unfortunately, these are not isolated examples. They can be found in almost every county and in most major cities in the United States. Today, as this article is being written, the *Washington Post* carried a story about crowded schools in one of our larger cities. Here are 1,800 pupils in one area of the city attending schools built for 1,200. In one of the schools, classes are held in a basement storeroom.

Crowding of our educational institutions, furthermore, is not a condition that may be soon corrected. We are far behind in construction. Yet the peak in school enrollment has not been reached. My same morning paper tells more about that city area. There are nearly three times as many children age 6 and under as are now in school; and nearly 3,000 additional

School building destroyed by fire in Bethel Township, Pa., but children were saved.

housing units are under construction or planned in that area. Nearly 4 million babies were born in the United States in 1947. Unless construction takes place, therefore, at an unprecedented rate, we will have further overcrowding, rather than an easing of the present situation.

Fire safety measures for schools include proper construction and use of buildings, elimination of hazards, plans for fighting fires, and plans for escape when danger arises. *School Fire Drills* primarily discusses the last-named aspect. It is concerned with the saving of lives.

High lights of the publication follow:

School Fire Losses

School fires are not a thing of the past. The National Fire Protection Association estimates the number of school fires in the period 1930–46 at 35,000. Although few of these were major fires, nearly all were potential destroyers of life and property.

Basic Principles of Fire Exit Drills

No building is completely fireproof; no group of children is panicproof; no fire drill is completely foolproof.

Safety should not be sacrificed for speed. There is no substitute for actual drill. An uncontrolled drill may become a stampede; control of drills therefore must be absolute. Because both school officials and personnel change, the drill should be carefully planned and documented. Full participation should be required of all employees.

The supervising school official should discuss exit procedures with all teachers and other employees at the beginning of the year. Teachers should post instructions in each room and discuss procedures with pupils. They should discuss drills immediately after they have been held. The principal, however, should be responsible for the plan and for the execution of the drill in his building.

Developing the Plan

In developing the plan, the principal and staff should prepare for all possible contingencies. The plan should be tailored to fit the building. Yet it must have flexibility. There should be similarity in plans for different buildings in the same district so that transferring pupils will not be confused. Plans should be discussed with local fire department officials. "Each drill may be made a teaching device in controlled concerted action."

> "If the parents of American school children were to demand a maximum degree of protection before permitting their children to enter school buildings, many buildings and building exit practices would, of necessity, be improved immediately."
>
> —*School Fire Drills*

If exit facilities were not originally constructed to provide the safest exit procedures under present conditions of building use, school officials may now find it appropriate to request essential changes. Doors, for example, should swing out and should be unlocked when the building is occupied. Night bars and chains should be removed when the building is used for evening meetings. Outside fire escapes should be free of window boxes and other obstructions. Exit signs should be placed over each exit from the auditorium. In preparing the plan, younger children should have first-out privileges. Alternate routes should be planned in case the assigned routes are blocked. It should also be decided whether the lines should reverse, or circle, in that case. All action must function immediately on the basis of previous plans.

Monitors may be selected to lead lines, hold open doors, and to serve as scarchers to clear toilets, showers, and semi-isolated areas of pupils. They, too, should be trained in their duties.

Teachers and pupils should shut off motors or equipment that might create fire hazards while they are out of the building. This applies to shops, cafeterias, boiler rooms, and the like.

Fire Alarm Systems

Mechanical systems are often preferred for small buildings; electrical systems are generally considered superior for large buildings. The latter, however, may be adapted to buildings of any size. Systems operated by power should be on separate circuits. Sounding alarms should be single repeated strokes of the gong. The gongs should be of distinctive sound and located in noisy spots like shops as well as in corridors. Flashing lights may be used in areas housing pupils with defective hearing. It is desirable to use similar signals for all buildings in a school system. The principal or his assistant should operate the alarm, but he should instruct all employees on the method of operation, in case of emergency.

Dramatic photograph of Atlanta, Ga., school burning—loss $60,000.

Duties of Custodians and Other Employees

The custodian should keep all exit lanes clear of furniture, soda dispensing machines, and the like. He should regularly inspect rails, exit lights, panic-exit devices, fire escapes, alarms, and doors. He should report in writing, keeping a copy for himself, defects in alarm systems or exit facilities that he cannot repair. When the alarm is sounded, he should shut off motors con-

trolled from his area. He may or may not assist in putting out the fire. A designated employee in the principal's office should lock vaults and files containing records.

The Drill

Frequency of drills should be based on local conditions. Probably fewer drills will be needed for older pupils. Drills should be held until perfection is obtained; they should continue to be held to maintain perfection. Drills should be held at various times during the day, including the period during class changes. The style should be varied to simulate fire conditions. Except for the first drill of the year, they should be unexpected.

Group gatherings in auditoriums and gymnasiums present special safety problems. A recommended practice is to designate certain teachers to be present at such gatherings and to train them in appropriate procedures. It may become necessary to obtain cooperation from fire department officials in enforcing safety regulations. Standing and sitting in aisles or around exits should be prevented. Exit drills should occasionally be held when pupils are gathered in assemblies.

Teachers, especially those of adjacent rooms, may be assigned to work in pairs during drills. Pupils in this case should be taught to follow the instructions of either teacher. Teachers should understand that teacher-panic breeds pupil-panic.

If plans for alarm systems, exit facilities, and the like, have been put into effect, the exit drill itself may be reduced to a minimum number of steps. These steps follow consecutively from the time the alarm sounds, when pupils stop work at once, until the principal and assistants make the final check for stragglers.

If outside fire escapes are to be used in an emergency, they should be used in drills. If the principal feels that the escapes are unsafe, that fact should not be an excuse for not holding drills by route of the stairs until the escapes are made safe.

Putting Out Fires

The hanging of a blanket near hazardous spots like laboratories for use in wrapping around a pupil whose clothing catches on fire is recommended. A flood shower may be maintained in chemistry rooms for the same purpose. It is not necessarily wise for all persons to abandon a building and leave a small fire that might spread before firemen arrive. Some schools organize fire-fighting squads and teach them use of extinguishing devices.

The supervisor responsible for school safety should require an efficiency report on each drill. If a building is so unsafe as not to assure reasonably safe evacuating, the building should be made safe or no longer used for housing school children.

ACTS OF CONGRESS

Continued from page 5

Public Law 796 listed under *Higher Education* earlier in this summary.

Surplus Property For Education

Public Law 616 (*S. 2277*).—This law amended the Surplus Property Act of 1944 to provide that the War Assets Administration may transfer to any State, including political subdivisions or municipalities (school districts implied), any surplus land, including improvements and equipment thereon which, in the opinion of the Secretary of the Interior, is suitable and desirable for use as a public park or recreational area. (Approved June 10, 1948.)

Public Law 652 (*S. 1302*).—This law amended the Surplus Property Act of 1944 to authorize the War Assets Administrator to dispose of, without charge except for shipping costs, to States, including political subdivisions (school districts implied), to public and governmental institutions, or to nonprofit or tax-supported educational institutions and nonprofit associations, any surplus personal property suitable for use in athletics, sports, or games. (Approved June 16, 1948.)

Public Law 889 (*H. R. 5882*).—This Act authorized the Secretary of the Armed Forces to donate for educational purposes without cost other than for packing and transportation, such equipment, books, and other supplies as may be obsolete or no longer needed by the Army, Navy, or Air Force, and which any of the Secretaries or the Commissioner of Education consider usable for educational purposes. With a few exceptions, the approval of the Commissioner of Education is required as a prerequisite to donations to educational institutions. (Approved July 2, 1948.)

See Public Law 796 given under *Higher Education* above.

Aid to War Defense Areas

Public Law 839 (*H. R. 6527*).—This law authorized the Federal Works Administrator during the fiscal year 1949 to make contributions for the operation and maintenance of school facilities to local school agencies that are overburdened with school enrollments caused by war activities or resulting from the reactivation or expansion of any defense establishment or the operation of any defense establishment. An appropriation of $6,000,000 was authorized. (Approved June 29, 1948.)

Public Law 785 (*H. R. 6935*).—This law appropriated to the Bureau of Community Facilities, Federal Works Agency, $3,000,000 of the $6,000,000 authorized by Public Law 839. (Approved June 25, 1948.)

On Federal Projects

Public Law 586 (*H. R. 4201*).—This law authorized payments to public-school districts serving Fort Peck Project, Montana, for education of dependents of persons engaged on Fort Peck Project. (Approved June 3, 1948.)

Public Law 835 (*H. R. 6028*).—This Act authorized the Secretary of the Interior to make provisions for the education of persons employed on the actual construction of projects engaged in by the Bureau of Reclamation in cases where construction activity places an undue burden upon the facilities of the public schools serving the construction areas. The Secretary is directed to enter into cooperative arrangements with local school districts where such construction activities exist and make a contribution from funds available for the project for covering the cost of furnishing educational services required for the dependents of project employees. (Approved June 29, 1948.)

Indian Education

Public Law 481 (*S. 805*).—This Act authorized and appropriated $250,000 for the construction of a high school at Roosevelt, Utah, to be administered by the Commissioner of Indian Affairs in cooperation with local and State school authorities. It stipulated that such school shall be available to all Indian children on the same terms as other children of the local school district. (Approved April 15, 1948.)

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See summary of "Court Decisions Relating to Education" by Dr. Keesecker in November 1948 SCHOOL LIFE. During the year, SCHOOL LIFE will bring you other reports on legislation affecting education.

New Books and Pamphlets

American Children Through Their Books 1700–1835. By Monica Kiefer. Philadelphia, University of Pennsylvania Press, 1948. 248 p. Illus. $3.50.

The Challenge of Atomic Energy. A Resource Unit and Discussion Guide for Teachers and Group Leaders by Crary, Evans, Gotlieb, and Light. New York, Bureau of Publications, Teachers College, Columbia University. 92 p. 90 cents.

Community Education in Action. A Report on Community Organization and Adult Education. Published through the Cooperation of the Institute of Adult Education, Teachers College, Columbia University. (Order from: American Association for Adult Education, 525 West 120th St., New York 27, N. Y.) 58 p. 50 cents.

For You . . . A Career in Home Economics. Washington, D. C., American Home Economics Association (700 Victor Building), 1948. 24 p. Illus. 50 cents.

Free Teaching Aids in 14 Subjects. Compiled by Lili Heimers. Upper Montclair, N. J., New Jersey State Teachers College, 1948. 53 p. (1948 Series, No. 1.) Processed. $1.

Gymnastic Handbook. By Major J. G. Thulin. Published by Sydsvenska Gymnastikinstitutet, Lund, Sweden. Cloth binding, 488 p., 3,300 illustrations, $5.50; paper-bound, $4.50.

Indoor Climate. A Science Reader for the Junior High School. By Elsie Padgett. Gainesville, Fla.. University of Florida, Sloan Project in Applied Economics, College of Education, 1947. 40 p. Illus. 35 cents.

Let Us Pay for the Kind of Education We Need. Report of a Study of State and Local Support of Mississippi's Schools. William P. McLure, Director. University, Miss., Bureau of Educational Research, University of Mississippi, 1948. 151 p. (Studies in Education, Vol. 1, No. 1.)

Public Relations Primer. Especially adapted for schools. By Lew E. Parmenter and Otis A. Crosby. Published by the National School Service Institute, 307 Palmer House, Chicago 3, Ill., in cooperation with National Education Association, National Association of State Teacher Association Secretaries and the School Public Relations Association. 24 p. 25 cents.

A State-Wide Nutrition Program Sponsored by the West Virginia State Nutrition Committee. Charleston, W. Va., 1948. 156 p. Illus.

Teaching the World to Read; A Handbook for Literacy Campaigns. By Frank C. Laubach. New York, Friendship Press, 1947. 246 p. $2.

Wealth Through Education. By V. L. Cox. New York, Stephen-Paul Publishers, 1947. 331 p. $3.75.

SCHOOL BUILDING CRISIS

Continued from page 12

type plans rather than massive structures, and (7) maximum provision for adaptability to changing conditions.

Educational Plant Needs.—In the fall of 1947 the Office of Education, in cooperation with the National Council of Chief State School Officers, studied the needs for educational facilities—land, buildings, and equipment to replace or modernize unsafe and obsolete educational facilities and to provide new facilities to accommodate present educational programs and enrollments predicted for the immediate future. The total estimated cost of these school and college plant needs, both for public and nonpublic institutions, is 11 billion dollars. The break-down is: Elementary and secondary public, 6.6; nonpublic, 0.8, higher education, public and nonpublic, 3.6.

By type of facility, the break-down is: New buildings and additions, 7.9; remodeling and rehabilitation, 1.3; equipment, 1.2; and sites, 0.6.

Costs and Financing.—The average building cost index for the first 6 months of 1948 was 331.21 on a 1913 base of 100, as compared with 228.75 in 1943, 239.14 in 1945, and 307.68 in 1947. There seems to be no indication that costs will come down any time soon. Thousands of localities cannot provide urgently needed school facilities from local sources and bonding capacities. State financial assistance will be necessary. Many reports coming to the Office of Education indicate that there are several States that will not be able to provide their minimum school plant needs without Federal financial assistance.

State School Plant Assistance.—There are 32 States that have State school plant regulations and/or require State approval of plans for all or certain types of districts. Only 27 States, however, provide school plant specialists in the State departments of education. There is a definite trend toward State aid for capital outlay. Nineteen States now provide some financial assistance to local school districts for capital outlay. Ten of these State aid programs are significant in the amounts of money provided. Several States not now providing this assistance are contemplating legislation for this purpose in 1949.

Confer on Statistical Reporting

An over-all plan for statistical reporting to be done by higher education institutions for national reports was considered at an Office of Education conference held just before the end of the 1947–48 school year.

Conferees were mainly university and Government agency officials who represent those in the field who will be called upon to supply data and who in turn find reports prepared from such data useful in their respective institutions and fields.

It was the consensus that the Office of Education should be the focal point for higher education statistics—that colleges and universities could save time and energy by referring statistical information requests to this Office.

U. S. GOVERNMENT PRINTING OFFICE: 1948

Estimated elementary and secondary school enrollments[1]

Year	Elementary, kindergarten to 8th grade, inclusive	Secondary, 9th to 12th grades, inclusive, including postgraduate	Total, kindergarten to postgraduate
1947–48	22,072,000	6,236,000	28,308,000
1948–49	22,797,000	6,270,000	29,067,000
1952–53	26,747,000	6,780,000	33,526,000
1954–55	28,146,000	7,196,000	35,342,000
1956–57	27,927,000	8,048,000	35,975,000

[1] Includes public and private schools.

Advance Notice

Office of Education Publications Scheduled to Come From the Press in the Months Ahead

Education of Negro Leaders, Bull. 1948 No. 3

Crippled Children in School, Bull. 1948 No. 5

Intellectual Abilities in the Adolescent Period, Bull. 1948 No. 6

Working With Parents, Bull. 1948 No. 7

Broadening Services of Small High Schools, Bull. 1948 No. 9

Education for Freedom—As Provided by State Laws, Bull. 1948 No. 11

Education in Panama, Bull. 1948 No. 12

Fundamental Education (Unesco), Bull. 1948 No. 13

Education in Venezuela, Bull. 1948 No. 14

Teacher Education for the Improvement of School Health Programs, Bull. 1948 No. 16

Federal Government Funds for Education, 1946–47 and 1947–48, Leaflet No. 79

14 Questions on Elementary School Organization, Pamphlet No. 105

Post-Graduate Education in High School, 1947–48, Pamphlet No. 106

Classroom Growth Record, Revised 1948

Summaries of Studies in Agricultural Education, Voc. Div. 237

Three Ways to Order School Life

or Other Government Publications

1

WRITE to the Superintendent of Documents, Government Printing Office, Washington, D. C. Give the name of the publication desired, the number or designation, and the issuing office or branch of government. Enclose your check or postal money order with your order. Send currency at your own risk. Do not send stamps or foreign money. Remittance must accompany the order. If a requested publication is temporarily out of print, the Superintendent of Documents will fill your order when the publication again comes from the press.

2

BUY coupons in advance from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. (20 for $1), and enclose a sufficient number of such coupons with your request for publications to cover payment. These coupons are accepted as cash payment for any Government publication. Many Government publications are inexpensive. Use of the coupon method of ordering saves time and expense of sending a check or money order to cover a small cost. Coupons can be handled more conveniently than coins.

3

USE the deposit system of ordering. You deposit $5 or more with the Superintendent of Documents, Government Printing Office, Washington 25, D. C. The Superintendent of Documents furnishes a deposit number which you use in ordering publications thereafter. You do not have to enclose payments of any kind if this system of ordering is used. Neither do you have to know the specific price of a publication in advance. You can order by title and ask that it be charged to your account at the Government Printing Office.

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents. See "Three Ways to Order . . ." on page 3 of cover, this issue of SCHOOL LIFE.

EDUCATIONAL EXHIBITS, How To Prepare and Use Them; A Manual for Extension Workers.

By H. W. Gilbertson, Department of Agriculture, Extension Service. Miscellaneous Publication No. 634. 41 p. 25 cents.

FARMERS' COOPERATIVES in Our Community.

By A. W. McKay, Cooperative Research and Service Division, Farm Credit Administration. Miscellaneous Report 118. 41 p. Free.

YOUTH ENTERS THE LABOR MARKET (19 articles) *Employment Service Review*, 15:1–40, May 1948.

Published by the United States Employment Service and affiliated State Employment Services. Single copies, 15 cents; annual subscription, $1.50.

DIGEST OF UNESCO PROGRAM FOR 1948.

Department of State Publication 3081. 9 p. 5 cents.

FIRST SESSION OF THE GENERAL CONFERENCE OF UNESCO, Paris.

Department of State Publication 2821. 157 p. 35 cents.

SECOND SESSION OF THE GENERAL CONFERENCE OF UNESCO, Mexico City.

Department of State Publication 3062. 186 p. 35 cents.

"THE PROGRAM FOR REEDUCATION IN JAPAN, A Survey of Policy."

Prepared by Velma Hastings Cassidy, Division of Historical Policy Research, and others. Department of State Publication 3109. (In *Documents and State Papers*, 1:3–31, April 1948) Single copies, 30 cents; annual subscription, $3.

A FEW NOTES, &C. UPON THE DECLARATION OF INDEPENDENCE.

Information and Publications Office, Library of Congress. 11 p. Free.

REPORT OF THE LIBRARY OF CONGRESS PLANNING COMMITTEE.

Information and Publications Office, Library of Congress. 8 p. Free.

Office of Education

Printed Bulletins

Fostering Democracy Through Our Schools.

Education in Haiti (Bulletin, 1948, No. 1) 25 cents

Making Democracy Work and Grow (1948, No. 10) 15 cents

Federal and State School Officers (Part 1, 1947–48 Educational Directory) 10 cents

County and City School Officers (Part 2, 1947–48 Educational Directory) 25 cents

Educational Associations and Directories (Part 4, 1947–48 Educational Directory) 15 cents

Office of Education

Processed Materials

(Free—limited supply)

Suggestions for Securing Teaching Positions (April 1948)

Summary of Teacher Certification Requirements, 1947–48 (February 1948)

Innovations in Curriculum Organization and Instructional Methods in Colleges and Universities (Bibliography, April 1948)

Teacher Placement, Registration and Related Services, 1948 (Revised January 1948)

Institutions Offering Undergraduate Engineering Curricula (as of September 1947) (no issue date)

Advance Statistics of State School Systems (May 1948, Circular No. 241)

Statistics of Education of Negroes (March 1948)

Statistics of Public Libraries in Cities with Populations of 100,000 or more for 1947, with Comparative Summaries for 1945 and 1946 (May 1948)

Aviation Periodicals for Teachers and Pupils (April 1948)

Vocational Division Publications (Revised January 1948)

Occupational Books, 1947–48 (April 1948)

Business Experience for Business Teachers (1948)

How To Interpret Cumulative Records, Part 1 (October 1947)

Information Concerning Child Labor Standards (April 1948)

Library Statistics of Colleges and Universities With Enrollments of 5,000 Students or More, 1946–47 (Circular No. 243. June 1948)

Studies and Reports on Hospital Occupations and on Selection and Training of Personnel. A Partial Bibliography of Manuscripts and Publications Since 1939 (June 1948)

Life Adjustment Education for Every Youth (Revised)

Sources of Materials Dealing with Reading Difficulties

Class Size. A Selected List of References by Year (from 1920 to 1948) (June 1948)

The Major Principles of the Biological Sciences of Importance for General Education (April 1948)

Social Hygiene Education Bibliography No. 1. Books and Pamphlets for Small and Preadolescent Children (Reprinted April 1948)

Bibliography of Bibliographies on Adult Education (Adult Education References No. 1, July 1948)

Methods of Instruction for Illiterates (Adult Education References No. 2, July 1948)

Material for Adult Illiterates (Both Foreign and Native Born) (Adult Education References No. 3, August 1948)

Adaptations of Classics and Famous Fiction (Adult Education References No. 4, August 1948)

Adult Education Councils (Adult Education References No. 5, July 1948)

Volume 31 Number 2
NOVEMBER 1948

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School Life

STUDENT CANDIDATES

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education · · · · · · · · · · · · · · · Federal Security Agency

CONTENTS for November 1948

Volume 31 Number 2

Cover photograph shows student candidates awaiting student government election returns at Midwood High School, Brooklyn, N. Y. See "A Visit to Midwood."

IF YOU ARE a school administrator or a teacher, you are probably busier today than you have ever been in your educational career. Finding ways and means to accommodate in school and college record numbers of children and adults and helping to fashion educational offerings to meet their varied needs present challenges unprecedented in American educational history. It is our hope that you will find SCHOOL LIFE a month-to-month aid during the school year as you face both old and new educational problems and search for the best possible solutions. Let us hear from you. We shall try to be as helpful as we can in the months ahead.

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GEORGE KERRY SMITH... Chief, Information and Publications Service
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Address all SCHOOL LIFE inquiries to the Chief, Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

Students of Brooklyn's Midwood High School hold a board of estimate meeting similar to one conducted by the city government.

A VISIT TO MIDWOOD

by Ellsworth Tompkins, Specialist for Large High Schools

I HAD the Sherlock Holmes feeling as I turned from Glenwood Road into Bedford Avenue on my way to the main entrance of Midwood High School in Brooklyn one bright Monday morning recently. I was after clues. What makes successful student government successful? How well is the student body acquainted with the status, activities, and functions of the student council? Is this one of the criteria of effective student government? To what extent is successful government the result of the principal's enthusiasm for it? If student government fails, why does it fail? Is it important for the student council to have a constitution? By what means do pupils learn about student government when they first come to the school? Questions such as these were running through my mind as I entered the school and was escorted to the principal's office, where I waited for Dr. Ross. It was immediately apparent that he was a busy man and that Midwood was a place of motion, action, and pleasantness. I wondered whether Midwood was too busy for a caller who wanted to look into its student government and not be hurried about it.

"My name is Ross. Very happy to meet you. Won't you come in?" It was the principal. And in I went. With the introductions, the weather, the matter of mutual friends, and usual pleasantries exchanged, we came to the point: Student government . . . Midwood . . . questions . . . see at first hand . . . outstanding practices . . . results. . . .

"Perhaps it would be better if Miss Kroeber and Mr. Kussin joined us," Principal Ross suggested. "They know more about it. I'll ask them to come in. Mr. Kussin is the Adviser to the Student Government and Miss Kroeber is Administrative Assistant—that means vice principal outside of New York City."

I had remembered those names from the *Midwood Baedeker*, the school handbook, which had been sent to me, along with copies of the *Argus*, the school newspaper. The *Argus* had interested me because it had freely, analytically, and constructively criticized the activities and projects of the student government.

"Do you devote much of your time to student government in the school?" I asked.

"You probably know what we call our student government. All the students know it as the *City of Midwood*. No, I believe I don't put too much time on it, but I do give it a lot of emphasis. As for the students, they put a lot of time on it, however. And that's the

way it should be, in my opinion—oh, come in, please! This is Miss Kroeber, and this is Mr. Kussin. I was just saying that as principal I put considerable emphasis on the importance of the *City of Midwood*."

"That's true, and the emphasis you give it is so very important. It's one of the chief reasons for whatever success we have," said Miss Kroeber.

"I know you call it the *City of Midwood*, but why do you?" I asked.

What About Taxes?

"We say *City of Midwood*," she continued, "because our student government is patterned after that of New York City. I really think it's relatively unimportant what form is used, so long as participation is effective. The city government of New York is rather complicated, in case you don't know it, and we believe our students will become better acquainted with their city government by using it as a pattern for Midwood. That's my opinion."

How easy for Midwoodites to like Miss Kroeber! Attractive, alert, gracious, well-spoken, soft-voiced, pleasant in manner.

"Then, if the *City of Midwood* is a miniature replica of the city of New York, what do you do about taxes?" I said facetiously.

They laughed. "That's right, there are taxes, levied and collected, and argued over," said Mr. Kussin, the adviser, a tall young man, who gave the impression of quiet strength.

"You better explain how it works," Dr. Ross added.

"Well, the *City of Midwood* is headed by a mayor chosen by the student body at large. This term the mayor of Midwood is David Fischer. Then we have eight term-presidents (corresponding to borough presidents), and they are elected by the different classes—you know—senior 1, senior 2, junior 1, and so forth. That's because we have graduation twice a year, not once a year. Then we have comptroller, chief justice of the student court, and secretary, all of whom were elected by the whole student body. But the really basic position is the president of the homeroom, elected by each homeroom group. He supervises all activities in his room and serves as delegate to the city council. Now the——." As Mr. Kussin looked at Miss Kroeber, she continued what he was saying.

"Yes, the city council a. m. and p. m.——"

"Do you have a double session at Midwood?" I inquired.

"Yes we do. We have school from about 7:45 a. m. to about 5:30 p. m., and we don't care too much for it, because of the fact that many of our pupils attending school on the afternoon session get home so late——."

"That must be quite a draw-back to you and the students in promoting successful student government, isn't it?"

Miss Kroeber said, "Well, I don't know about that: I've worked in other schools, you know, and I think there is not too much connection between daily time schedule, school size, all the mechanical details of school management and the success of student government. Of course, we could use that as an excuse. But to us it is a challenge to have good student government despite some of these apparent handicaps. So, to answer your question, I should say the double session has not interfered with the progress of our student government as much as might be expected. But we have one council for the morning session and one for the afternoon, and these two councils are made up of the homeroom presidents. Each council then elects its own chairman, and he or she and the officers elected by the entire student body and the eight term-presidents comprise the board of estimate, and now we're around to taxes. They are set by the board of estimate after the rigmarole of budgetary proceedings and hearings. After the budget is made up, it must be passed by the city council. And before any homeroom president votes, he discusses the budget with his section."

"Taxes were 40 cents last term," Principal Ross put in. "Forty cents per student. Once he pays that he is entitled to all the normal activities of the *City of Midwood* and he's a citizen of Midwood."

"That seems somewhat complicated. Do the pupils understand it?"

Ask the Pupils

"I think so, without much difficulty. But you can probably find that out best by asking the pupils," said the principal.

There was indication that this thread of explanation had spun out, so I said, "Maybe now is the time to ask you about the strong points of your student government."

"Well, I should say that one strong point is the fact that the *City of Midwood* has complete responsibility for drawing up the budget, for approving disbursements through our budget commission," said Mr. Kussin. "The students levy the taxes, collect them, and spend them. That gives them a sense of power and responsibility in being able to run their finances. That seems to be one of our most evident strengths. Then, through the election commissioners, the *City of Midwood* sets up procedures for all platforms and elections. If you look over that election notice on the table, you will see that the two election commissioners wrote that themselves. I didn't write it, Dr. Ross didn't. They did, with only an English teacher to approve style, not content, as required by *City of Midwood* regulations. That is another strength."

"I think," Miss Kroeber was speaking, "that the *City of Midwood* is responsible student government because it is not being

Freshman students actively direct and participate in their own orientation program at the Midwood High.

constantly supervised by the faculty or principal. As a matter of fact, the administration really avoids making decisions that are properly in the sphere and jurisdiction of student government. Legally, the principal has the power of veto—he has to have. But I am confident all Midwood understands that an issue regarding that veto power is not likely to arise, because in matters concerning pupil welfare and relations, the administration and staff, particularly Dr. Ross, are willing to be outvoted. We want the Midwood students to have the practice of making cooperative decisions, of accepting personal and group responsibilities. That sounds a little high and mighty, but I believe it is so."

"You know," added Dr. Ross, "school is life, just as John Dewey said so often that it is now commonplace. To breathe vitality and vigor into the idea is anything but commonplace. For instance, the notices that Mr. Kussin mentioned. That's one example of education as living."

Discuss Weaknesses

"As far as weaknesses are concerned," Mr. Kussin broke in, "I think our students will show no hesitancy in talking about them."

"I quite agree," the principal smiled, "that's where I get my information. But, you might like to know what we think some weaknesses are. In the first place, our democracy is only as good as the leaders it elects to office. For the citizens to elect competent leaders is always a major consideration. Sometimes we have better leaders than other times, just as everywhere. At other times we have leaders that do not meet our hopes. Sometimes they fade out after a fine start, and at other times they develop splendidly after a poor start. Of this I feel fairly certain: it is difficult to predict what kind of leader a boy or girl will be. But that does not lessen our duty to emphasize the careful choice of leaders on the part of the electorate."

"And another weakness: though boys and girls can find many opportunities open to them to serve the school, boys and girls with originality, perseverance, and a will to achieve, there still must be more opportunities made available. Much remains to be done before any of us will be satisfied. The idea of service is to some extent still restricted to a minority of our pupils. Our job is to demonstrate that we deserve to live in a democratic society by trying to solve our immediate problems in a cooperative way. Though we may be doing fairly well, we've got to do better."

"The pupils can talk more convincingly than we can about weaknesses of student government," Mr. Kussin said, "and since today happens to be the day of the week when the city councils meet, why not come with me to the meetings and find out at first hand how much our answers are worth?"

"That would be fine!" added Miss Kroeber. "By all means take a look at the campaign literature, signs, slogans, *Argus* analyses of platforms and issues, and plans for election assemblies, which incidentally are to be held this week. You ought to hear how the assemblies quiz the candidates about their platforms. That really is something. . . ."

The ringing of the period bell interrupted our conversation, and hastened the leave takings of Miss Kroeber and Mr. Kussin. Dr. Ross said, "This is a good time to eat. Let's go to lunch!"

As I turned from Bedford Avenue into Glenwood Road the afternoon of that bright Monday morning, I felt a pleasant elation and a gentle weariness. The clues had been traced and the excellence found. Glancing back for a last look at Midwood's chaste colonial facade, sharp and shining in the strength of the midafternoon sun, I sensed that here was something more than brick and windows and doors. Here was spirited, benevolent cooperation between school government and student government.

Plans for Developing a School Building Program

THREE hundred and fifty leading architects, contractors, and school administrators recently enrolled in a Washington State School Plant Workshop to discuss school building problems. Out of this workshop, held in Seattle, Wash., came a summary which SCHOOL LIFE offers as a guide to other States interested in developing school building programs and in organizing school and community for such building programs. The Washington School Plant Workshop Summary follows.

The development of a building program is one of the major educational and business undertakings of every school district. The following suggestions list certain key steps which should be developed by individual school districts in their activities in the construction field.

▶ 1. *There is need for specific long-range studies of basic facts about the community, its population, its industrial changes, its student groups, and other significant factors.* This information may be used to predict school needs for at least the next 10 or 15 years.

▶ 2. *The school board and the superintendent must study these facts carefully, adapt them to the needs of their district, and interpret these findings to the community.*

▶ 3. *There must be completed by competent trained leadership a comprehensive survey of existing school facilities from the viewpoint of their adaptability to accepted educational needs.* The Office of State Superintendent of Public Instruction is prepared to cooperate with all districts in the conduct of such studies.

▶ 4. *Specific attention must be given to the recommendations of classroom teachers concerning the exact facilities to be provided for effective instruction at all grade levels.* The superintendent and the principal should devote much time to this planning work with teachers.

▶ 5. *The building program will reflect in a large degree the attitude of the community toward education.* In every community in Washington the school must continue to be an integral part of neighborhood life. Time must be taken, therefore, for discussion with individuals and organized groups within the district as to what the building should include. A true community-planned school will receive the enthusiastic endorsement of all patrons of the district.

▶ 6. *When all opinions are collected the school directors have the responsibility of sitting down with the superintendent and formulating a tentative plan of action.* Here they will wish to review statistical aspects of their prolonged survey, with special concern given to need and finance. If construction is feasible, then an architect must be employed. No question deserves

(*Continued on page 10*)

THIS STATEMENT brings SCHOOL LIFE readers up to date on progress in the Project for Adult Education of Negroes. The article is a condensation of the third progress report on the project prepared by Ambrose Caliver, Specialist for Higher Education of Negroes, Project Director. See previous reports on this project in SCHOOL LIFE, October 1946, and SCHOOL LIFE, January 1948.

Project for Adult Education of Negroes

"I GETS paid by check. Now I don't have to make no X. I can sign my whole name myself. Been comin' since Christmas. I only wish I had learned about this class before."

Similar comments have been made by hundreds of grown men and women who have learned to sign their names in the classes offered through the Project for Adult Education of Negroes sponsored by the Office of Education during the past 2 years, and directed by Ambrose Caliver, Specialist for Higher Education of Negroes.

Alarmed at the presence of 10 million functionally illiterate adults in the United States, the Office undertook the project in 1946 with financial assistance from the Carnegie Corporation of New York and the cooperation of organizations, school systems, and individuals. In the 2 years of its existence, the Project has attracted national and international attention, and the results have been so successful that UNESCO may adopt it as one of its associated projects in its world-wide assault on illiteracy.

Clarence Beebe, Assistant Director General of UNESCO, and John Bowers, Director of Fundamental Education, visited the Office of Education during the spring to learn about the Project. It was, they believed, an approach to the type of fundamental education in which they had a special interest. And at its meeting on June 25, 1948, the Panel on Fundamental Education of the U. S. National Commission for UNESCO nominated the Project for Adult Education of Negroes to be one of its associated projects. Fundamental education is designed to help under-privileged people to live fuller and happier lives in an ever changing environment; to develop the best elements in their own culture and to participate in the economic and social progress in their areas and in the world. It attempts to give people the fundamental tools which will enable them to function effectively, at least on the elementary level, as workers, citizens, and individuals. As a member of one of the Project classes said, "You got to have learnin' before you can do most anything."

Projects on fundamental education are in progress in many other countries. UNESCO wants to include these in its program and study them to find common problems and common solutions. It will also serve as a clearinghouse through which materials from such projects are disseminated.

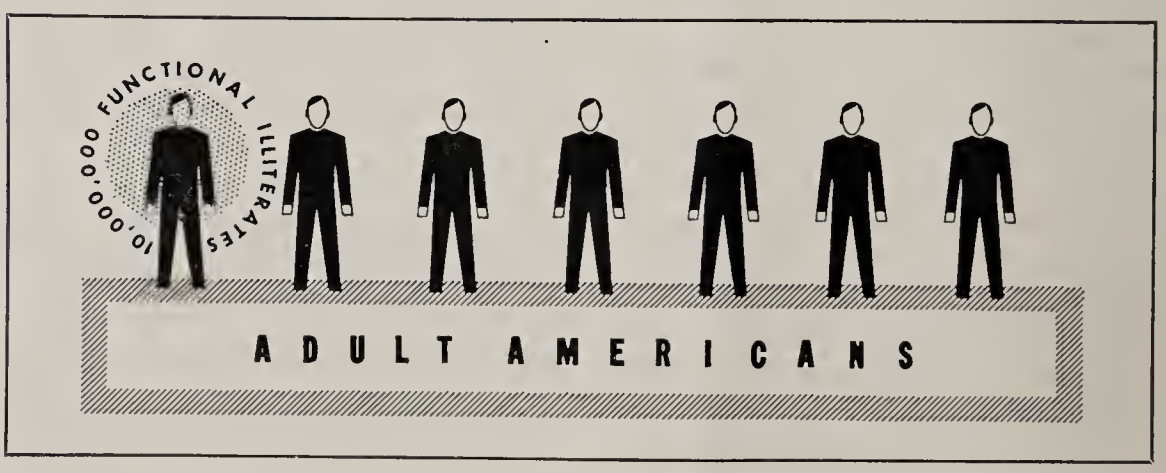
Number of Illiterates

The Project for Adult Education of Negroes concerned itself with the functionally illiterate Negroes, of whom there are 3 million in the United States, or 2 out of every 5 of the adult Negro population. The long-felt need for such adult education is indicated by a comment of one of the class members: "If only our foreparents had had this, I wouldn't be in this fix today. It is bad to have to meet people and don't know how to meet them."

The Project was designed as a demonstration or pilot effort to provide criteria and guides, to make educational leaders aware of the seriousness of the situation and of their responsibility, and to arouse the interest of lay leaders of community organizations concerning the problem and to indicate how they may cooperate in attacking it. The Carnegie Corporation of New York made grants totaling $49,910 to the Project, and from this amount $17,050 was allocated to the six institutions which participated directly in conducting the Project. They were Atlanta University, Fort Valley State Teachers College, Tennessee Agricultural & Industrial State College, Fisk University, Hampton Institute, and Virginia State College. Many other organizations, school systems, and individuals have cooperated.

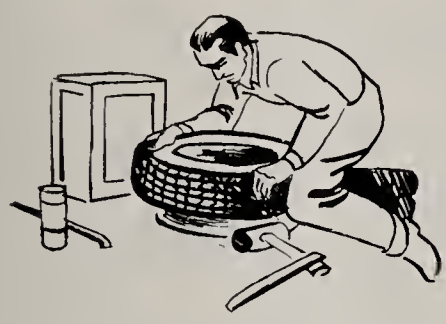
Experimental materials, such as basic readers and workbooks, were produced and tested in classes. While these materials are suitable for many types of learners in a variety of localities and situations, the difficulty of producing materials that have universal application is recognized. Therefore emphasis has been placed on the process rather than the product, and an effort made to stimulate teachers to develop materials based on the needs and interests of their pupils, particularly adults of low literacy levels. A comment of a member of one of the classes indicates that the Project materials have realized their motivational objective: "I like the story of Citizen King because it is what anyone has to do any day. And he wouldn't have got that job if he hadn't gone to night school and got some learnin'!"

And another adult student said: "I like the Language Workbook 'cause it helps me in my church work. They made me President of the literary department. Everybody's eyes is open to see how I'll act. So



I've been studyin' from my book and I hope that next Sunday at 3 o'clock you will all be there to see how I do."

Nearly a thousand teachers and prospective teachers of adults who were in contact with the Project have been exposed to the principles discussed here and to the techniques of applying them. All of the institutions participating in the Project are determined to continue the work, at least to conduct classes for teachers of adults. Their interest is indicated by the fact that they have almost matched the $17,050 allotted to them by the Project. These and other institutions plan to make the course



6.

The tire is on a car.	☐
The man is standing up.	☐
The man is fixing a tire.	☐
The man is wearing a hat.	☐
The man is feeding his dog.	☐

Page from instruction book used—learning is linked with everyday practical experiences.

for teachers of adults a regular part of their curriculum.

Each year since its beginning evaluative conferences of adult education specialists have been held to discuss techniques of group leadership, scientific validation of materials and methods in adult education, development and effective use of instructional materials, principles of teaching adults, selection and preparation of teachers, special problems of organizing classes and training adults, and enlisting the interest of school officials and community leaders.

The Project has been operating on a demonstration basis for 2 years and during that time scores of requests for information concerning literacy education in general and the Project in particular have been received. Representatives of 25 countries, including England, China, India, Indonesia, Belgium, and Haiti, have either visited or written the Office of Education to get information. Federal agencies, particularly the State Department, have requested information and help. After the introduction of the bill (S. 2801) for the purpose of providing funds to the States to help eradicate illiteracy, Senators and Representatives, as well as professional and lay leaders in practically every State in the Union, asked the Project for more information.

To Consolidate Gains

Despite the interest which the Project has aroused throughout the Nation, communities and States are not yet ready to continue it and to make an all-out attack on the problem of illiteracy without further stimulation and assistance. All concerned with the Project believe that two or three additional years are needed in order to consolidate the gains made, and to prepare for the Nation-wide campaign against illiteracy which will begin if the Congress passes a national literacy education bill. With this in mind, the Conference of Presidents of Negro Land-Grant Colleges has spearheaded an effort to secure funds for such a program. Other organizations, including the National Council of Chief State School Officers, have endorsed its program, which is estimated to cost $370,000. It should be emphasized that the proposed program would not be concerned solely with Negroes, but that it would prepare the way for an attack on illiteracy wherever it may be found throughout the Nation.

Meanwhile, until needed funds may be found, arrangements have been made to continue a skeleton organization of the Project and to conduct a minimum program. The Office of Education has made one professional staff member available on a temporary basis to continue the preparation, selection, and revision of materials, and insofar as possible to render consultative and information service. In order to provide other necessary services and travel on a limited basis and to assure the continuation of certain needed activities during the interim period, four national Negro organizations—the Elks, the Phi Beta Sigma Fraternity, the Conference of Presidents of Negro Land-Grant Colleges, and the American Teachers Association—have offered to make a modest contribution to the Project.

The time has come when the problem of illiteracy can no longer be left to the unprepared, the immature, or the mere well-wishers; nor can it be left to voluntary and unprofessional effort. Educational leaders must come to recognize their responsibility in the matter, particularly in five areas of service: Evaluation, selection, and production of instructional materials suitable for teaching adults; preparation of adult education teachers; preparation of teacher trainers and supervisors; development of teaching methods; and bringing about an awareness of and concern for the problem on the part of the public in general, and of the legislators and public school officials in particular.

Many of the ills which afflict human beings—disease, poverty, crime, and maladjustments—find their greatest incidence among the least educated. Moreover, so large a mass of undereducated people become a drag on the entire population. The lack of national wealth and strength resulting from this untapped reservoir of human resources is incalculable.

Salaries Paid School Librarians in 16 Large Cities

ACCORDING to recent reports from public school systems in a group of 16 cities with 100,000 or more population, supervisors or directors of public school libraries are receiving annual salaries ranging from less than $4,000 to more than $8,000. Three of the cities reported that school librarians assigned to senior and junior high schools work under the general supervision and direction of the school principal. Three cities report special subject supervisors in libraries in addition to the general supervisor or director.

Secondary school librarians in the 16 cities are being paid a minimum of $2,200 and a maximum of $5,700. Elementary school librarians are receiving a minimum of $2,200 and a maximum of $5,200.

In the 22 States which have persons employed as State supervisors, directors, or consultants of school libraries, the salary ranges from less than $3,000 to more than $5,000. Two States employ two persons in this capacity.

Additional information on the subject has been prepared by Nora A. Beust, Specialist for School and Children's Libraries, and is available upon request from Service to Libraries, Office of Education.

Recent Supreme Court Decisions Relating to Education

FOR OCTOBER 1948 SCHOOL LIFE Ward W. Keesecker, Office of Education Specialist in School Legislation, prepared a summary of the principal bills relating to education passed by the Eightieth Congress, second session, and signed by the President. For SCHOOL LIFE readers this month Dr. Keesecker digests recent court decisions relating to education.

IN RECENT years an increasing number of decisions by the United States Supreme Court have affected education among the several States. Three decisions are of particular significance. Early in 1947 the Supreme Court in a New Jersey case held that the use of public tax funds by school districts for paying the transportation of children attending a parochial school was not in violation of any provision of the Constitution of the United States (*Everson* v. *Board of Education of the Township of Ewing*, 67 S. Ct. 504).

In January 1948 the Supreme Court reversed a decision of the highest court of Oklahoma and held that the State of Oklahoma, in conformity with the equal protection clause of the fourteenth amendment, was required to provide qualified Negro applicants with legal education equal to that afforded by the State institution for white students and also that where admission was denied solely on the ground of color, mandamus would compel admission (*Seipel* v. *University of Oklahoma*, 68 S. Ct. 299).

On March 8, 1948, the Supreme Court rendered its decision in the case of *McCollum* v. *Board of Education* arising in Champaign, Ill. The Court held that sectarian religious instruction on public school premises during school time, of the kind offered in the Champaign city schools, was not permissible under the First Amendment of the United States Constitution because it violated the principle of separation of Church and State (69 S. Ct. 461).

Army To Teach Lessons of Citizenship

GEN. Omar N. Bradley, Army Chief of Staff, in a recent address before the Forty-ninth National Encampment, Veterans of Foreign Wars of the United States, in St. Louis, Mo., said, "I am already convinced that the Army has too long ignored the insides of its men. During the war it was apparent that men fought best when they understood why they were fighting. To give our troops conviction and to equip them with ample justification for the service on which they embark, the Army will add emphasis to its educational program."

Continuing, he said, "Despite the opportunities for free education that exist in these United States, too many young men come into the Army appallingly ill-informed on the issues and crises that warrant their service. American education has failed to give many young men an alert appreciation of their liberties and a consequent explanation of their obligations. We have too long concentrated on how to make good, how to get ahead. We have taught our young people how to plunder our resources, how to get jobs, and how to get rich. We have neglected to tell them that democracy is a two-way street—that with its benefits comes the necessity for also giving service. It is because American education has so often failed to imprint this lesson of citizenship on the minds of these young men, that the United States Army has felt it necessary to stimulate their thinking while in the service."

Education by Radio in Atlanta

ATLANTA and Fulton County schools have joined a select group of 14 large city and county systems in the Nation owning a full-time FM educational radio station. With the dedication of Radio Station WABE–FM in September, they became the first systems in the Southeast to have such a facility to add to audio-visual education aids.

Technically, the station is property of the Atlanta Board of Education, but it was presented to the Board by the Rich Foundation of Atlanta for use of both systems. The gift from the foundation included all station and studio equipment for broadcasting and 300 FM receiving sets for use in the schools. On the basis of one receiver for each 8 teachers, these sets were distributed through the 70 schools of the city system and the 91 units of the county system, for use by a total of 90,000 students in elementary and high schools.

Aside from natural advantages of a full-time radio station, the two school systems have received benefit already in two by-products. First, there has been another step toward a complete curriculum integration by the two systems; and second, the radio permits for the first time simultaneous and identical instruction to Negro and white students under the system of segregated schools.

The use of radio in Atlanta and Fulton County schools is not new. Researchers in the field of radio education variously credit the Atlanta system with being either the first or the second system to adopt it, the first experience having come in 1926 when an Atlanta dealer presented the schools with 60 battery-type receivers (one for each school) and radio station WSB of Atlanta gave time for school broadcasts. This initial step was limited to cultural music programs, and through the years since then there has been some type of radio activity through standard AM commercial stations.

The Department of Audio-Visual Education of the Atlanta Board had maintained a radio division since 1942 for work through commercial stations for classroom broadcasts, and through recordings and turntables to supplement the limited air time available.

From an administrative standpoint, the radio station will perform an important function. Regularly, the period from 8:50 to 9 a. m. is set aside for administrative announcements, with one faculty member in each school designated to receive and distribute official announcements. The station was used in the week before school opening on September 9 for administrative broadcasts to faculty members meeting at their respective schools.

Although the planning of station operation, which went into the full classroom broadcasting schedule September 13, has been very extensive, the use of radio in the schools is not compulsory. Each teacher may elect to use any or all of the programs for her grade level, or she may disregard radio altogether. Teachers will

receive bulletins announcing the programs and will be fully equipped through the station with utilization aids suggesting preparation of the classroom for listening, and supplemental activity to gain the most from the radio programs. No program is designed to be self-contained, but demands prior or supplemental assistance from the teacher.

Book Week—November 14-20

"Books Tell the Story" is the slogan for the twenty-ninth national observance of Children's Book Week, November 14–20. Book Fairs across the Nation is the theme of the 1948 plans for the event.

The Children's Book Council, 62 West Forty-fifth Street, New York 19, N. Y., is headquarters for the annual celebration of Book Week. It has available planning aids, publicity materials, and the addresses of persons equipped to supply complete Book Fairs of all sizes.

Higher Education Fall Enrollment

HIGH LIGHTS of the survey of college and university enrollment this fall will be reported in an early issue of HIGHER EDUCATION, Office of Education semimonthly periodical. The study, as in 1947, will report total number of students by sex, the number of students enrolled for the first time in any college, and the number of veteran students drawing benefits under Public Laws 16 and 346.

Helping Teachers Keep Happy

AFTER AN educational survey is made, what happens to the findings? There appears to be no question of how certain State and local school administrators and home economics education leaders are making use of information resulting from a study of home economics teaching satisfactions and dissatisfactions recently completed. (See "Four Thousand Teachers Report on Their Jobs," SCHOOL LIFE, October 1948 issue.)

Beulah I. Coon, Office of Education Research Specialist in Home Economics Education, points out some of the steps being taken by States to insure a more adequate supply of home economics teachers and to keep those already on the job happy in their work.

The 4,216 replies from teachers in 46 States were made available to the respective States for further study. To facilitate study and action by States on the returns, three workshops were held in different sections of the country. State research chairmen, State supervisors of home economics, and others reviewed the reports from teachers, planned ways to improve conditions termed unsatisfactory by the teachers, and took steps to analyze and make more widely known what contributes to job satisfaction.

Analysis of returns by one State revealed that the better satisfied teachers had more homelike home economics departments. Their programs were adequately financed. They themselves were properly recognized by administrators for work well done. In contrast, teachers with inadequate teaching materials and equipment, with insufficient financial support, and recognized little or not at all for their accomplishments were found to be least satisfied in their positions.

Several school administrators in this State met with home economics teachers in State conference, considered these and other pertinent problems brought out in the study, and took action accordingly.

Another State saw a definite correlation between teacher satisfaction and provision of definite funds for operating expenses and of equipment for teaching a broad home economics program rather than one phase, such as foods or clothing. The State simplified its methods of working with school administrators to improve the adequacy of home economics education and of funds for operating expenses.

"Our teaching load is too heavy," reported teachers in another State. The complaint was met by showing the teachers national figures on teacher load with which theirs compared favorably. Nevertheless, where teaching load was found to be extraordinarily heavy, the situation was remedied as much as possible.

Reviewing Survey Findings

A council of representatives of women's organizations was approached in one State to see what could be done to provide better recreational possibilities for teachers, to consider more satisfactory health services and more stimulating cultural opportunities in the communities. The council is reviewing the survey findings on teacher attitudes toward community conditions generally as well as community attitudes toward teacher activities, reported by many teachers as contributing to their job dissatisfaction.

The study furnished fertile information which another State used as a basis for strengthening its home economics teacher-training program. It also provided basic facts which guided another State in encouraging its teachers to do advanced study and get training for leadership in an effort to help maintain teacher satisfaction.

School Library Survey

AS A PART of its program of making essential information on libraries available to administrators, the Office of Education will gather data about school libraries this fall. Copies of the survey form, School Library Statistics (1947–48), will be mailed to superintendents of city and independent school districts and to county superintendents for all school districts under their jurisdiction.

Administrators receiving forms are urged to have the form completed promptly and to return it to the Office of Education. According to reports received from approximately three-fourths of the superintendents of city and rural districts in two previous studies, Statistics of Public-School Libraries, 1934–35 and 1941–42, 92 percent of the school systems reported on had some form of library service by 1942.

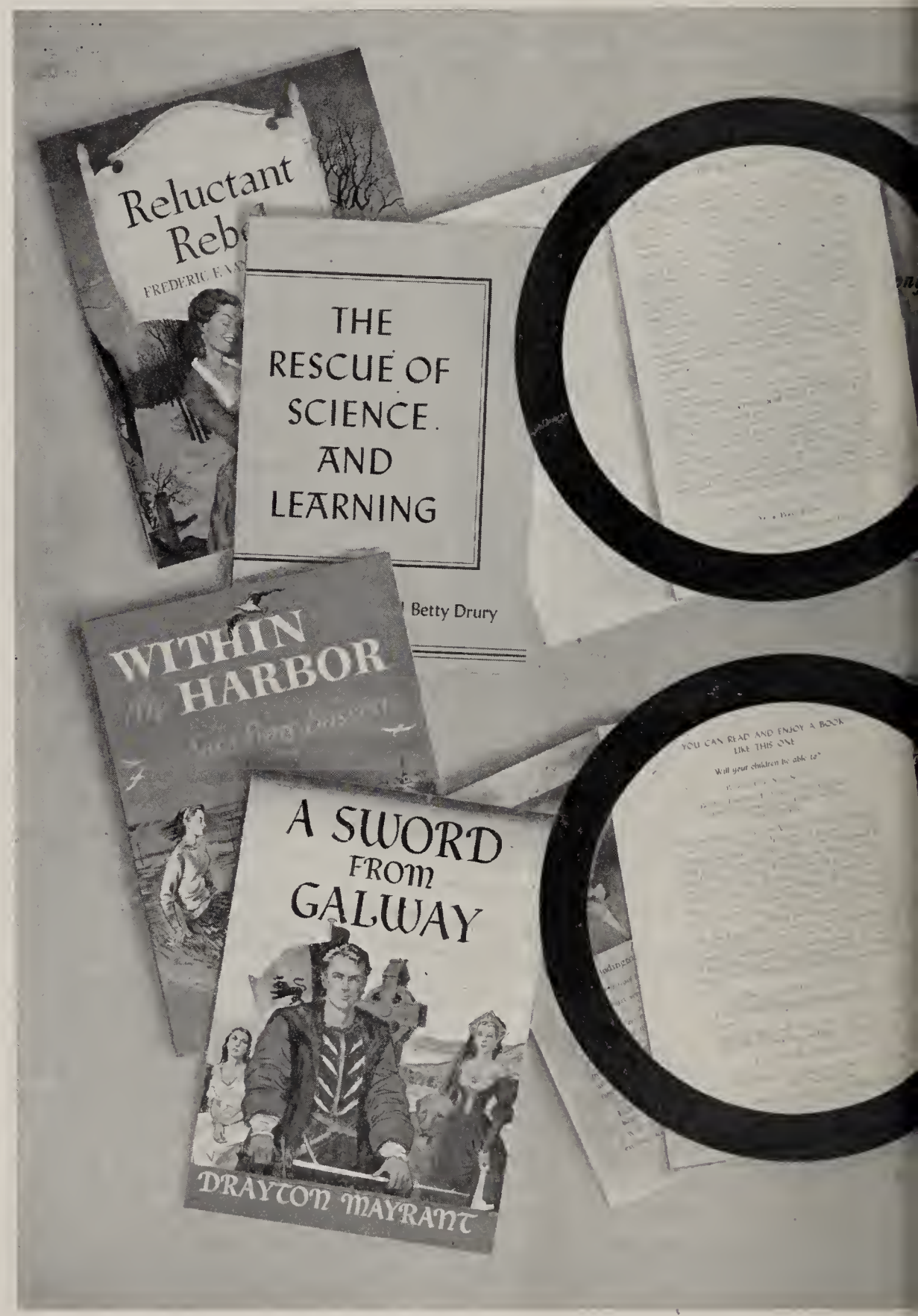
Publishers support campaign for

AGAIN this school year The Advertising Council is lending its strong support to the communication of facts on American education and school conditions to radio listeners and to readers of the printed page.

For the cooperation of this nonprofit, public service organization, working cooperatively in past-year campaigns with the Office of Education, the Office of Government Reports, and the Citizens Federal Committee on Education to stimulate interest in improving school conditions, American education owes many debts of gratitude. The Nation's teachers, parents of school children, and youth itself could well say thank you to The Advertising Council, 11 West Forty-second Strect, New York 18, N. Y., and through the Council to the radio, advertising, and publishing industries for their efforts in helping make the public cognizant of our country's school plight and in pressing for public action which has produced educational progress. Expressions of appreciation could well be directed to specific firms which sponsor "better school" advertisements in newspapers and magazines and over the radio. Education has benefited greatly through such contributions to public service.

Messages To Millions

One novel but effective way book publishers have been cooperating with The Advertising Council in the better schools campaign is reported on these pages for the information of SCHOOL LIFE readers. Many publishers have included "Better Education" messages on several million book jackets which get Nation-wide circulation. Two of the messages are presented for your reading. Teachers and students may wish to respond to this unique public service effort in support of American education by writing to their textbook publishers through the American Textbook Publishers Institute, 1 Madison Avenue, New York 10, N. Y.



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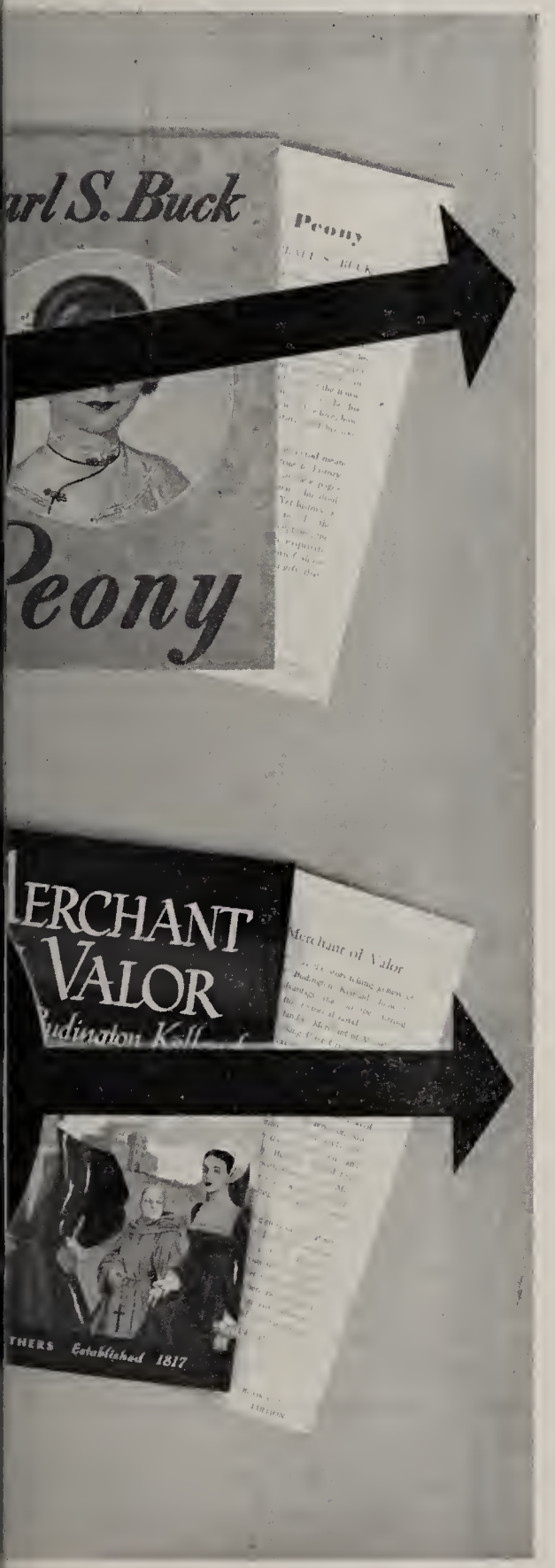

The 5th Freedom

WHEN you have read this book, we want you to think for a moment about what you have just done. Actually, you have done something very difficult, though you are so used to it that it seemed easy. You had to be taught to do this, and probably many teachers struggled with you before it could be said that you could both read and understand what you read. You owe those teachers a great debt. They gave you the key to freedom.

There are other teachers, now, in your neighborhood, who are trying to give this key to other children. They are tired, discouraged people. Some will leave teaching this year for jobs that have a shorter work day, which are decently paid, which offer a better standing in the community and a more normal private life. Unless the present trend is reversed, more will leave next year, and the available replacements will be fewer and worse prepared. The sad truth is that able young people are avoiding this profession.

Every year thousands of normally intelligent youngsters finish their schooling unable to do what you have just done—read and understand a book. In overcrowded classes, with overworked teachers, with textbooks that are too few and too old, they will not have grasped the key.

This is the crisis in American education. It is here, it is real, and it is dangerous beyond words.

As a Nation we have joined others in a desire to realize the four freedoms. But there is a fifth freedom more fundamental than any of the others, and this is FREEDOM FROM IGNORANCE. The ignorant man is the easiest prey to want and fear. Freedom of religion means little to him, and a free press means nothing, for even if, technically, he can read, he cannot understand what he reads. He is a danger to himself, to you, to this country, and to the world.

You can help. Visit your local schools. See what can be done to keep and to attract able teachers. Support larger appropriations for salaries, equipment, textbooks. This will cost you some time and money. Our teachers mold our Nation's future. Give them your help.

This message is printed as a public service by
Your Book Club
in cooperation with The Advertising Council

You Can Read And Enjoy A Book Like This One

Will your children be able to?

Reading time: Sixty Seconds

Reading Purpose: To help save the American educational system for our children and our children's children

THE most sacred heritage an American child has is his right to as much education as he wants or can use. It is only through education that our children can understand the other priceless things that America gives. Today our educational system is faltering. Tomorrow it may be gone—unless we act now! The day after tomorrow the American way of life will be gone, too, if our educational system breaks down. Here are a few facts to show how grave the crisis is: 350,000 teachers have left the American public schools since 1940; 70,000 teaching positions are unfilled; 2,000,000 school-age children are not in school. The turnover in teachers is twice what it was before the war. Many school systems use inadequate and obsolete textbooks. The morale of teachers has dropped to an all-time low. School buildings in many areas throughout the country are in a deplorable state.

Here's what Y O U can do . . .

1. Check up on EDUCATIONAL CONDITIONS in your local schools
2. Back up and work with others seeking to improve TEACHERS' WORKING AND LIVING CONDITIONS

Let's save the American schools!

This message is printed as a public service by
Your Book Club
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True-False Quiz on Class Size

RECORD school and college enrollments are again stimulating wide discussion of the question of class size. Ellsworth Tompkins, Office of Education Specialist for Large High Schools, has done much research on this question. He recently prepared a true-false quiz on class size which we are pleased to present to SCHOOL LIFE readers. Mr. Tompkins points out that "busy administrators, principals, and teachers may find the quiz interesting and helpful." He says that the quiz also "may well serve as a subject for a faculty discussion or conference." The key to letters following certain questions is: (E) for Elementary, (S) for Secondary, and (C) for College. If no letter is used, the item has general application. This quiz is part of a longer article, "Enigma of Class Size," copies of which are available upon request. Address Office of Education, Federal Security Agency, Washington 25, D. C.

(How much do you know about results of studies on class size?)

For the purposes of this quiz, it is arbitrarily assumed that small classes enroll up to 24 pupils, and large classes enroll 25–50 pupils.

---- 1. Most of the studies on class size have been confined to the elementary school.

---- 2. Generally large classes seem to waste more time than smaller classes.

---- 3. Pupils in higher grades profit rather more by small classes than pupils in the lower grades do.

---- 4. In general, smaller classes are of greatest advantage to the dull pupils. (Dull pupils in this study were those whose intelligence scores were less than the median score of the class immediately below.) (E)

---- 5. There seems to be a correlation between class size and term marks. (S)

---- 6. Small classes make for increased pupil interest through group stimulation. (E)

---- 7. Large classes have been found to be inspiring to the teacher. (S)

---- 8. Large classes surpass smaller classes in achievement when class management is given careful attention. (S)

---- 9. From the teacher's point of view, large classes are more enervating. (S)

---- 10. The lecture method is the only successful method in conducting large classes. (C)

---- 11. Studies in optimum class size were stimulated only after reliable means were available for determining the intelligence and achievement of pupils.

---- 12. Teachers prefer average-sized classes (20–25) rather than small (10–15) or large (30–40) classes. (C)

---- 13. There is a correlation between size of class and teaching efficiency. (S) (C)

---- 14. Traditionally the size of class in elementary schools is larger than in the secondary school.

---- 15. The superior student is hampered by large classes, but the inferior student is helped. (S)

---- 16. Students believe that one of the advantages of larger classes is that they afford a greater variety of student reactions. (C)

---- 17. Student participation depends more on the teacher than on the size of class.

---- 18. Small classes can be justified on the basis of superior student achievement. (E)

---- 19. Better contact with the instructor can be made in small classes. (S)

---- 20. Pupils are strongly in favor of small classes. (S)

---- 21. Teachers disagree strongly on the most effective small- and large-class teaching procedures. (S)

---- 22. Little effort has been made to adapt important teaching functions to large class conditions.

---- 23. Teachers generally are skeptical of their ability to adapt instruction to larger classes. (S)

---- 24. Teachers are confident of their ability to modify their teaching to suit small classes. (S)

(*See page 12 for the key to the quiz.*)

SCHOOL BUILDING PROGRAM

(*Continued from page 3*)

more attention than the selection of the architect, who actually interprets community wishes in terms of the final structural plans.

▶ 7. *The architect will have many meetings with the administration and the governing board of the school district.* It is not until these meeting are held that specific details of finance of the building may be decided. The qualified architect can provide professional information in his field and at the same time he will solicit repeatedly the information which teachers and other school people only can give.

▶ 8. *Before a building program may be completed it is necessary that long, continued attention be given to methods of finance.* A building program which has been planned with the support and cooperation of the community almost invariably gains voters' approval. Key community leaders should endorse every funds campaign, and should assume active leadership in its conduct. Every available method of public information should be employed, with emphasis at all times placed upon the betterment of educational opportunities for youths and adults of the community.

▶ 9. *Professional considerations must not stop with the completion of the new structure.* It is recommended highly that the school administration, the school board, and the architect sit down together with all school personnel, including teachers, custodians, heating engineers, cafeteria workers, and students' representatives for a discussion on how the building should be used. Stress at this meeting should be placed upon the healthful maintenance of the classrooms and upon the specifics of maximum use of all new facilities.

▶ 10. *Every building program must be a long-range program.* The school superintendent must make special effort to keep abreast of trends not only in his community, but throughout Washington and the entire United States as well. Increasing responsibility, both in number of students and in the type of instruction offered, bespeak never-ending future challenges within every district in the areas of schoolhousing, program planning, and all other community services.

A mobilized local community will demand superior educational services on all levels for all children, and it will expect its professional leadership to give the competent direction and wise planning which such a demand entails.

New Staff Specialist

Herbert S. Conrad has been appointed Chief of the Research and Statistical Service, Central Services Division. Dr. Conrad came to the Office of Education after serving for several years on the College Entrance Examination Board located at Princeton, N. J. For a period of 18 months he was also Educational Consultant to the Secretary of War. In 1945 he was Chief of the Examination Methods and Statistical Analysis Unit of the United States Civil Service Commission. From 1928 to 1945 he served the University of California at Berkeley in the fields of research and statistical analysis and of educational psychology. From 1926 to 1928 Dr. Conrad was in the Department of Psychology of Columbia University.

Education Can Change Community Life

WHAT a group of educational leaders is doing to raise the standards of educational leadership in our Nation is reported to you in the adjoining article by John Lund, Office of Education Specialist in the Education of School Administrators. Dr. Lund is also serving as Secretary to the Planning Committee of the newly organized National Conference of Professors of Educational Administration. The full report of the Madison conference will be available for distribution later this fall. For details write to Daniel R. Davies, Teachers College, Columbia University, New York City.

ATTRACTED to the University of Wisconsin campus on September 2 were a broadly representative group of educational administration professors. The occasion was the second annual workshop conference of professors of administration to consider problems in developing educational leadership. Their organization of a permanent National Conference of Professors of Educational Administration was probably the high light of the conference.

This group of educational leaders had met a year before at Endicott, N. Y. They had worked hard and had made considerable progress. Their report, published in limited edition, has been studied by many administrators, education staffs, and students during the past year.

At Endicott this group had boldly proclaimed that "education can change community life," and that "it has done so." They had stated their belief that "the basic method and purpose of education must become that of *improving the quality of daily living in communities*," and that, "the quality of educational programs can never be expected to rise to a level higher than the competence of leadership." They had identified some of the competencies they believed educational leaders should possess and they had set forth the thinking of the group on some ways and means by which such competencies can best be acquired.

Reassembling at Madison a year later the realization was strong upon the group that Endicott marked only the beginning of efforts which must go on for a long time. This could be no short-term drive. Nor could this group alone accomplish the task they share with educational authorities and other organized professional groups, namely the continuous upgrading of the kind and quality of leadership for American education at all levels of operation.

The action taken at Madison to organize for continued action was therefore in the nature of a solemn commitment to a cause and a program of continuing cooperative study and action. In the language of their formally adopted resolution:

THE NATIONAL CONFERENCE OF PROFESSORS OF EDUCATIONAL ADMINISTRATION proposes to work toward the declared purpose of this organization "to improve educational leadership" through the following means: (1) Improve the programs for preparation of administrators of education in our respective institutions as proposed in the recommendations of the Endicott and Madison Conferences; (2) cooperate in working toward the upgrading of standards for the preparation of administrators of education; (3) cooperate in the development of uniform minimum standards for certification by the States of administrators of education.

We further propose to continue to work together as individuals and institutions in special studies, investigations and experiments to attain our declared purpose

We also declare our desire and willingness to cooperate with any and all other groups or interests that are working toward these same purposes. We invite their help.

Preview of Progress

The kind of cooperation invited here was already on the way toward implementation. Representatives of the following groups and agencies participated in the two conferences held at Endicott and at Madison: The American Association of School Administrators, the National Association of Secondary School Principals, the Department of Elementary School Principals of the National Education Association, the National Council of Chief State School Officers, and the Office of Education of the Federal Security Agency. Representative laymen will be included in the personnel of future conferences. Assurances of interest and further cooperation have been received from all the groups mentioned. Plans are developing for organized meetings of all persons interested, and attending the regional meetings of the American Association of School Administrators to be held at San Francisco, St. Louis, and Philadelphia early in 1949. Such a meeting was successfully held at Atlantic City in February 1948. Institutions, singly and in regional groups, are planning study, research, and experimentation programs for the year ahead. These will involve cooperation at the "grass roots" level between institutional staff members, administrators, and teachers in the field and representative laymen. It should be a busy and fruitful year.

With this background description of progressive activity a brief preview of progress made at Madison is appropriate.

As stated earlier, the Endicott Conference had based its concept of educational leadership upon the conviction that "the basic method and purpose of education must become that of *improving the quality of daily living in communities*." At Madison that conviction was reaffirmed and the

INSTITUTIONS (61) represented at Endicott or at Madison: Alabama Polytechnic Institute,* Claremont Graduate School, Stanford University, University of California at Berkeley,* Colorado State College of Education,* University of Denver,* Yale University, University of Connecticut, George Washington University, University of Florida,* University of Georgia, Drake University, Iowa State Teachers College, University of Kentucky,* University of Idaho, Illinois State Normal University, Northwestern University, Southern Illinois University, University of Chicago,* University of Illinois, Ball State Teachers College, Butler University, Indiana State Teachers College, Indiana University,* University of Maryland,* Boston University,* Harvard University, Michigan State College,* Wayne University, University of Minnesota, University of Mississippi,* Washington University, University of Omaha, Columbia University,* Cornell University,* New York University,* Syracuse University, University of Buffalo,* University of Rochester, Duke University, East Carolina Teachers College, University of North Carolina,* University of North Dakota, Ohio State University,* Ohio University, Oklahoma A & M College,* University of Oregon, Pennsylvania State College,* Temple University, University of Pennsylania,* University of Pittsburgh,* George Peabody College for Teachers, University of Tennessee,* Texas Christian University, University of Texas,* University of Utah,* University of Wyoming, State College of Washington, University of Washington, University of West Virginia, University of Wisconsin.*

*Represented at both conferences.

effort was made to characterize in some detail the kind of a school implicit in this concept in order to analyze the job of leadership in education. The result was a listing of 16 descriptive statements regarded by the conference as distinctively and essentially characteristic of the community school. These statements appear in the accompanying box.

As an outgrowth of its study of what is involved in education for the improvement of community living, the conference identified the leadership requirements of schools for better living. A valuable body of material was developed in answer to the question *"What should be the nature of the leadership process?"* It is down to earth and practical in its approach to the problem, providing clear guide lines for the professors' answers to the major problem before them, namely, *"How can we assist in the identification, preparation and emergence of democratic, educational leadership?"*

Sixteen Characteristics of the Community School

1. The community school seeks to operate continuously as an important unit in the family of agencies serving the common purpose of improving community living.
2. The community school shares with citizens continuing responsibility for the identification of community needs and the development of subsequent action programs to meet these needs.
3. The community school begins its responsibility for better living with the immediate school environment.
4. The curriculum of the community school is sufficiently comprehensive and flexible to facilitate the realization of its purpose.
5. The community school program is dynamic, constantly changing to meet emerging community needs.
6. The community school makes full use of all community resources for learning experiences.
7. The community school develops and uses distinctive types of teaching materials.
8. The community school shares with other agencies the responsibility for providing opportunities for appropriate learning experiences for all members of the community.
9. The community school recognizes improvement in social and community relations behavior as an indication of individual growth and development.
10. The community school develops continuous evaluation in terms of the quality of living for pupils, teachers, and administrators; for the total school program; and for the community.
11. The pupil personnel services of the community school are cooperatively developed in relation to community needs.
12. The community school secures staff personnel properly prepared to contribute to the distinctive objectives of the school, facilitates effective work and continuous professional growth by members of the staff, and maintains only those personnel policies which are consistent with the school's purposes.
13. The community school maintains democratic pupil-teacher-administrator relationships.
14. The community school creates, and operates in, a situation where there is high expectancy of what good schools can do to improve community living.
15. The community school buildings, equipment, and grounds are so designed, constructed, and used as to make it possible to provide for children, youth and adults those experiences in community living which are not adequately provided by agencies other than the school.
16. The community school budget is the financial plan for translating into reality the educational program which the school board, staff members, students, and other citizens have agreed upon as desirable for their community. (Detailed discussion of these characteristics is of necessity omitted here.)

Here again the conference came up with practical proposals for action programs. Full recognition was of course given to the fact that in many areas of possible action much will need to be done through research and experimentation. Many problems requiring further research were identified and listed.

The conferees left Madison as they left Endicott, satisfied with the fruits of their united labor, both from the point of view of the value of the experience itself to each of the participants, and from the point of view of the progress made. They left also more convinced than ever that only a good start has been made along a road that still offers challenges to clear thinking, teamwork and bold action if the objectives are to be reached in our time.

Members of the Planning Committee for the National Conference of Professors of Educational Administration are: Russell T. Gregg, University of Wisconsin, chairman; William E. Arnold, University of Pennsylvania; Orin Graff, University of Tennessee; David W. Mullins, Alabama Polytechnic Institute; Roald F. Campbell, University of Utah; Ralph Cherry, University of Kentucky; Clyde M. Campbell, Michigan State College; Dana Cotton, Harvard University; Daniel R. Davies, Columbia University, treasurer; and John Lund, Office of Education, secretary.

Code For Comics

FOURTEEN of the thirty-four publishers who produce comics for children and adults in our country recently subscribed to a code of ethics for comics promulgated by the Association of Comics Magazine Publishers. The high points of the code, which may affect the type of comic content regularly circulated to 50 million persons, and read by many school-age children, are: Less sex, no crime detail, no sadistic torture, a minimum of slang and no vulgar language, no "alluring" divorces, and no ridicule of or attack on any religious or racial group.

Key to quiz on page 10.

1. Plus	9. Plus	17. Plus
2. Minus	10. Minus	18 Minus
3. Plus	11. Plus	19. Plus
4. Plus	12. Plus	20. Plus
5. Minus	13. Minus	21. Plus
6. Minus	14. Plus	22. Plus
7. Plus	15. Minus	23. Plus
8. Plus	16. Plus	24. Plus

British teachers, participating in the 1948–49 British-American teacher exchange program, were entertained at the White House before going to teaching posts in 29 States. Mrs. George C. Marshall, wife of the Secretary of State, and representatives of the Department of State and Federal Security Agency welcomed them.

Ten-Point Goal To Strengthen Teaching

A 10-POINT program to help strengthen teaching as a profession, thereby making it more attractive as a career for young men and women, was announced by the executive committee, American Association of Colleges for Teacher Education, at a biennial national conference at Estes Park, Colorado, early this fall.

The program urges: (1) A public relations program to help the public see that "the teachers of this country are the real defenders of the democratic way of life;" (2) high standards of recruitment and selection of prospective teachers; (3) increase in amount of preservice preparation of teachers in public schools to a minimum of 5 years; (4) major changes in curricula for teachers "demanded by the nature of current political, international, economic, social, and educational problems;" (5) adjustment of curricula to the increasing number of junior colleges so that graduates may elect to prepare for teaching without a loss of time; (6) wider and wiser use of laboratory facilities in preparation of teachers; (7) immediate steps to attract better prepared staff members for teacher education institutions; (8) revision of certification laws in many States to permit experimentation and changes in the curricula of institutions preparing teachers; (9) higher salaries for public school teachers, and (10) provision of courses in colleges and universities which prepare teachers that will provide the ability "to discover real life problems in the communities where they teach and to develop curriculum material related to those problems which will aid in their solution and thereby improve the standards of living in those communities."

Walter E. Hager, president, Wilson Teachers College, Washington, D. C., is president of this association.

Life Adjustment Education Conference in Arkansas

EDUCATION for life adjustment was the theme of the annual summer conference for school administrators, cosponsored by the Arkansas Education Association and the State Department of Education at the Hotel Marion at Little Rock, August 16–17, 1948. In summarizing, State Commissioner of Education Ralph B. Jones proposed cooperative action on the part of the State Department of Education, the colleges, the public school leaders, and the public to carry forward the type of educational program discussed at the conference.

The plans of Commissioner Jones, which were similar to those suggested by the Commission on Life Adjustment Education for Youth in its proposal for cooperative action in the various States, included:

1. Enlisting the help of college personnel resources in a reasonable number of cooperating schools which possess potentialities for significant progress in improving education for all youth.

2. Designating one key member of the staff and one staff member from a college to work with each of the selected cooperating schools in the development of survey, planning, and improvement techniques and organization.

3. In the selected cooperating schools emphasizing—

(*a*) The utilization of community resources and the location of community problems and needs.

(*b*) Lay participation in improving the school and other related aspects of community life.

(*c*) Understanding and appreciation of the American way of life and the development of zeal for democratic institutions.

(*d*) Guidance beginning with a study of dropouts and those likely to drop out.

(*e*) Study of the needs and institutions of programs of benefit to out-of-school youth and adults in the community.

(*f*) Pupil and parent participation in community planning activities.

(*g*) Inventiveness in developing new and more effective organizations for learning.

(*h*) Reporting, studying, and evaluating practices and achievements.

(*i*) Keeping the educational profession and the general public continuously informed of the significant activities and measurable achievements.

International Conference on the Crippled

REHABILITATION of the crippled is such an important part of modern life that an international conference was called in July 1948 to consider the medical, educational, and vocational aspects of an all-round program. The first Inter-American Conference on the Rehabilitation of the Crippled and Disabled met in Mexico City. It was sponsored by the International Society for the Welfare of Cripples.

The Conference was attended by representatives from the United States, Canada, 16 Central and South American countries, Spain, and France. The United States sent an official delegation of 10 persons, 3 of whom were from branches of the Federal Security Agency. They were: Michael Shortley, Director of Vocational Rehabilitation, chairman of the delegation of the United States; Edwin F. Daily, Director, Division of Health Services, Children's Bureau; and Romaine P. Mackie. Specialist, Schools for the Physically Handicapped, Office of Education.

Aims of the Conference were to promote the cooperation of official and private organizations, to determine the condition of the crippled in Central and South America, and to make a minimal program for a 5-year plan which would help the Latin American countries organize in a modern way and promote rehabilitation benefits.

The last general session of the Conference adopted sixteen recommendations under the general heading of a "Five-Year Minimum Plan for Aid to the Handicapped." These will appear in the proceedings of the Conference which will be published in both Spanish and English.

While much of the program was devoted to problems in medical and health care, welfare, vocational guidance and placement, and to the general problem of finding the disabled, *education* of both crippled children and adults was considered. Only those phases of the Conference which placed particular emphasis upon education will be reported here.

United States Report

At one of the general sessions, an all-round picture of educational programs for crippled children in the United States was presented by Romaine P. Mackie, Office of Education. Her paper was titled "Education of Crippled Children in the United States." It was pointed out that the education of crippled children in the United States is a part of a rapidly expanding program for the education of various types of exceptional children carried on by State and local departments of education. Within the last 8 years, there has been unprecedented increase in State personnel responsible for the schooling of exceptional children. This expansion has been paralleled by supporting legislation and by the development of teacher education facilities.

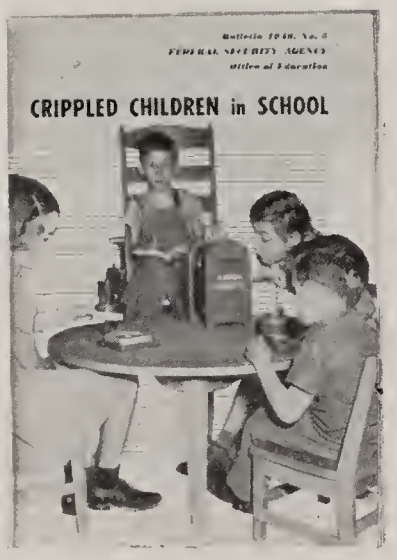
Education was likewise emphasized in a section meeting devoted to the topic "Educational and Vocational Rehabilitation." It was stressed that rehabilitation should begin early in life or early after the onset of disability. It was emphasized that an adequate program for the handicapped should lead to optimum physical recovery, intellectual growth, social and emotional adjustment, and that all of these elements are essential in the preparation for life and vocational adjustment. A program including these elements must provide education to meet the needs of the whole child wherever he is—in schools, in hospitals, in convalescent homes, or in his own home.

A phase of the conference which attracted much attention was an exhibit, assembled by the Office of Education, Federal Security Agency, on schools and classes for crippled children. Approximately one hundred photographs showing crippled children in special day-school classes, in hospitals, convalescent homes, and under home instruction were exhibited in the Museum of Health. These photographs were arranged around a large red, white, and blue sign captioned "Education of Crippled Children in the United States." The exhibit was made possible by the cooperation of several State and local departments of education.

Permanent Exhibit

Another feature of the exhibit was the display of printed publications. Materials from the Office of Education, Federal Security Agency, and from the various State and local departments of education were shown. A collection of this printed material was left as a permanent exhibit in the Museum of Health in Mexico City.

Several of the States contributed publications in quantity. California, for example, sent fifty copies of five different publications. In order to make effective use of these printed materials, they were arranged in thirty packets. One of these packets was given to the official delegate from each country. The few remaining packets were mailed to key people in nations not personally represented at the Conference. The other copies of publications were distributed at the sessions where education was a topic.



ROMAINE P. MACKIE, *one of the United States representatives at the Inter-American Conference on the Rehabilitation of Crippled and Disabled, is Office of Education Specialist for Schools for the Physically Handicapped, Elementary Education Division. She is the author of Office of Education Bulletin 1948, No. 5, "Crippled Children in School," soon to come from the press. For information on proceedings of the Mexico City conference, write to Miss Bell Greve, Secretary-General, 2239 East Fifty-fifth Street, Cleveland 3, Ohio.*

Aviation Education Reports

TWO RECENT reports of research in national aviation policy may be of interest to educators. *Survival in the Air Age* is a report of the President's Air Policy Commission, Thomas K. Finletter, chairman.

National Aviation Policy, by the Congressional Aviation Policy Board, is a report of an independent investigation made by the legislative branch of the Government with the aid of specialists in aeronautics and related fields. Recommendations made in these reports have already led to proposed legislation to correct unsatisfactory conditions and shape future aviation policy.

Survival in the Air Age includes sections on air power and national security, aircraft-manufacturing industry, aeronautical research and development, civil aviation, and Government organization.

National Aviation Policy considers combat aviation, air transport, aircraft manufacture, research, and Government organization.

Concerning aviation education, the policy Board found that, although 30 States have adopted aviation-education programs and 17 others plan such programs, further effort must be made if our citizens are to meet responsibilities of world leadership. "To provide an airminded public and a reservoir of trained personnel," the Board recommended: Promotion of flight and technical courses in colleges and universities with full credit given; aviation education courses in primary and secondary schools; a program of supplying high schools with surplus aircraft equipment.

A brief summary of each report may be obtained free from Aircraft Industries Association, 610 Shoreham Building, Washington, D. C. Order the full reports from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Survival in the Air Age. President's Air Policy Commission. 166 pages, paper-bound. 75 cents.

National Aviation Policy. Senate Report No. 949, Eightieth Congress. 57 pages, paper-bound. 20 cents.

World-Wide Interest in American Education

WHAT TYPES of questions about education United States style are in the minds of educational leaders of other nations?

Galen Jones, Director of the Office of Education's Secondary Education Division, who with Ruth E. McMurry of the UNESCO Relations Staff, Department of State, represented the United States at the Eleventh International Conference on Public Education held at Geneva, Switzerland, this year, helps us answer this question—at least in part.

For SCHOOL LIFE readers these representatives of the United States at the Geneva conference present certain questions asked of the United States delegation upon this occasion:

Belgium (*Mr. Merecy*)

1. Are salaries of elementary and secondary school teachers different?

2. Is the influence of John Dewey upon the educational system of the United States increasing or is it on the wane?

France (*M. Francois*)

3. What are the practices in American secondary schools with respect to the development of world citizenship?

4. Will you illustrate how "democratic practices" are developed in the schools?

Australia (*Mr. Nelson*)

5. Can you tell us if Federal aid to the States for education is likely in the near future?

6. I should like to know more about the exchange of letters between students in American schools with those in foreign countries, both as to volume and the number of countries involved.

Burma (*Mr. Cho*)

7. In most countries, including Burma, teaching is a mission of love and never adequately remunerated. I have noted the publicity about teachers' strikes in at least two of your cities which I find it difficult to understand. I also note the fact of your swelling birth rates and the urgent need for more teachers. Can you explain why such a problem exists in your country?

Egypt (*M. K. El Nahas*)

8. In your program of visual education would you tell us whether silent films are used more widely than sound films?

9. In the audio education area do you depend mostly on programs from commercial stations or State and city school-owned stations?

10. Will you tell us of the rules regulating the exchange of teachers and students with foreign countries?

China (*Dr. Cheng and Prof. Li*)

11. Are Federal aids to education on the increase and, if so, along what lines? Does this mean Federal control?

12. I am aware of the tendency toward the consolidation of rural schools. Has there been any improvement and in what ways?

13. Will you please tell us more about the junior college movement?

14. We are interested in learning more about the provisions of the Fulbright Act and the Smith-Mundt Bill

15. Can you tell us how textbooks in the fields of geography and history contribute to teaching for world-mindedness?

16. Is there currently any shortage of textbooks in the United States?

17. Are women and men teachers treated the same as regards salaries and retirement provisions?

Sweden (*Mr. Karre*)

18. Can you tell us the percentage of youth who go on to college?

19. Is the chief role of counselors to give vocational guidance or does their work also include what we think of as the services of school psychologists?

United Kingdom (*Mr. Wilson*)

20. In the small high school is the entrance selective? If not, how do they manage to encompass all the needs of the pupils?

Scotland (*Mr. Anderson*)

21. How do you develop individual and group responsibilities?

22. How are leadership conferences for youth conducted?

Pakistan (*Dr. Husian*)

23. Are there equal educational opportunities for Negroes? What restrictions if any, are placed upon Negroes?

Iraq (*Mr. Muhyddin*)

24. In decreasing the number of school districts is there a move toward centralization of control?

25. Does the Office of Education plan to help foreign students in locating colleges and residences?

Luxembourg (*Mr. Winter, Miss Wilhelmy*)

26. Can you tell us the percentage of schools using the Winnetka Plan? Is this percentage the same for rural as for urban districts?

27. What is the average wage of public school teachers?

28. What is the relation of "inspectors" to schools?

Bulgaria (*Mr. Mintcher*)

29. Are there any special schools for youth of Slavic origin?

30. Are there any particular opportunities for Slavic youth?

31. What are the provisions for vocational education at the secondary school level?

Portugal (*Mr. Ferreira de Almeida*)

32. Do the proposals of the Commission on Higher Education impose any limitations on the freedom of higher education?

New Books and Pamphlets

A Community School in a Spanish Speaking Village. By L. S. Tireman and Mary Watson. Albuquerque, University of New Mexico Press, 1948. 169 p., illus. $2.50.

Describes a community school and the work with bilingual children.

Dental Health Program for Elementary and Secondary Schools. Chicago, The Council on Dental Health, American Dental Association, 1947. 40 p.

Discusses the dental health problem and outlines the principles of a school dental health program. Lists educational aids for children and adults.

Educational Lessons From Wartime Training. The General Report of the Commission on Implications of Armed Services Educational Programs. By Alonzo G. Grace, Director, and Members of the Staff. Washington, D. C., American Council on Education, 1948. 264 p., illus. $3.

Presents the summary volume on the lessons of the wartime services educational programs for American education now and in the future.

The Metric System of Weights and Measures. Twentieth Yearbook of the National Council of Teachers of Mathematics. Compiled by the Committee on the Metric System, J. T. Johnson, Chairman. New York, Bureau of Publications, Teachers College, Columbia University, 1948. 303 p. $3.

Surveys the nature, history, and advantages of the metric system and offers suggestions for its adoption in classroom and general use.

School Days. Suggestions for Daily Programs in Maine Elementary Schools. Augusta, Division of Curriculum and Instruction, State Department of Education, 1948. 149 p., illus. 75 cents to other than Maine teachers.

Based on classroom experiences; includes examples of different types of daily programs.

Speech Handicapped School Children. By Wendell Johnson, Spencer F. Brown, and Others. New York, Harper and Brothers, 1948. 464 p. $3.

Designed to help classroom teachers, supervisors, and school administrators in the education of speech-defective children.

Two-Way Street; The Emergence of the Public Relations Counsel. By Eric F. Goldman. Boston, Bellman Publishing Co., Inc., 1948. 23 p. $1.25.

Traces the development and growth of the new profession of counsel on public relations.

UNICEF. New York, United Nations International Children's Emergency Fund, 405 East 42d St., 1948. 16 p., illus.

A report to those who have made the work of UNICEF possible.

Your Part in Your Child's Education. An Activity Program for Parents. By Bess B. Lane. New York, E. P. Dutton & Co., 1948. 252 p. $2.50.

A handbook for parents and parent groups interested in community-centered education.

Recent Theses in Education

School Administration

A Comparative Study of State Certification Requirements for Teachers, Supervisors, and Directors in Vocational, Trade, and Industrial Education in the United States. By Basil S. Warner Doctor's, 1946. New York University. 331 p. ms.

Recommends that certification terminology be standardized and simplified; that certification regulations require higher educational attainment of teachers, supervisors, and administrators; and that the State have the exclusive right to issue certificates.

Contributions of Major Surveys or Investigations to the Program of Secondary Education. By Edna C. Miller. Doctor's, 1947. University of Cincinnati. 260 p. ms.

Discusses criteria for evaluating the contributions of the investigations.

The Fiscal Status of Joint High Schools in Pennsylvania Under Act Number 403. By Lewis N. Snyder. Doctor's, 1947. Temple University. 162 p.

Determines the financial effects of this Act on present and proposed joint high schools, and suggests possible new legislation to supplement or extend the benefits of the Act.

Evolution of the Legal Status of the City Superintendent of Schools in Selected States. By John B. Geissinger. Doctor's, 1945. University of Pennsylvania. 254 p.

Studies laws and court decisions affecting the city superintendent of schools in Pennsylvania, Virginia, New York, and Massachusetts, and notes trends.

History of Public School Financial Legislation in North Dakota. By John Hove, Jr. Master's, 1946. University of North Dakota. 65 p. ms.

Analyzes the laws that have determined the tax base, legal levy, and debt limitations, together with laws that have regulated the practice of apportionment of State funds, and theories of equalization.

An Inquiry Into the Supervisory Services Desired by the District Superintendent, Principals, and Teachers of a Supervisory District in New York. By Erwin W. von Schlichten. Master's, 1945. Syracuse University. 79 p. ms.

Discusses the supervisory services desired by all of the teachers, principals, and district superintendent of one supervisory district of one county.

Management Practices in the Elementary Schools of the Greater Washington Area. By Katherine C. DeShazo. Master's, 1947. George Washington University. 47 p. ms.

Studies administrative practices as they relate to management planning, management execution, and management control found in a sampling of the elementary schools of the greater Washington area.

The Relations of City School Systems to the City-Manager Form of Government. By Forbes H. Norris. Doctor's, 1945. Harvard University. 282 p. ms.

Discusses conflicting views of school-city relations, and presents case studies of five cities, studying the structural organizations and personnel.

The Reports of the Elementary Principal to the Local Superintendent of Schools. By Henry C. Ducker. Doctor's 1945. New York University. 144 p. ms.

Analyzes 276 replies to a questionnaire sent to 450 principals of elementary schools throughout the United States in an attempt to determine the phase of administration and supervision most frequently reported to the superintendent and how and when this information is presented to the superintendent by the principal.

Standards for School Plant Construction Established by State Requirements. By Milton W. Brown. Doctor's, 1946. University of Chicago. 169 p.

Attempts to discover the requirements established by different States for materials and methods in the erection and alteration of school buildings, and to determine whether the newer codes are adequate and more complete than the older codes.

A Study of Teacher Reaction to Supervisory Practices. By Mollie B. Whitlock. Master's, 1946. George Washington University. 49 p. ms.

Analyzes data obtained from a questionnaire submitted to 136 elementary school teachers in the Alexandria, Va., city school system.

A Summary of the Literature of 1929–44 Relating to the Supervisory Duties of the Elementary School Principal. By William T. Armstrong. Master's, 1946. University of Cincinnati. 132 p. ms.

Studies problems met by the principal in the performance of his supervisory duties, and the proposals for the solution of these problems, as revealed in the literature.

Supervisory Practices of Principals of Secondary Schools in Metropolitan Washington. By Elizabeth Rolston. Master's, 1946. George Washington University. 60 p. ms.

Describes the development of criteria and of a questionnaire which was sent to 24 principals of junior and senior high schools in the Washington area. Shows that the supervisors are interested in the growth and welfare of their teachers.

Government Films

TO BORROW: Write directly to the producing agency.

TO PURCHASE: Order from Castle Films, Division of United World Films, Inc., 445 Park Ave., New York 22, N. Y.

Department of Agriculture

Blister Rust—Enemy of the Pines
Dead Out
Everyman's Empire
It's No Picnic
Our White Pine Heritage
Paul Bunyan Had a Son
Return of the Pines
Then It Happened
Tongas Timberland

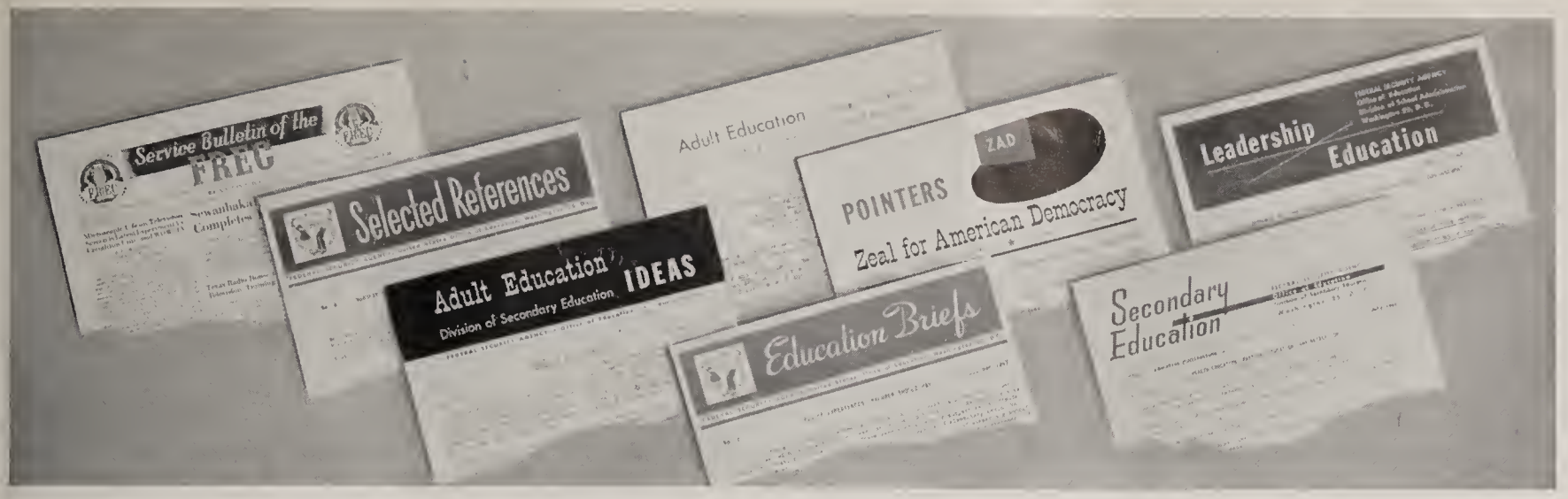
Civil Aeronautics Administration

Our Town Builds an Airport

Fish and Wildlife Service

Basic Net Mending
Retailing Fish

U. S. GOVERNMENT PRINTING OFFICE: 1948



Special-Purpose Publications

SEVERAL PUBLICATIONS, news letter in type, are prepared in divisions of the Office of Education. These special-purpose publications furnish information which may be useful to you or your co-workers in education. They are:

TITLE	*TO PROMOTE*	*DIVISION ISSUING*
Education Briefs	Elementary Education	Elementary Education
Selected References	Elementary Education	Elementary Education
Secondary Education	Secondary Education	Secondary Education
Pointers	Zeal for American Democracy	Z. A. D. Staff
FREC Bulletin	Education by Radio	Auxiliary Services
Adult Education Ideas	Adult Education	Secondary Education
Adult Education References	Adult Education	Secondary Education
Leadership Education	School Administration	School Administration

For information on these or other publications of the Office of Education, write to the Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

USE OF AIRCRAFT IN FORESTRY

Prepared by the Forest Service, Department of Agriculture. 9 p. Processed. Single copies free from the U. S. Forest Service.

Department of Labor

THE AMERICAN WOMAN, HER CHANGING ROLE—WORKER, HOMEMAKER, CITIZEN

Report on 1948 Women's Bureau Conference. 210 p. (Bulletin No. 224.) Free from the Women's Bureau.

EMPLOYMENT OUTLOOK IN THE PLASTICS PRODUCTS INDUSTRY

Prepared by the Bureau of Labor Statistics. 1948. 20 p. U. S. Government Printing Office. (Occupational Outlook Series, Bulletin No. 929.) 15 cents.

Federal Security Agency

FOODS YOUR CHILDREN NEED

Prepared by Children's Bureau, Social Security Administration, in cooperation with the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture. U. S. Government Printing Office, 1948. 15 p. 5 cents.

GUIDE TO HEALTH ORGANIZATION IN THE UNITED STATES

By Joseph W. Mountin and Evelyn Flook, Public Health Service. U. S. Government Printing Office, 1947. 71 p. (Miscellaneous Publication No. 35.) 20 cents.

"LEARNING TO LIVE TOGETHER"

By Katherine Glover, Children's Bureau, Social Security Administration. U. S. Government Printing Office, 1948. In *The Child*, 13: 18–20, 31, August 1948. Single copies, 10 cents; annual subscription, $1. Describes a "try-out of democracy" in the nursery and play school.

THE PUBLIC HEALTH NURSE AND YOU

Prepared by the Public Health Service. U. S. Government Printing Office, 1947. [12] p. 10 cents. Contains such vocational information as duties, qualifications, and opportunities.

National Archives

FACSIMILE OF BILL OF RIGHTS

A 30- x 31-inch facsimile of the original Congressional resolution proposing the articles of Amendment to the Constitution which are known as the Bill of Rights, prepared by the National Archives. Suitable as a wall chart or bulletin display. U. S. Government Printing Office. 55 cents.

Superintendent of Documents

CHILDREN'S BUREAU AND OTHER PUBLICATIONS RELATING TO CHILDREN

Price List 71, 29th Edition. U. S. Government Printing Office, 1948. 8 p. Free.

FOREIGN RELATIONS OF THE UNITED STATES

Price List 65, 28th Edition. U. S. Government Printing Office, 1948. 10 p. Free.

OCCUPATIONS, PROFESSIONS, AND JOB DESCRIPTIONS

Price List 33A, 1st Edition. Washington, U. S. Government Printing Office, 1948. 8 p. Free.

Office of Education

School Life Reprints

(*Free*)

Administration of School Health Services. (May 1948.)

Duty of Teachers To Promote Ideals and Principles of American Democracy. (February 1948.)

Education for the Thirteenth and Fourteenth Years. (June 1948.)

Education of Georgia Supervisors. (March, April, June, 1948.)

A Future for Aviation Education. (May 1948.)

Some Implications of Scientific Methods of Secondary Education. (July 1948.)

Fellowship Opportunities and Teaching Positions in Other Countries (January 1948)

Citizens' Federal Committee on Education Material (January 1948)

Educational Plant Needs (January 1948)

Some Highlights in 1947 Legislation for Exceptional Children and Youth (March 1948)

Parent Education Programs (March 1948)

Deaf Children Under Six Go to School (March 1948)

Office of Education

Printed Bulletins

School Bus Maintenance (Bulletin 1948, No. 2), 15 cents.

Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1947 (Bulletin 1948, No. 8), 15 cents.

Teaching Elementary Science (Bulletin 1948, No. 4), 15 cents.

Processed Materials

Demonstration Workshop on Teacher Education for Health. (September 1948.)

Experimenting in Elementary Science. Elementary Education Division *Education Brief* No. 12. (August 1948.)

Film Catalogs of the United States Government. Visual Aids Section.

Government Monographs on Occupations. Vocational Education Division *Miscellany* 3296. (July 1948.)

Office of Education Publications on Health Education, Physical Education, and Recreation. Secondary Education Division Bibliography. (July 1948.)

A Partial List of 16mm Film Libraries. Visual Aids Section.

Regional Conferences on Zeal for American Democracy. *Pointers*, Zeal for American Democracy Program.

Summary Report of 1948 Regional Conferences, Trade and Industrial Education. (August 1948.)

Work of the Visiting Teacher. Elementary Education Division *Selected References* No. 16. (July 1948.)

Volume 31 Number 3
DECEMBER 1948

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for December 1948

Volume 31 Number 3

Cover photograph: General Mills, Inc., has kindly granted permission for SCHOOL LIFE use of this photograph which paid tribute to the Nation's teachers in many national publications during the 1947 Christmas season. Remember the caption?—It was Merry Christmas, Miss Miller.

School Life Spotlight

"INDEED, academic freedom is nothing more than a specific application of the freedoms inherent in the American way of Life." . . . . . p. 2

★ ★ ★

"How to make best use of surplus property acquired through proper channels is a problem common to many teachers." . p. 3

★ ★ ★

" . . . such a station involves only the expenditure of approximately $2,500 for transmitter and an additional $2,500 for a single studio control room and other necessary equipment." . . . . . p. 7

★ ★ ★

"All over the Nation, boys and girls are protesting against the unrealistic offerings of the traditional curriculum in the only way they know: They are dropping out of school at an alarming rate." . . p. 8

★ ★ ★

"Don't always wait until a teacher retires to say 'thank you' for some significant achievement." . . . . . p. 12

Published each month of the school year, October through June.

To order SCHOOL LIFE send your check, money order, or a dollar bill (no stamps) with your subscription request to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. SCHOOL LIFE service comes to you at a school-year subscription price of $1.00. Yearly fee to countries in which the frank of the U. S. Government is not recognized is $1.50. A discount of 25 percent is allowed on orders for 100 copies or more sent to one address within the United States. Printing of SCHOOL LIFE has been approved by the Director of the Bureau of the Budget.

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GEORGE KERRY SMITH... Chief, Information and Publications Service
JOHN H. LLOYD..... Assistant Chief, Information and Publications Service

Address all SCHOOL LIFE inquiries to the Chief, Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

As a General becomes a President

ADDRESSING a selected group of leaders of schools and colleges both in this country and abroad, General Dwight D. Eisenhower, upon occasion of his inauguration as president of Columbia University on Columbus Day, October 12, said, "If this were a land where the military profession is a weapon of tyranny or aggression—its members an elite caste dedicated to its own perpetuation—a lifelong soldier could hardly assume my present role. But in our Nation the Army is the servant of the people, designed and trained exclusively to protect our way of life. Duty in its ranks is an exercise of citizenship. Hence, among us, the soldier who becomes an educator or the teacher who becomes a soldier enters no foreign field but finds himself instead engaged in a new phase of his fundamental life purpose—the protection and perpetuation of basic human freedoms."

President Eisenhower's address, his first public statement on American education since he became the thirteenth President of Columbia University, has been widely quoted. Because of its appeal for liberal education, academic freedom, and education for democratic citizenship, and believing that its content will challenge all teachers and educational leaders, SCHOOL LIFE presents these selected excerpts from the whole address:

"Today's challenge to freedom and to every free institution is such that none of us dares stand alone. For human freedom is today threatened by regimented statism. The threat is infinitely more than that involved in opposing ideologies. Men of widely divergent views in our own country live in peace together because they share certain common aspirations which are more important to them than their differences. But democracy and the police state

have no common purposes, methods, or aspirations. In today's struggle, no free man, no free institution can be neutral. All must be joined in a common profession—that of democratic citizenship; every institution within our national structure must contribute to the advancement of this profession."

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"Democratic citizenship is concerned with the sum total of human relations. Here at home this includes the recognition of mutual dependence for liberty, livelihood and existence of more than 140 million human beings. Moreover, since we cannot isolate ourselves as a nation from the world, citizenship must be concerned, too, with the ceaseless impact of the globe's 2 billion humans upon one another, manifested in all the multitudinous acts and hopes and fears of humanity.

"The educational system, therefore, can scarcely impose any logical limit upon its functions and responsibilities in preparing students for a life of social usefulness and individual satisfaction. The academic range must involve the entire material, intellectual and spiritual aspects of life."

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"But it is not enough merely to realize how freedom has been won. Essential also is it that we be ever alert to all threats to that freedom. Easy to recognize is the threat from without. Easy, too, is it to see the threat of those who advocate its destruction from within. Less easy is it to see the dangers that arise from our own failure to analyze and understand the implications of various economic, social, and political movements among ourselves. Here is a definite task for the teacher.

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". . . The broadest possible citizen understanding and responsibility is as necessary in our complex society as was mere literacy before the industrial revolution."

☆ ☆ ☆

"At all levels of education, we must be constantly watchful that our schools do not become so engrossed in techniques, great varieties of fractionalized courses, highly specialized knowledge, and the size of their physical plant as to forget the principal purpose of education itself—to prepare the student for effective personal and social life in a free society. From the school at the crossroads to a university as great as Columbia, general education for citizenship must be the common and first purpose of them all.

"I do not suggest less emphasis on pure research or on vocational or professional training; nor by any means am I suggesting that curricula should be reduced to the classical education of the nineteenth century. But I deeply believe that all of us must demand of our schools more emphasis on those fundamentals that make our free society what it is and that assure it boundless increase in the future if we comprehend and live by them.

"Love of freedom, confidence in the efficacy of cooperative effort, optimism for the future, invincible conviction that the American way of life yields the greatest human values—to help the student build these attitudes not out of indoctrination but out of genuine understanding, may seem to some to be education in the obvious.

"Of course, the reverse is true. There is a growing doubt among our people that democracy is able to cope with the social and economic trials that lie ahead. Among some is a stark fear that our way of life may succumb to the combined effects of creeping paralysis from within and aggressive assault from without.

"Fear of the future with a concomitant sense of insecurity and doubt of the validity of fundamental principles is a terrible development in American life—almost incredible in the immediate aftermath of America's most magnificent physical and spiritual triumphs. Only by education in the apparently obvious can doubt and fear be resolved."

☆ ☆ ☆

"Historical failures in the application of democratic principles must be as earnestly studied as the most brilliant of democracy's triumphs. But underlying all must be the clear conviction that the principles themselves have timeless validity. Dependence by the country upon the schools for this vital service implies no infringement of academic freedom.

"Indeed, academic freedom is nothing more than a specific application of the freedoms inherent in the American way of life. It follows that to protect academic freedom, the teacher must support the entire free system which, among other things, guarantees freedom for all."

Million Teachers Needed

A 10-MEMBER National Commission on Teacher Education and Professional Standards met recently at the National Education Association headquarters in Washington, D. C., and announced that 1,289,000 teachers will be needed during the next 10 years to meet the Nation's growing school enrollments. The Commission's break-down of the million-teacher need:

(Elementary)

To replace teachers who retire, die, or leave the classroom	553,000
To provide one additional teacher for each 30 additional pupils	262,000
To replace teachers holding emergency licenses	70,000
To reduce the size of classes to an average of 25 pupils	160,000

(Secondary)

To replace high school teachers who will leave the classroom	174,000
To provide one additional teacher for each additional 30 pupils	49,000
To replace high school teachers holding emergency certificates	20,000

Chairman of the Commission is L. Frazer Banks, Superintendent of Schools, Birmingham, Ala.

Dr. Benjamin W. Frazier

TEACHER education specialist in the Office of Education for more than 20 years, Dr. Benjamin William Frazier, Division of Higher Education, died September 15 in Bethesda Hospital, Bethesda, Md., after a week's illness. Dr. Frazier joined the Office of Education staff in 1927. His surveys and publications have been major contributions to the advancement of teacher education programs in the United States during the past generation. His last bulletin, "Teaching as a Career," was only recently announced in SCHOOL LIFE.

Features Office of Education

FEATURED in the October 1948 issue of *The Phi Delta Kappan* is an article on "The Organization and Functions of the Office of Education" by Andrew H. Gibbs, Research Assistant, Division of School Administration, Office of Education. Editor of *The Phi Delta Kappan*, official national organ of Phi Delta Kappa, professional fraternity for men in education, is Rolfe Lanier Hunt. Phi Delta Kappa national office is located at 2034 Ridge Road, Homewood, Ill.

How To Increase Surplus Property Utilization

HOW ARE YOU making use of surplus property in your State—in your city or school? The Office of Education is establishing a "central clearing house" for information about specific projects relating to surplus property utilization. You can both contribute to and be served by this central information service on surplus property adaptation and use in education. Write for a copy of a 4-page leaflet entitled, *Bibliography of Articles on Conversion of War Surplus Equipment for Civilian and School Use.* The supply is limited. This leaflet contains references to sources of detailed information on surplus property conversion such as: Good Televisor From War Surplus . . . *Radio Craft,* Jan. 1948; Build Your Own Television Receiver Using BC412 Scope . . . *Radio News,* Aug. 1947. In requesting the bibliography, address your request to the Division of Secondary Education, Office of Education, Federal Security Agency, Washington 25, D. C. Enclose with your request your contributions on utilization of surplus property which will be shared with others in the field of education. Whenever possible, submit drawings and descriptions of how you converted surplus property items to school use. Proper credit will be given the contributor if his report is used in a future publication of the Office of Education.

SCHOOLS throughout the United States have received by direct donation from the Air Forces to date surplus property materials valued at more than 62 million dollars. Donations from the other services of the National Military Establishment advance the total valuation of materials received many more millions of dollars.

How do schools get this surplus material for use and adaptation in the classroom? How are they putting it to work in the service of education?

First, schools must make requests for surplus property through their own State Educational Agency for Surplus Property, says Willis C. Brown, Aviation Education Specialist, Office of Education Division of Secondary Education.

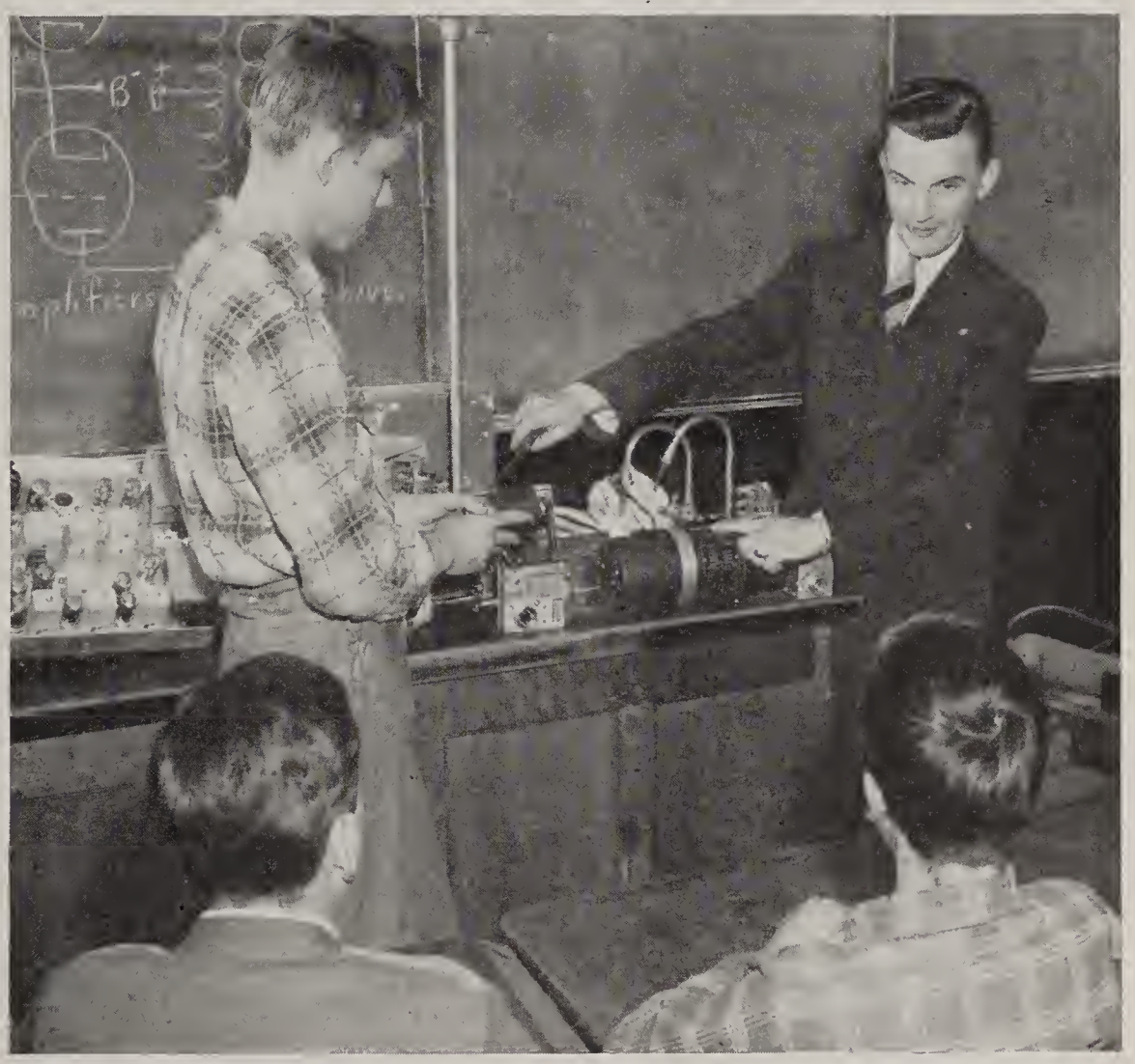
"How to make best use of surplus property acquired through the proper channels is a problem common to many teachers," Mr. Brown points out. "Some States are making up kits of materials for different subject classes. Others depend on the initiative of local schools to indicate what they can use. In any case," he says, "secondary schools should find many uses for surplus property that are consistent with modern curricula needs."

"Many teachers find it difficult or impossible to demonstrate modern science developments because existing apparatus is often very old and of a traditional type," Mr. Brown points out. "Science pupils in many high schools are handicapped by meager or inadequate laboratory equipment." To both teachers and administrators he suggests that "many types of surplus electronic equipment as well as aircraft instruments and parts are still available to schools from Air Force sources. Much of this equipment frequently can be used with little change, or parts may be used to construct apparatus suitable for demonstrating science principles. Such uses," he continues, "add vitality and realism to science and industrial arts classes, and also make possible much interesting and instructive project work for pupils."

According to Mr. Brown, "very little literature exists that will help teachers and other school personnel adapt surplus equipment to instructional needs. A committee of teachers with initiative representing such fields as physics, science, or industrial arts may develop many ingenious devices for use in classrooms. It is believed that a school will be richly repaid for the time spent on this type of project."

(*Continued on page 7*)

EVERY STATE has a State Educational Agency for Surplus Property through which public tax-supported and nonprofit educational institutions, tax exempt under Internal Revenue Code 101.6, are eligible to receive property available for donation from the Army, Navy, and Air Forces under provisions of Public Law. This State Educational Agency for Surplus Property functions in collaboration with the State Department of Education and is located in the State Capital. Administrators and teachers interested in securing surplus war materials should write to the Educational Agency for Surplus Property in their own State.



Teacher uses surplus equipment to teach principles of physics to high school students in Durham, North Carolina.

Trade and industrial education students preparing for their life's work.

Vocational agriculture students get experience in democratic processes through FFA.

Vocational Education—Democracy in Action

THIS summary of many ways in which vocational education offers opportunity for the teaching of democratic principles, attitudes, and practices is presented by Mildred Louise Boie, formerly of the Zeal for American Democracy staff, Office of Education. It is offered as a suggestive statement to administrators and teachers in other fields of education equally interested in making their programs living and meaningful for students as builders of democracy—today and tomorrow.

LIKE happy family life, democracy is not an abstract idea or ideal that boys and girls learn by rote or by lecture from their elders. Democracy means patterns of living and acting that individuals develop because of their own emotional needs, and the pressure of other human beings' needs—through their own concrete experience with other people in real situations.

If the family shares the chores around the home, the use of the radio, the mother's attention and care, everyone in the family is experiencing democracy. The give and take, the duties and privileges, the mutual consideration and respect, the free discussion and cooperative planning which living together requires, give children in the family security and confidence; develop healthy adjustments; encourage self-expression at the same time that they modify aggression and selfishness; make the individual feel wanted and needed, and help him recognize and respect the wants and needs of other human beings—all goals of democracy.

In the same way, if the boys and girls in a school share the planning and discussion of their needs, wants, and work, the cooperative use of materials, the teachers' attention and help, they are developing attitudes and emotional patterns and learning habits of work which spell living democracy.

Office of Education staff members in the Vocational Education Division report some of the ways in which vocational schools and classes throughout the country help young people and adults develop attitudes, abilities, and practices that foster democracy—a wealth of creative ideas, practical suggestions, and concrete methods that indicate the significance of vocational education in our democratic way of life.

Using Democracy in Real Life Situations

Vocational education puts democracy to work in providing opportunities for the practice of democratic procedures in real life problems and situations. In home economics education programs, for example, concrete studies of foods and nutrition, housing, home furnishing, equipment, clothing, and textiles deal with the solution by students of actual home problems. Student needs also are related to those of other members of the family. The student therefore practices democratic respect and consideration for the rights and needs of her own intimate social group.

In retail store training and in trade and industrial education, cooperative courses are planned which use the facilities of business and industrial establishments to give concrete training opportunities for students. Through working in such establishments, the students get first-hand knowledge of the problems and democratic practices of business and industrial life.

Vocational guidance helps trainees analyze their own problems and make choices and plans accordingly.

Home economics education students learn how to solve actual home problems in the classroom.

Helping the Individual

Basic in vocational education is the democratic principle and practice of giving each individual opportunity to learn and grow according to his own ability and environment.

Vocational education also contributes to democracy in helping to choose and develop leaders. By tests and tools, guidance services identify and measure the traits and abilities that are important for developing democratic leadership. Such devices offer means for identifying boys and girls who have these traits. They also help individuals identify and use opportunities, such as committee work, for cooperation and leadership. Special counseling service helps the individual analyze his own needs and abilities and helps him build confidently his training program.

Meeting Democratic Responsibilities

Vocational education helps boys and girls recognize the duties and responsibilities as well as the privileges of citizens in a democracy. Through organizations such as the Future Farmers of America, the New Farmers of America, the Future Homemakers of America, and New Homemakers of America, students not only plan their own work—by democratic method, group discussion, parliamentary procedure, and participation in community activities—but assume also responsibility for doing the work planned and for its results.

A splendid opportunity for democratic activity is developed through cooperative programs for community good: cooperative buying and selling of farm products, training rural electrification workers, cooperating with community agencies.

Special Topics in Democracy

By all these practical methods and concrete projects, vocational education offers students a living experience in democracy. Having experienced democracy in their training, students are more likely to recognize its fundamental principles in the community in everyday contact with others.

In courses in child development, family economics, and family and community relations, for example, students learn to deal with children democratically, to determine the values most important for the individual or the family group and to plan how to use money to help attain these values, to help improve family or community situations in which better facilities are actually provided for members of the family or community.

In courses in business law, they learn the laws that control business activities, the reasons for those laws, and the operation of courts that control the application or misapplication of laws. In business economics and in courses in selling and management, students learn about the American system of free enterprise, consumer demand and supply, the sources of economic goods and services, and the government's relation to business and its interest in the consumer. Understanding these factors of American life is recognized as essential for the intelligent participation of citizens in our democracy's economic life.

Informing the Public

Directly and effectively, vocational education shares with the citizens of the community knowledge of its goals, programs, and work. By including community businesses and industries in its planning of vocational instruction, it shares its work with the community; by training young people and adults for useful and needed work in the community, it serves the community; by helping develop the abilities of individuals, it contributes to the citizens' welfare. Here is democracy in action.

British Exchange Positions

IF YOU ARE a teacher in a special field, and wish to exchange positions for one year with a British teacher in the same field, write a letter of application to Dr. Paul Smith, Chairman, Committee for the Interchange of Teachers, Office of Education, Federal Security Agency, Washington 25, D. C.

Dr. Smith reports openings for special teachers to exchange posts with a teacher of Great Britain during the 1949–50 school year.

Openings announced are as follows:

1 teacher of arts and crafts—secondary school.
5 teachers of home economics—junior college level.
2 teachers of the deaf.
1 teacher of woodwork—elementary school.
3 teachers in hospital schools.
8 teachers in grammar schools—junior college level, including 3 in geography, 1 each in French, physical education, German and French, biological sciences, and chemistry.
2 teachers in training colleges for teachers, 1 each in education and mathematics.

Applicants for these positions should be teachers regularly employed in American schools. Applications should be submitted as early as possible.

New Assignment

C. F. Klinefelter, a veteran member of the staff of the Office of Education's Division of Vocational Education, has been designated as Consultant, Supervisory Training in Industry. For 16 years Dr. Klinefelter was associated with the late Charles R. Allen in the training of conference leaders for the vocational education program and in the development of instructional material for use by foreman conference leaders. Dr. Klinefelter will serve on the staff of the Trade and Industrial Education Service, Office of Education.

United States Navy Occupational Handbook

THIS statement on the United States Navy Occupational Handbook was written by Royce E. Brewster, Assistant Chief, Occupational Information and Guidance Service, Vocational Education Division.

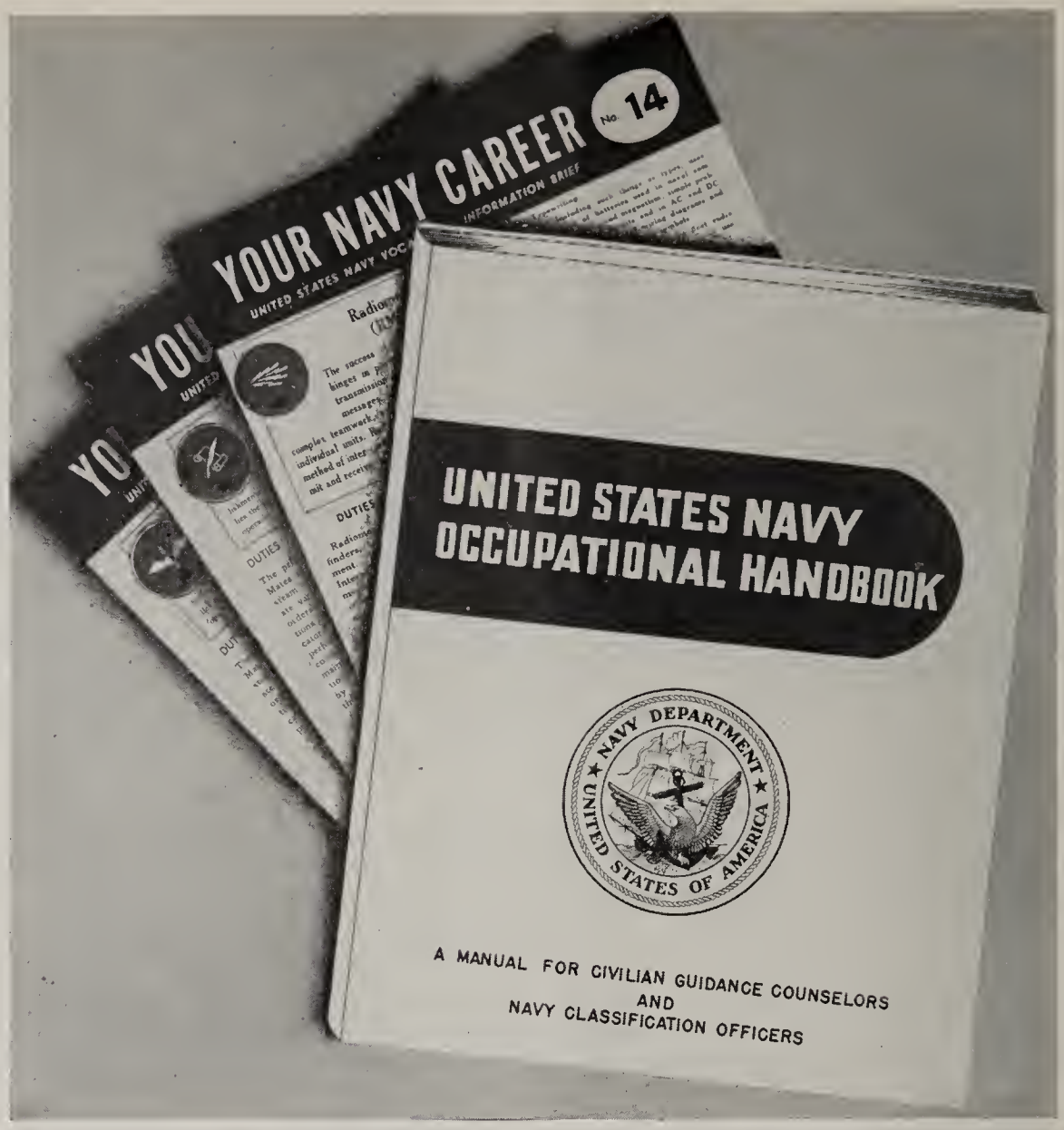
DISCUSSION and conference with leading educators and vocational counselors by the School and College Relations Officer of the Navy made it clear that there was a definite need for a publication that could be used by school and civil agency counselors as a guide to the Navy's broad occupational structure.

Steps were taken, therefore, to develop, with the cooperation of educators, a useful counseling aid, descriptive of the Navy's 62 job-family groups, most of which have their counterparts in civilian occupations, and explaining also the peacetime rating structure of the Navy.

Development of the desired publication was directed by Lt. Comdr. Richard Barrett Lowe, USNR, School and College Relations Officer, Bureau of Naval Personnel. With the counsel of the Occupational Information and Guidance Service, Office of Education, and cooperation of the Billet and Qualifications Research Division, Bureau of Naval Personnel, Comdr. Lowe brought together a group of Naval Reserve officers to work on this project. The officers were called to active duty from positions in education, guidance, and personnel fields to give the Navy the benefit of their advice, experience, and skill in producing the counseling data needed by school administrators, teachers, and counselors of youth.

Their project has now been completed. They have prepared a publication known as the *United States Navy Occupational Handbook*, which gives the major types of information needed to describe the 62 vocations for which the Navy furnishes training. The Handbook, ready for distribution to all secondary schools, contains 62 Vocational Information Briefs, plus 4 additional monographs to supply information on the following: "Recruit to Petty Officer," "Women in the Navy," "Commissioned Officers," and "The Naval Reserve." With each copy of the Occupational Handbook sent to high schools will be a duplicate packet of the Vocational Information Briefs for use in conjunction with it. This extra set also will enable the counselor to use the handbook as a counselor's office manual or library copy with the separate briefs available for filing under their respective job classifications. Each brief supplies the following factual information: What the Job Is; Duties and Responsibilities; Work Assignments; Qualifications and Preparation; Training Given; Path of Advancement; Related Naval Occupations; Related Civilian Jobs, and Emergency Service Ratings.

As a complete, authoritative job analysis of one of the world's largest technical organizations, the *United States Navy Occupational Handbook* is unique both in its make-up and in its philosophy. It is a contribution to the literature of occupational and vocational information and sets a pattern which doubtless will be followed by other agencies. The material should be in the hands of all guidance and personnel workers throughout the country.



School Radio Equipment Guide Now Available

A SET OF standards to guide school administrators in selecting appropriate radio equipment has been released by a joint committee of educators and manufacturers. In cooperation with the Office of Education, the Radio Manufacturers Association has published a 40-page brochure, *Classroom Radio Receivers*.

School authorities confronted with the problem of selecting suitable classroom radio receivers, the committee advises, should analyze four factors: First, the educational objectives of classroom audio activities; second, the specific broadcast programs that are or will be available for classroom use; third, the method of transmission (FM, AM, and short wave) offering the desired programs; and finally, the type of classroom radio receivers needed to tune these programs.

The publication is available without charge from the Radio Manufacturers As-

sociation, 1317 F Street NW., Washington, D. C., or the Radio Section of the Office of Education, Federal Security Agency.

Another publication, *FM for Education*, offers suggestions for planning, licensing, and utilizing FM educational radio stations owned by schools, colleges, and universities.

Chief author of this Office of Education publication, Franklin Dunham, Chief, Educational Uses of Radio, recently spoke on the Opportunities Now Available to Education in the Lower Power FM Frequencies at the annual convention of the Association of Educational Broadcasters, held at the University of Illinois. Dr. Dunham also represented the United States in a forum discussion, Radio Round the World, at the School Broadcast Conference in Chicago which brought together school and college leaders in educational radio from this country and abroad.

Part 4 of the Office of Education publication, *FM For Education*, tells how to acquire an FM station, and part 5 explains how to set up such a station.

Most significant for schools and colleges interested in FM education is an article, "Communications Become Important Aid to Learning" by Dr. Dunham, which appears in the November 15 issue of HIGHER EDUCATION, Office of Education biweekly periodical. In this detailed treatment of FM radio and television, Dr. Dunham refers to "announcement of new and more lenient rules by the Federal Communications Commission which went into effect September 27, 1948, inviting educational institutions to utilize the new low-power FM facilities." He describes experimental use of FM broadcasting by a university over an area of 6 miles radius from its transmitter with power of only 2½ watts. "The FCC," he points out, "after a full study and investigation, raised the limit for this type of service to 10 watts which will undoubtedly cover a much more extensive area in more topographical locations."

Top news is the fact that "such a station," according to Dr. Dunham, "involves only the expenditure of approximately $2,500 for transmitter and an additional $2,500 for a single studio control room and other necessary equipment. This may be raised to $3,500 additional if another studio is desired, or to $4,500 if three studios are deemed necessary."

Hundreds of schools and colleges wishing to take advantage of the new low-cost FM educational opportunities have already written to the Office of Education requesting further information and applications. The publication *FM for Education*, Misc. No. 7, Revised 1948, price 20 cents, gives information on making applications for FM stations and broadcasting service.

Babies Today—Pupils Tomorrow

CANS AND JARS of baby food are the fastest moving items on the grocers' shelves today, it is reported in the September 1948 issue of *Advertising and Selling*. According to the report, a study by the Grocery Manufacturers of America reveals that baby food tops all other grocery purchases. Record sales of baby food today forecast peak enrollments of pupils tomorrow.

Historic Documents in Facsimile

SIGNIFICANT historic documents in the custody of the Archivist of the United States, such as the Bill of Rights, are now being reproduced in facsimile by the National Archives for sale to schools, libraries, and the public, according to Dr. Wayne C. Grover, the Archivist.

To meet the demand for copies of documents important in securing traditional American liberties and illustrating other aspects of United States history and to provide them at a much lower cost than would be possible in filling individual orders, the National Archives has begun to reproduce such documents in quantities by photographic and other methods. So far 14 documents, including photographs, have been so produced in facsimile. The facsimiles, which are described in the list attached, are for the most part the same sizes as the original documents. A facsimile of the large, five-page Emancipation Proclamation, signed by Abraham Lincoln, is now being prepared, but it is not yet known how much it will cost.

The facsimiles may be ordered from the Exhibits and Information Officer, National Archives, Washington 25, D. C. Orders for large quantities of Facsimile No. 1, Bill of Rights, however, should be addressed to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Accompany each order addressed to the National Archives with a check or postal note made payable to the Treasurer of the United States. Facsimiles available are:

No. 1. **Bill of Rights.** (32" x 34") 55 cents.

No. 2. **Oath of Allegiance of George Washington at Valley Forge, 1778.** (10" x 8") 20 cents.

No. 3. **Deposition of Deborah Gannell, Woman Soldier of the Revolutionary War.** (11" x 14") 20 cents.

No. 4. **Photograph of Indian Chief Sitting Bull.** (8" x 10") 20 cents.

No. 5. **Photograph of Abraham Lincoln.** (8" x 10") 20 cents.

No. 6. **Revolutionary War Recruiting Broadside.** (11" x 14") 20 cents.

No. 7. **Photograph of Robert E. Lee.** (8" x 10") 20 cents.

No. 8. **Letter from Dolly Madison Agreeing to Attend Washington Monument Ceremonies, 1848.** (8" x 10") 20 cents.

No. 9. **Historical Sketch of the Washington National Monument to 1849.** (11" x 14") 20 cents.

No. 10. **Broadside Soliciting Funds for Completion of Washington Monument, 1860.** (11" x 14") 20 cents.

No. 11. **Certificate of Membership in the Washington National Monument Society.** (10" x 8") 20 cents.

No. 12. **Appeal to Masons for Funds for Washington Monument, 1853.** (11" x 14") 20 cents.

No. 13. **Photograph of John J. Pershing.** (8" x 10") 20 cents.

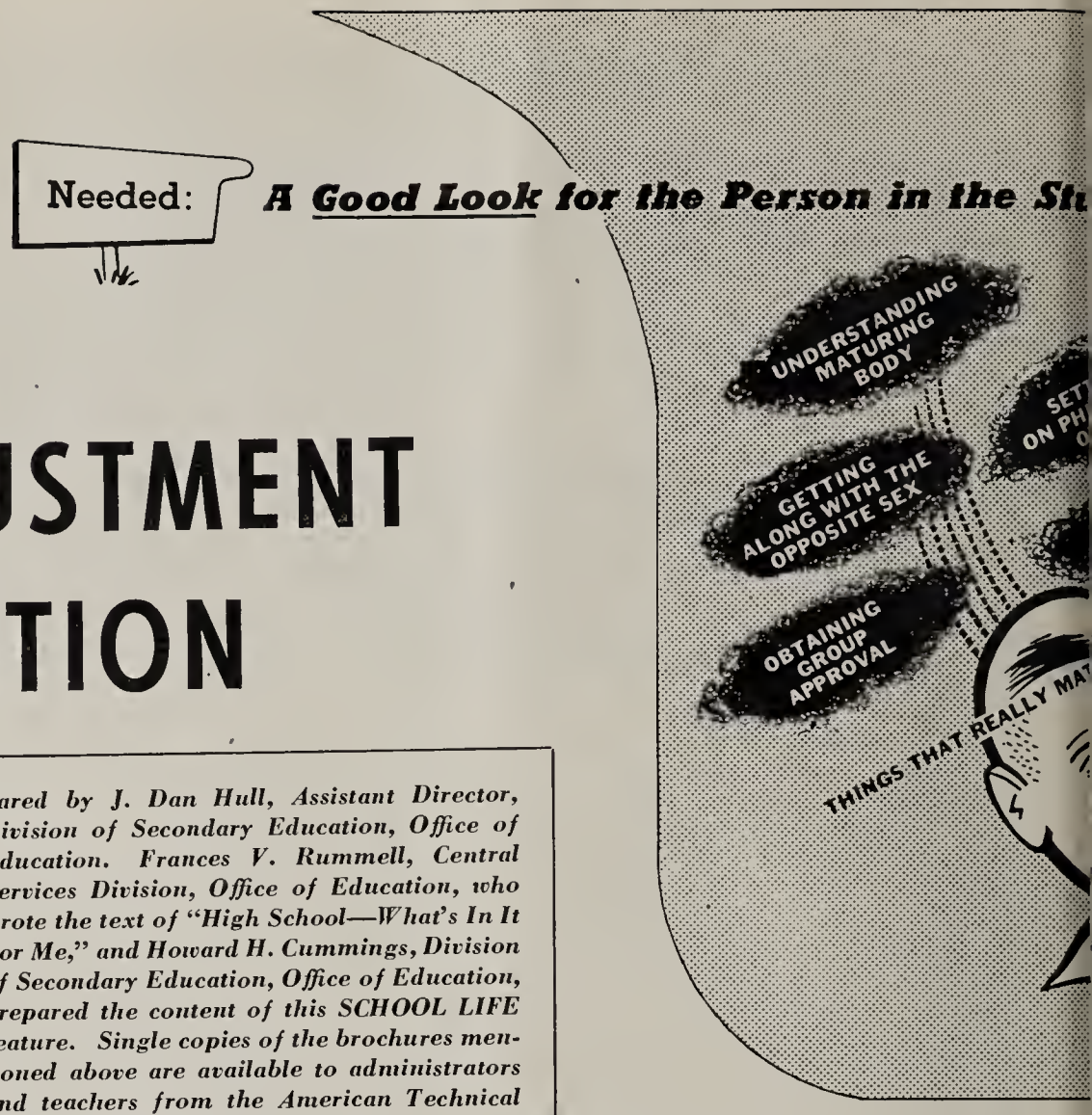
No. 14. **Photograph of Dwight D. Eisenhower.** (8" x 10") 20 cents.

SURPLUS PROPERTY

(Continued from page 3)

How one school, the Bronx High School of Science, New York City, has used surplus property effectively to enrich its science educational program is revealed in the following:

1. Alnico magnet used to build a wobbly bar or floating magnet.
2. Lucite cut to make refraction block.
3. Uncased variac—cased and calibrated to furnish variable power.
4. Aircraft radio equipment used to build power supply.
5. Aircraft radio equipment used to build amateur transmitter.
6. Large selsyn motor used to make phase angle demonstration apparatus.
7. Drift-meter converted to galvanometer.
8. Prisms and lenses used for laboratory demonstrations in light.
9. Air-cooled engine set up for dynamometer demonstration.
10. Carburetors sectionalized for demonstration.
11. Airplane engines sectioned for demonstration.
12. Field telephone used to demonstrate principles of telephone.

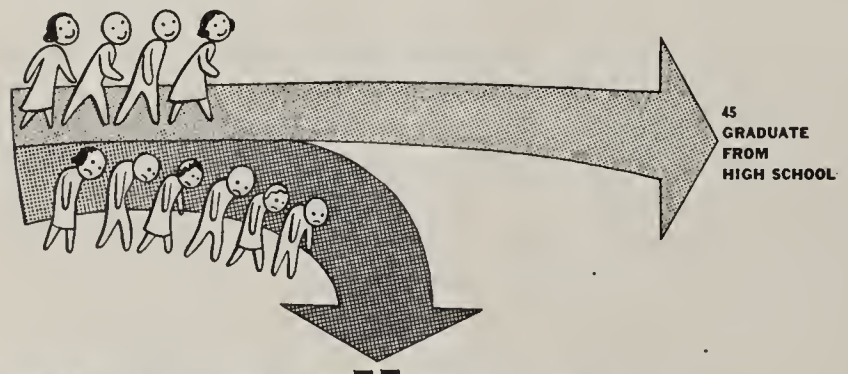


LIFE ADJUSTMENT EDUCATION

SCHOOL LIFE credits the American Technical Society, Drexel Avenue, at Fifty-eighth Street, Chicago 37, Ill., for granting permission to use the illustrations in this presentation. These and other illustrations, by William N. Thompson, Office of Education Graphics Specialist, will appear in a brochure, "High School—What's In It for Me," being published by the American Technical Society. Also being published by the Society to further the Life Adjustment Education Program is a primer on "Life Adjustment Education" prepared by J. Dan Hull, Assistant Director, Division of Secondary Education, Office of Education. Frances V. Rummell, Central Services Division, Office of Education, who wrote the text of "High School—What's In It For Me," and Howard H. Cummings, Division of Secondary Education, Office of Education, prepared the content of this SCHOOL LIFE feature. Single copies of the brochures mentioned above are available to administrators and teachers from the American Technical Society. Write for your copy today.

MOST boys and girls are headed for jobs that require little training. These youth need and want an invigorated education that relates to their everyday lives. So, as a matter of fact, do the youth who are bound for college or for the skilled occupations. For tomorrow all youth—however they earn their bread—will be struggling against the social, economic, and emotional tensions that headline modern life.

All youth need instruction in human relations, civic obligations, consumer education, work experience, physical and emotional health, and international affairs. Such studies help smooth the continuing perplexities adults face in trying to be effective workers, citizens, and family members. Such studies face up to the demands made upon all persons who would live whole and significant lives.



Of every 100 youngsters 55 drop out of school

BOREDOM and FRUSTRATION—factors behind drop-outs

Today the traditional curriculum of specialized courses frequently offers thin and unsatisfying fare. It must be reinforced. And for the majority of our youth—those who would stand to benefit most from a general education—the traditional curriculum is far below subsistence level.

All over the Nation, boys and girls are protesting against the unrealistic offerings of the traditional curriculum in the only way they know: They are dropping out of school at an alarming rate.

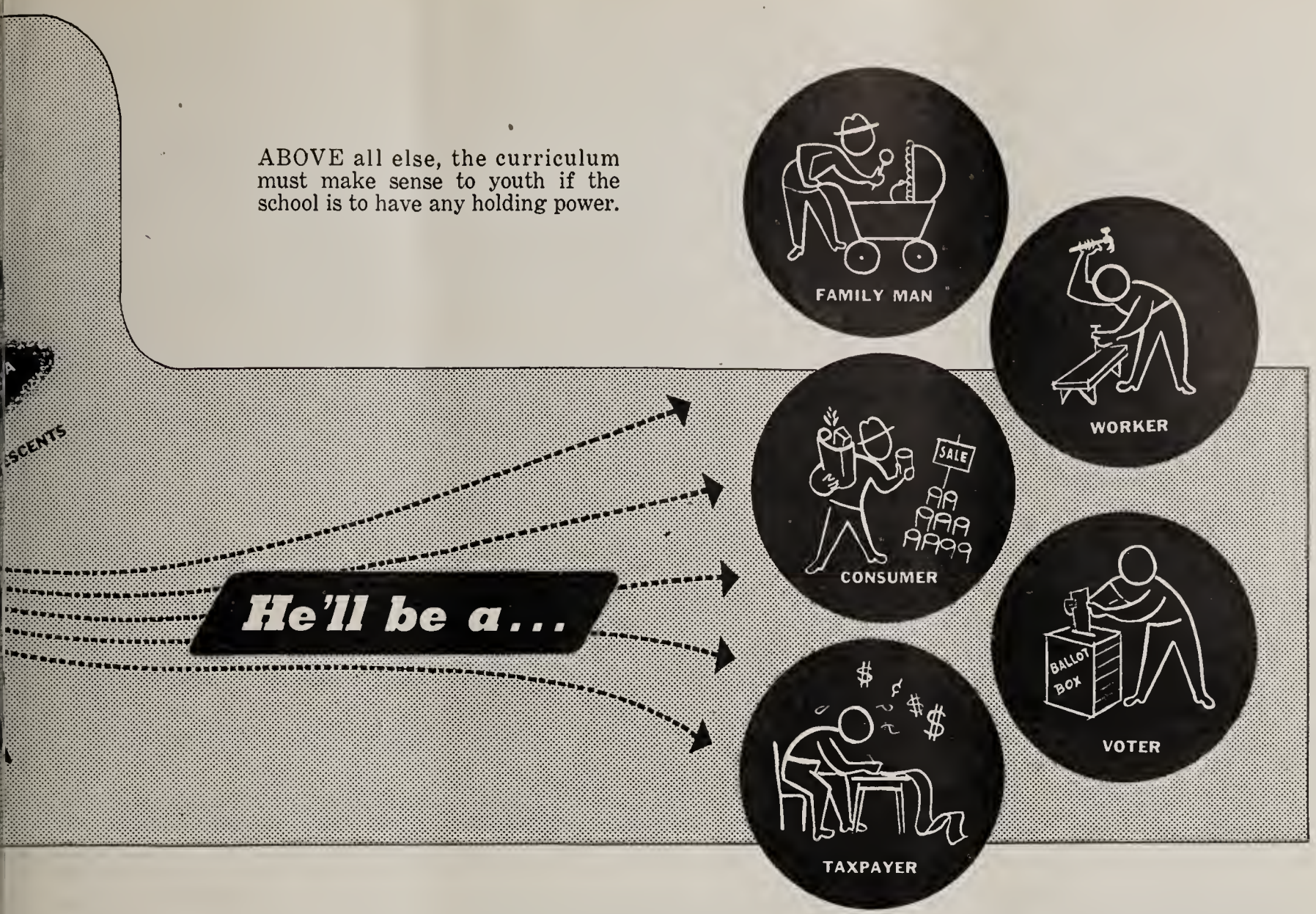
Only 45 Graduate

Of every 100 youngsters who start to school, 45 stick long enough to graduate from high school. Investigations clearly show that the great majority of drop-outs leave school because they cannot see that education is getting them anywhere.

What to do about this problem? Educational leaders have been concerned with possible solutions for the past generation. During the past 2 years leaders in both vocational and general education have made a fresh attack. A special Commission on Life Adjustment Education for Youth was organized to help crystallize the planning for Nation-wide action that could make educational offerings more attractive and meaningful to young people preparing to take their places in society as citizens, workers, and family members.

Latest step toward action that could furnish helpful guides to school administrators and teachers desiring to serve to the fullest

ABOVE all else, the curriculum must make sense to youth if the school is to have any holding power.



the young people at the secondary school level was the calling of a work conference on Life Adjustment Education. Eighty-three educators from 28 States, in addition to consultants and members of the Commission on Life Adjustment Education participated in this conference at Washington, D. C., in October. Galen Jones, Director, Division of Secondary Education, Office of Education, reviewed the work of the Commission. Superintendent Benjamin C. Willis, of Yonkers, N. Y., Commission Chairman, and Ward P. Beard, Assistant Director, Office of Education Division of Vocational Education, addressed the conference. Thirteen hours of working time were devoted to each of the nine problem areas which the conferees decided to consider:

▶ 1. How can a Life Adjustment Program be initiated in a given school?

▶ 2. How can citizens, parents, and community groups contribute to the successful development of the program?

▶ 3. What should be included in the curriculum?

▶ 4. What teaching techniques and materials are needed?

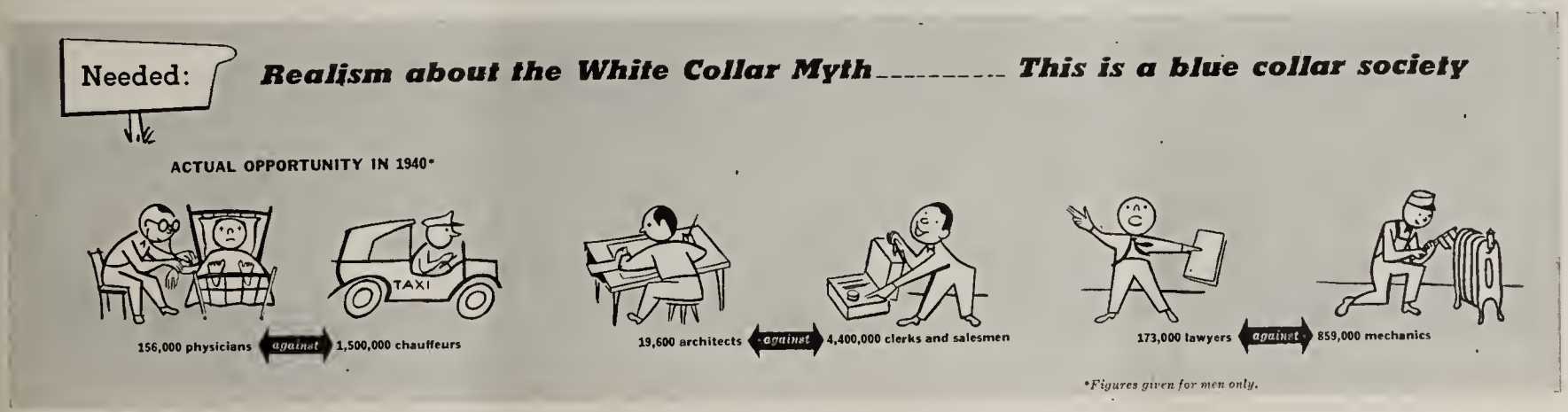
▶ 5. What kinds of organization and administration are essential to facilitate the program of Life Adjustment Education?

▶ 6. What special pre-service and in-service training will the teachers and administrators need?

▶ 7. How can guidance services be utilized?

▶ 8. What types of services can the following agencies provide: Commission on Life Adjustment Education, Office of Education; State Departments of Education; State steering committees; teacher-training institutions; and local administrators?

▶ 9. How can the program be evaluated?



Robert S. Gilchrist, Assistant Superintendent of Schools, Minneapolis, Minn., and a panel of six high-school principals discussed at one of the seven general sessions of the conference the topic "Progress Which Has Been Made in Life Adjustment Education." Samuel P. McCutchen, New York University, discussed the topic "Lessons from the Eight-Year Study for Life Adjustment Project." Marcella Lawler, Teachers College, Columbia University, spoke on "Utilizing Significant Facts About Youth in Planning a Program of Life Adjustment Education." Galen Jones, Raymond Gregory, and Harry Jager, Office of Education, also directed general session discussions.

The conference recommended that the Office of Education urge Chief State School Officers to take steps to stimulate within each State the development of Life Adjustment Education Programs. The Commission on Life Adjustment, meeting as a part of the conference, suggested the following criteria for schools that want to take part in the program. To become a cooperating school, evidence related to the following criteria should be presented to the State steering committee:

▶ 1. Guiding principles of Life Adjustment Education should be understood and accepted by the school's administration and staff.

▶ 2. A plan of action in accordance with these principles should be proposed by the school's administration and staff.

▶ 3. Willingness to change the school program—to adapt it to Life Adjustment Education goals—should be expressed by the administration and staff of the school.

▶ 4. The community should be ready to accept changes in the school program toward Life Adjustment Education goals.

▶ 5. Necessary resources for carrying out the proposed plan of action for Life Adjustment Education can and will be made available by the school.

Health Education Pioneer Honored

SEVEN years ago James Frederick Rogers, M. D., Office of Education Consultant in Hygiene, retired from Federal Government service. For 21 years he had worked for the Government, first as a surgeon in the Office of Industrial Hygiene, Public Health Service, and later as a pioneer health education specialist on the Office of Education staff. His research and publications stimulated State and local health education programs between World War I and World War II. His interest in an organization of State leaders in health and physical education led to the formation of the Society of State Directors of Health, Physical Education and Recreation. On behalf of this Society, Dr. Thomas C. Ferguson, Supervisor of Physical Education, State Department of Education, Baltimore, Md., on September 24 in the Federal Security Building, presented to Dr. Rogers a citation "in grateful recognition of inspiring leadership and outstanding service to our profession."

Acting Commissioner of Education Rall I. Grigsby congratulates Dr. Rogers after presentation of citation.

Many of Dr. Rogers' publications are still available as authoritative reports in the health education field. Others are out of print but are still available for reference in school, college, or public libraries. Among his better known publications are the following: *What Every Teacher Should Know About The Physical Condition of Her Pupils* (10¢); *Welfare of the Teacher* (10¢); *Physique of the School Child* (5¢); *Student Health Services in Institutions of Higher Education* (10¢); *Instruction in Hygiene in Institutions of Higher Education* (10¢); *School Custodian* (10¢); *State-Wide Trends in School Hygiene and Physical Education; The Health of the Teacher* (out of print); *Safety and Health of the School Child—Survey of Conditions* (out of print); *Physical Education in Institutions of Higher Education* (out of print). Order from Superintendent of Documents.

School Fire Drills

From a bulletin which Milwaukee's Superintendent Lowell P. Goodrich sent to his State's principals and teachers in September, we learn, "The pamphlet 'School Fire Drills No. 103' issued by the U. S. Office of Education is enclosed. This pamphlet has been thoroughly checked by Deputy Chief Johnston, in charge of the Bureau of Fire Prevention and Protection, and he assures us it meets Milwaukee standards." The author of the Office of Education pamphlet "School Fire Drills" is Nelson E. Viles, school housing specialist.

What the States Require in "Education for Freedom"

To preserve and perpetuate the ideals and principles of American democracy it is essential that they be understood. This publication, based upon research, brings to the school administrator, the teacher, or the layman an opportunity to further understand these ideals and principles. It presents a concise analysis and compilation of State laws which require instruction in schools concerning the Constitution of the United States, American history, and matters related to American freedom.

—Oscar R. Ewing,
Federal Security Administrator.

A YEAR AGO former Commissioner of Education John W. Studebaker, in addressing the convention of the National Council for the Social Studies at St. Louis, Mo., called for a step-up in high school social studies courses "to bring up young citizens who really understand and cherish American democracy, who are well informed and skillful in thwarting the purposes of totalitarians, and who understand and accept their responsibilities in today's shrinking and increasingly interdependent world."

More recently, when General Dwight D. Eisenhower was installed as President of Columbia University, his forthright inaugural address called for liberal education in the school and university to strengthen democratic government and to preserve human freedom. He said, "I deeply believe that all of us must demand of our schools more emphasis on those fundamentals that make our free society what it is and that assure it boundless increase in the future if we comprehend and live by them."

Statements such as these tend to stimulate review by schools and colleges of their educational offerings aimed at providing full understanding of the American way of life and what we must do to preserve it.

Taking stock of progress made and planning steps toward further progress call for availability of basic information the type of which is presented in a newly-published bulletin of the Office of Education, "Education for Freedom as Provided by State Laws."

This democracy education inventory handbook, prepared by Ward W. Keesecker, Specialist in School Legislation, answers such questions as, How many States require instruction on United States history? Do all States require teaching concerning the United States Constitution? What are the provisions in State laws governing the use of the American flag in public schools? SCHOOL LIFE offers the following review of Dr. Keesecker's publication.

Review

Dr. Keesecker points out that his study "is limited to a summary analysis and compilation of State laws which provide for instruction in American history; the ideals and principles of American government, including Federal and State constitutions; and for the teaching of patriotism." He says, "the term 'education for freedom' denotes the objective of those laws which provide that the history and the ideals and principles of our form of government be taught, that our system of government be understood, that its characteristics be explained, and that some comparisons be made with other systems. It means imbuing the mind with the knowledge of our government and a devotion to its principles."

"The heritage of American youth includes a thorough understanding of the ideals and principles of American constitutional government so that he may become an intelligent, loyal and devoted citizen," says Dr. Keesecker. "He should know the facts of history—that our Federal and State Governments have doubtless provided more human rights, to more people, and over a longer period of time, than has any other system of government yet established. He should also know the verdict of history regarding other systems of government.

Regarding instruction concerning the history and systems of other governments, Dr. Keesecker indicates that "it is of course vital that a pupil should have the freedom to learn and to be inquisitive about various forms and philosophies of government. That freedom, however, ought not to be construed and applied so as to deny or abridge the right of pupils to full benefit of history in the development of the principles of American liberty." On this subject he quotes George Washington: "We ought to deprecate the hazard attending ardent and susceptible minds from being too strongly and too early prepossessed in favor of other political systems before they are capable of appreciating their own."

"To educate for the preservation of American principles of freedom is the antithesis of indoctrination as it exists under totalitarian governments. Instruction in these principles of freedom tends to keep the power in the hands of the people, which is the reverse of totalitarianism," Dr. Keesecker says.

History.—The analysis made by the Office of Education of State laws reveals that at least three-fourths of the States require the teaching of United States history in public elementary and secondary schools. While many of the States give considerable discretion as to content of such history courses, several States, including Arkansas, Illinois, New Jersey, Oklahoma, Oregon, Pennsylvania, Virginia, and Washington, give specific provision in the law as to the time, content and purpose of United States history instruction. Excerpts from the principal provisions of State statutes requiring instruction on United States history, the Constitution, ideals and principles of American government, and patriotism, appear in the Office of Education publication.

To teach youth the ideals and principles of American freedom and the liberties guaranteed under our constitutional democracy, and their accompanying responsibilities, does not mean to direct them *what* to think. It does mean to teach them to realize that under our system they are *free to think* and *free to express their thoughts*. . . . It brings individuals to intellectual maturity where they may with dignity and equal rights hold differences of opinion and deal effectively with the problems of our time. It makes each individual a stockholder in American democracy.

—Edgar Fuller,
Director School Administration Division,
Office of Education

The Constitution.—All States, except Kentucky, Maryland, Texas, and Vermont have statutes which require instruction in elementary schools concerning the Constitution, according to Dr. Keesecker. All States, except Kentucky and Maryland, by law require such instruction in high schools. Many States which do not have statutory requirements provide for teaching on the

Constitution by State department regulation or course of study. A majority of the States, according to the Office of Education, have deemed it appropriate to determine somewhat specifically what must be done with respect to the teaching of the Constitution of the United States.

The American Flag.—Digests of State laws governing the use of the flag in public schools, as well as those requiring observance of special days in public schools, are offered in the new Office of Education publication. With few exceptions, all State laws require the United States Flag to be displayed over or within every school building, or flown from a staff on the school grounds, weather permitting. Teaching of respect for the flag and of information concerning it is required in most States. Provisions for this purpose are usually in the nature of Flag Day observances, flag programs, or by special instruction concerning the flag. Fifteen States require Flag Day observance or flag exercises in public schools, and about half of the States require instruction relating to the flag.

Copies of the Office of Education publication, "Education for Freedom—As Provided by State Laws," Bulletin 1948 No. 11, are available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The single copy price is 20 cents.

Appreciating Good Teachers

THIS ARTICLE, by G. Kerry Smith, Chief, Information and Publications Service, Office of Education, may serve as a stimulus for State and local action in efforts to enhance the prestige of teaching and to recruit able teachers. SCHOOL LIFE welcomes reports of "teacher appreciation" and teacher recruitment activities which will be shared with all SCHOOL LIFE readers.

MANY FINE boys and girls who *should* become teachers will not do so unless local and State groups of lay and professional friends of education take vigorous action to help create public interest in and awareness of the great importance of teaching. The following activities are suggestive of what might be done by local and State groups in building community appreciation of good teaching.

SCHOOL LIFE is interested in making a more complete checklist of such suggestions. If you have ideas that might be helpful or if you know of activities that have been successfully carried out, SCHOOL LIFE would be pleased to hear from you.

Many communities already have in existence a citizens committee on education, made up of representatives of business, including editors of newspapers and directors of radio stations; and representatives of women's clubs, civic and service organizations, farm, labor, PTA, veterans, and other groups. If your community has such a citizens education committee, ask it to sponsor "appreciation projects." If not, ask people in whom the community has confidence to assume responsibility for organizing and serving on a committee. Choose these nuclear people carefully and emphasize the importance of their selecting an able and well-balanced group to round out the committee.

Whatever the form of organization for this "appreciation project," two elementary principles should be kept in mind: (1) So-called "media" people—editors, writers, radio announcers and station directors, advertisers, advertising writers, et cetera—should be brought in early at the planning stage; and (2) a lay person who stands high in community esteem and who accepts responsibility seriously should be persuaded to head the committee.

Newspaper and Radio Suggestions

1. A series of short articles or interviews by the president of the local chamber of commerce, labor federation, Rotary Club, and other community organizations on the general topics: "Who was my favorite teacher?" "What I learned from one teacher." "What teacher influenced me most?"

2. A contest sponsored by a civic organization for high school seniors or for college students on "Why I plan to teach."

3. A series by teachers on "Why I like teaching."

4. Another series by teachers on "How I used my summer."

5. A series by parents with the general theme: "What the school is doing for my children."

6. Human interest stories on well-known teachers.

Other Community Activities

1. Ask local merchants, banks, and business houses to use the ads prepared by the Advertising Council or to have their own ads prepared on such themes as: What qualities do you want in your child's teacher? Which of your teachers do you remember best? What are the challenges of teaching?

2. Arrange occasions for honoring teachers. Don't always wait until a teacher retires to say "thank you" for some significant achievement. The simplest plan is to have a dinner given by a civic or service organization or by a citizens' committee on education.

One community invited a much-loved teacher to participate in the laying of the cornerstone of a new building.

Some chamber of commerce groups give receptions for new teachers.

It might be appropriate for a university to award an honorary degree to a teacher who has achieved unusual distinction.

The mayor of one city proclaimed a day in honor of a school teacher who had spent 55 years in the profession. A scroll of appreciation and gifts donated by local merchants were presented in a special ceremony.

3. A 1948 film, "School House in the Red," 42 minutes, 16 mm, color, available from most State departments of education and the Kellogg Foundation, presents a contrast of modern and older patterns of education. It might serve as a general background for a discussion of the varied types of abilities needed in the teaching profession.

4. One chamber of commerce committee on education appropriated $50 for a supply of materials on the teaching profession to be circulated among high school students.

5. Quiz-type radio programs might be arranged to bring out the beliefs of those questioned on what they want the schools to do and the kinds of teachers schools should seek to employ.

6. Provide a scholarship fund for future teachers in case the need is not covered by State or other sources.

7. Work with school guidance officials to make sure that the opportunities in teaching are directly presented to high-school students who seem to be specially qualified for teaching. Check later to see how many of these actually decide to enter teaching.

Possible Cooperative Activities at the State Level

1. Consideration of appropriateness of suggestions listed above for State use.

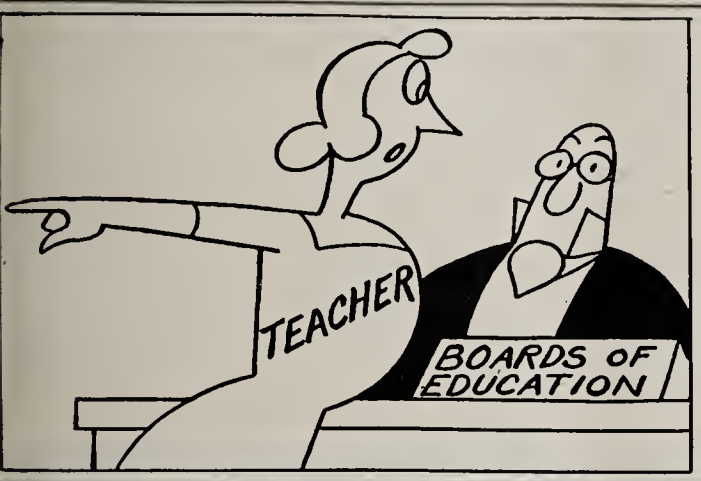
2. A State plan for scholarships for qualified prospective teachers.

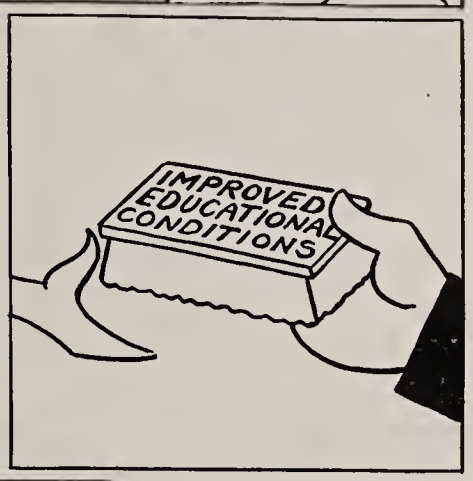
3. A State contest for teachers on the theme: "Why I Like Being a Teacher."

4. Preparation of appropriate posters.

5. Research projects on the effectiveness of various materials and methods used in teacher recruitment and selection and in "appreciation projects."

6. Secure cooperation of teacher education institutions.





SCHOOL LIFE presents this panel of cartoons by the well-known artist, O. Soglow, which originally appeared in *The New Yorker*. The drawings were made in support of the campaign for better education sponsored by the Advertising Council and the Citizens Federal Committee on Education. *Advertising and Selling* magazine reprinted the cartoon advertisement in its August 1948 issue. *The New Yorker* offers these reprints to anyone who wishes to have them. Copies of the symbol, Our Teachers Mold Our Nation's Future, are available from The Advertising Council, 11 West 42d Street, New York 18, N. Y.

Helpful Material

1. Write to the Advertising Council, Inc., 11 West 42d Street, New York 18, N. Y., for a copy of the brochure *Why It's Good Business To Improve Our Schools*, listing free mats for newspaper and magazine use.

2. Order from the Superintendent of Documents, Washington 25, D. C., reprints (10 cents each) of Frances V. Rummell's human interest articles from SCHOOL LIFE (June and July, 1948) titled *What Are Good Teachers Like?* These articles about some of the country's outstanding teachers may suggest feature stories for use in your local newspapers.

3. Order from the Superintendent of Documents, Washington 25, D. C., reprints (5 cents each) of Christine K. Simmons' article *Attracting New Teachers* in the October 1948 SCHOOL LIFE for general suggestions in recruiting able teachers.

4. Order from Superintendent of Documents, the Office of Education Bulletin 1948, No. 11, *Teaching as a Career* by Benjamin W. Frazier, price 15 cents, for background information.

5. For suggestions for a talk to high school seniors, consult an article in the *American Junior Red Cross Journal* for October 1948 by John W. Studebaker: "How About Teaching as a Career?"

6. Order from the National Education Association, 1201 16th Street NW., Washington 6, D. C., copies of Personal Growth Leaflet No. 161, *Our profession Glorious* (1 cent each, $7.50 per 1,000 copies). This contains famous quotations about teachers and teaching. Such selections might be used as "fillers" in local newspapers or might be incorporated into talks. (Minimum order 25 cents.)

7. Order from Delta Kappa Gamma Society, 804 Littlefield Blvd., Austin, Tex., *Find Your Own Frontier, A Study of the Profession of Teaching* (52 pages, 75 cents). Sponsored in cooperation with the National Commission on Teacher Education and Professional Standards.

8. *Unseen Harvest, A Treasury of Teaching*, edited by Claude M. Fuess and Emory S. Basford, 678 pages, Macmillan 1947, $5, contains a variety of statements by notable authors.

9. *So You're Going to Teach*, by Eva Knox Evans, published by Hinds, Hayden & Eldredge, Inc., New York, 50 pages, 25 cents. Informal style for youth thinking about becoming teachers. Cartoon illustrations.

In New Positions

Henry F. Alves, Director, Division of School Administration, Office of Education.

Edgar Fuller, Executive Secretary, National Council of Chief State School Officers.

Henry F. Alves has been appointed Director of the Division of School Administration, Office of Education. He succeeds Edgar Fuller who has been named executive secretary of the National Council of Chief State School Officers.

Mr. Alves first joined the Office of Education staff in 1935 as specialist in State school administration. He served as chairman of the Office of Education Advisory Committee on Surplus Property and directed the Office's program of surplus property utilization which has channeled many millions of dollars worth of war surplus property to school systems and educational institutions across the Nation.

A native of New Braunfels, Tex., Mr. Alves has climbed the educational ladder from teacher of a one-teacher school in Frat, Tex., in 1911–12 to the highest position in school administration in the Office of Education. From 1911–35 he served in Texas as teacher, principal, superintendent of schools, State high school supervisor, State college examiner, State director of research, and assistant State superintendent of public instruction. Since 1930 he has served as visiting professor, mainly in summer sessions, at the University of Texas, University of Michigan, and George Washington University.

During the past several years he has served as consultant to chief State school officers and other school administrators in the field of school administration. Mr. Alves attended the University of Texas, was graduated from Southwest Texas State Teachers College, and received his masters degree from the University of Texas in August 1928. He did graduate work toward the Ph. D. degree at Teachers College, Columbia University, and University of Texas.

Dr. Fuller, formerly State Commissioner of Education in New Hampshire, joins the staff of the National Council of Chief State School Officers with a rich educational background as a teacher, principal, superintendent, junior college president, educational lecturer and consultant, and Federal Government leader in aviation education. He has been serving as a member of the executive and legislative committees of the National Council of Chief State School Officers which he will now serve as its executive secretary.

Recent Theses in Education

A GOLD MINE of information on education is the collection of more than 7,000 theses on file in the library of the Office of Education.

Dating from 1930, these research studies in education, sent regularly to the Office of Education by many institutions of higher education throughout the country, form a rich reservoir of educational data, available to school administrators, teachers, research students, and others, by interlibrary loan.

From 800 to 900 masters and doctorate theses in the field of education are deposited with the Office of Education library each year. Each month, for SCHOOL LIFE readers, Mrs. Ruth G. Strawbridge, Office of Education Library Bibliographer, dips into the reservoir of theses to list a number of them which appear to be timely and useful. You can borrow on interlibrary loan the theses listed in SCHOOL LIFE or on file in the Office of Education collection. The theses listed this month are in the field of the physically handicapped and socially maladjusted.

Beginnings of Maladjustment and Delinquency: A Study of the Methods of Detection Used in 13 Large Cities. By Helen A. Prince. Master's, 1947. Boston University. 73 p. ms.

Shows that there are definite symptoms which precede delinquency. Suggests that the classroom teacher and others associated with the child be sensitized to the early indications of maladjustment so that treatment may be initiated.

Case Studies of 14 Juvenile Delinquents in an Urban Area of Racially Mixed Population. By Bessie M. Cooper. Master's, 1947. University of Cincinnati. 145 p. ms.

Studies the socio-economic and educational status of these children, who ranged in age from 10 to 16 years.

Crippled Children in American Education, 1939–1942. By Romaine P. Mackie. Doctor's, 1944. Teachers College, Columbia University. 144 p.

Analyzes replies to questionnaires received from 362 schools in 40 States, in which 16,696 crippled children were enrolled.

An Evaluation of the Annual Hearing Test Law of the New York State Department of Education. By Elsie A. Taber. Master's, 1946. New York University. 89 p. ms.

Attempts to determine at what intervals group audiometer tests should be scheduled in New York State, by studying the most popular audiometer testing intervals in practice throughout the public schools of the country.

Language Difficulties of the Deaf Child. By *Sister* Heloise Gutman. Master's, 1944. University of Cincinnati. 51 p. ms.

Analyzes and describes procedures employed in teaching deaf children at St. Rita School for the Deaf at Lockland, Ohio.

The Moron in High School: A Study of the Pupil With an I. Q. Below 75 as Rated by a Group Intelligence Test. By Ruth F. Roland. Doctor's, 1946. Harvard University. 170 p. ms.

Investigates the length of stay in high school, age and sex differences, behavior, courses taken, and school marks obtained by 324 mentally deficient pupils enrolled in a city high school from 1928 to 1940, inclusive. Indicates that most of these pupils were placed in the industrial arts and home economics departments.

Problems in the Education of Partially Seeing Children in Residential Schools for the Blind. By Guy J. Marchisio. Master's, 1946. Boston University. 104 p. ms.

Surveys enrollment in schools for the blind throughout the country. Finds that sight-saving and partially blind pupils are being enrolled in schools for the blind at the rate of 42.7 percent of the total residential school population; that there

(*Continued on page 16*)

Zeal for American Democracy Across the Nation

IMPETUS GIVEN the Zeal for American Democracy program by the Office of Education during the past year has stimulated democracy education in many areas across the Nation.

Following the eight regional conferences held by the Office of Education with Chief State School Officers or their representatives in June, many States planned their own State-wide conferences on Zeal for American Democracy. Helpful in planning for these State conferences were the findings of the regional meetings, summarized as follows:

Planning Aids

Some form of democracy education is now being emphasized in most of the States.

Revision of the social studies curriculum is a continuous challenge to education.

Lay committees or advisory councils at State, county, or local levels are concerned with the educational program.

There is a definite recognition of the need for more democratic action in school administration.

There is a dearth of suitable instructional materials on the theory and menace of totalitarianism.

Descriptions and evaluations of good school practices in democracy education are needed.

There is a need for appropriate reading materials on different maturity levels for use in democracy education programs.

Annotated classified bibliographies are scarce.

There is an intensive need for "how to do it" literature for teachers and administrators.

Participation by youth in community activities is effective education for democracy.

Many States already have passed from the planning to the action stage in the Zeal for American Democracy program.

PENNSYLVANIA has prepared a manual which lists recommended practices in the teaching of democracy. This information was gathered from the schools throughout the State.

NEVADA has established community committees. High school students are represented on these committees which promote Zeal for American Democracy.

VIRGINIA has produced its own films on citizenship education.

WEST VIRGINIA has recommended a State-wide committee of county superintendents to coordinate activities in democracy education promotion.

NEW YORK has a continuing curriculum development program.

RHODE ISLAND has a school board institute which unites the efforts of the various communities of the State. Senior high-school students in the State have an opportunity to attend a citizenship workshop on community problems.

NEW HAMPSHIRE conducts citizenship workshops for teachers.

New Pointers

Two new issues of *Pointers*, the Zeal for American Democracy news letter prepared by the Office of Education, serve as a clearinghouse medium for the exchange of progressive practices in the Z. A. D. program. These latest bulletins guide educators to democracy education teaching materials and summarize reports reaching the Office of Education from the field.

SCHOOL LIFE presents a brief summary of some *Pointers* high lights:

Asbury Park, N. J.—Superintendent Harry S. Hill called upon his teachers to implement the Nation-wide Zeal for American Democracy program by placing emphasis on the great documents of human liberty, the common courtesies in democratic group life, the skills of thoughtful, critical, and selective reading.

Madison, Wis.—Published by the University of Wisconsin is an organization handbook, "Citizenship Training and Induction for New Voters."

King County, Wash.—W. W. Thomas is trying a new social studies unit in the high schools.

Lynwood, Calif.—Principal William W. Jones has prepared a leaflet which lists the many ways democracy can be fostered in a secondary school.

Hartford, Conn.—A new pamphlet titled "Ten Years of Civic Education in Connecticut Schools" has been prepared by Palmer Howard, Consultant in Citizenship, and has been issued by the Bureau of Youth Services, Connecticut State Department of Education, as Curriculum Laboratory Bulletin No. 18.

Washington, D. C.—A semester's study of the Constitution and Federal Government will become a requisite for graduation from high school. This is in addition to the current requirement of a year of American history.

Caddo Parish, La.—An educational council was started here to give teachers an opportunity to participate in school administration. George Conger, president of the parish's school board, tells about this organization in *The Boardman*.

Tallahassee, Fla.—One article, "Making Social Studies Functional for Holidays," in the December 1947 *Florida School Bulletin*, is particularly appropriate to Zeal for American Democracy programs. The article is by Florence Tryon. The bulletin is issued by the State Department of Education, Tallahassee, Fla.

Ocean City, N. J.—The following subjects were treated by students in original essays in connection with 1947 graduation exercises: Democracy—Attitudes; Democracy—An Ideal; Democracy—Progress; Democracy—An Obligation; Democracy—Methods—Public Opinion.

Framingham, Mass.—High-School Principal Mayo M. Mayoon believes schools should take advantage of graduation audiences to strengthen adult concepts of democracy. For 9 years his school has used democracy themes in its commencement programs.

Chautauqua, N. Y.—The New York State Community Service Council pioneered a program in civic education for young adults 18 to 30.

In One County

What one superintendent of schools did to stimulate action both in the classroom and in the community for the Zeal for American Democracy program is told in detail in a supplement of *Pointers*, copies of which will be made available to superintendents and leaders in citizenship education this month. This superintendent is Floyd B. Cox, of Monongalia County, W. Va. For information on this specific program, and for further information on citizenship education programs, write to Zeal for American Democracy, Office of Education, Washington 25, D. C.

New Books and Pamphlets

American Public Education. By Harl R. Douglass and Calvin Grieder. New York, The Ronald Press Co., 1948. 593 p. Illus. (Douglass Scries in Education) $4.50.

The Art of Conference. By Frank Walser. Rev. Ed. New York, Harper & Bros., 1948. 206 p. $3.

Exploring Individual Differences. A Report of the 1947 Invitational Conference on Testing Problems, New York City, November 1, 1947. Sponsored by The Committee on Measurement and Guidance, Henry Chauncey, Chairman. Washington, D. C., American Council on Education, 1948. 110 p. (American Council on Education Studics, Series 1, No. 32) $1.50.

Find Your Own Frontier. By M. Margaret Stroh. A Study of the Profession of Teaching Sponsored by The Delta Kappa Gamma Society with the Co-operation of The National Commission on Teacher Education and Professional Standards. Austin, Tex., 1948. 52 p. Illus. 75 cents. Order from: National Headquarters, The Delta Kappa Gamma Society, 804 Littlefield Building, Austin, Tex.

I Learn From Children. An Adventure in Progressive Education by Caroline Pratt. New York, Simon & Schuster, Inc., 1948. 204 p. $2.75.

School Transportation Responsibilities. "Not One Child Shall Be Injured, Maimed or Killed!" Prepared by a Committee Representing New York State Central School Principals Association, New York State Association of District Superintendents, and The State Education Department. Albany, University of State of New York Press, 1948. 46 p. Illus. (Transportation Pamphlet 1).

Schools and Community Resources. Study Materials on Education for Better Living. New York, American School Publishing Corporation, 1948. 40 p. Illus. 25 cents. Reprinted from School Executive, Jan. 1948. Order from: Dr. John E. Ivey, Jr., Division of Research Interpretation, University of North Carolina, Chapel Hill, N. C.

The Teacher as Counselor. By Donald J. Shank, Chairman, Helen D. Bragdon, Clifford E. Erickson, Lcland J. Gordon, George E. Hill, and Karl P. Zerfoss. Washington, D. C., American Council on Education, 1948. 48 p. (American Council on Education Studies, Serics 6, No. 10). 75 cents.

The Teaching of Reading in the Elementary School. By Paul McKee. Boston, Houghton Mifflin Co., 1948. 622 p. $3.60.

What of Teaching? (Vocational booklet published jointly by six State-supported colleges and universities of Illinois.) DeKalb, Northern Illinois State Teachers College, 1948 39 p. Illus.

RECENT THESES

(*Continued from page 14*)

are some 50,000 partially seeing students in the United States, of whom approximately 9,000 are being served in the public schools and in the few sight-saving classes in schools for the blind.

Recreation as an Educational Adjunct in the Care and Treatment of the Handicapped. By Bertha Carlson. Masters, 1947. George Washington University. 73 p. ms.

Shows that general as well as specialized hospitals provide recreation services to patients.

Some Aspects of the Personality of Male Juvenile Delinquents. By Dennis J. Buttimore. Doctor's, 1946. New York University. 124 p. ms.

Studies 285 boys ranging in age from 12 to 18, using as subjects 95 delinquent boys, 95 problem boys in public schools in Jersey City, and 95 non-problem boys in public schools in the same city.

A Study of the Trends and Issues in the Administration of Mentally Retarded Children in the Elementary Schools in a Series of Cities. By Elizabeth V. Sullivan. Master's, 1946. University of Louisville. 98 p. ms.

Canadian-French-United States Teacher Exchange

SEVEN United States teachers are exchanging positions this year with Canadian teachers. Seven other teachers from the United States are exchanging posts with teachers from French lycees.

The Canadian-United States teacher exchange program is now in its second year. Canadian teachers from Winnipeg, Manitoba; Edmonton, Alberta; Montreal, Quebec; Halifax, Nova Scotia; Vancouver, British Columbia; and Kimberley, British Columbia, are exchanging jobs with teachers in Highland Park, Ill.; Hutchinson, Kans.; Prichard, Ala.; Kalamazoo, Mich.; Milwaukee, Wis.; San Diego, Calif.; and Trinidad, Colo.

In operation for the first time this year, the French-American teacher interchange has brought seven qualified teachers of English in French lycees to the United States. Teachers in Boston, Mass.; Baltimore, Md.; Orangeburg, S. C.; New Orleans, La.; Los Angeles, Calif.; Minneapolis, Minn.; and Jackson, Mich., have turned over to them their teaching responsibilities in our country and have accepted in return the responsibility of teaching English in French lycees during this school year.

A financial grant from Independent Aid, Inc., makes possible the French-United States teacher exchange program. Local school authorities pay the cost of the Canadian-United States teacher interchange.

Honored

Gertrude G. Broderick, Office of Education Radio Education Specialist, was honored at the School Broadcast Conference at its October meeting in Chicago. Mrs. Broderick, who has direction of the Office of Education Radio Script and Transcription Exchange, was cited for her long service to educational radio, particularly for her activity in building the Nation-wide script and transcription exchange operated by the Office of Education. The exchange, which has been in operation for about 12 years, serves as the clearing house for school, college, and selected commercial radio scripts available for educational use. Through the transcription exchange transcriptions of many important documentary radio programs broadcast originally over major national networks are preserved and loaned to schools and colleges.

U. S. GOVERNMENT PRINTING OFFICE: 1948

Zeal for American Democracy

AS STATES and local communities make progress in advancing their programs of Zeal for American Democracy, a greater demand for basic information on both the democratic and totalitarian forms of government is created. School administrators and teachers search for practical suggestions which can be put to use in the classroom and assembly hall. Study guides, reading lists, experiences of others are desired to further the program locally. During the past year the Office of Education has prepared much useful material which you may wish to include in your Zeal for American Democracy library.

Making Democracy Work and Grow which gives practical suggestions for students, teachers, administrators, and other community leaders

Education for Freedom which is an analysis and compilation of State laws which require instruction on the Constitution, in American history, and respect for the United States Flag.

Zeal for American Democracy issue of **HIGHER EDUCATION** which tells about instruction in American democracy in colleges and universities.

Fostering Democracy Through Our Schools which gives practical suggestions for democracy education programs during American Education Week, 1948.

Pointers on Zeal for American Democracy, which gives in news-letter style high light reports on what is being done currently across the Nation in this program.

Growing Into Democracy, a packet of leaflets prepared especially to teach the meaning and significance of American Democracy at the elementary school level.

Special "Zeal for American Democracy" issue of **SCHOOL LIFE**. This February 1948, issue of SCHOOL LIFE furnishes basic information on democracy and totalitarianism. It is now a best seller.

Study Guides (one for High School Classes, and one for College Classes) on The Strategy and Tactics of World Communism, prepared for use with the report of Congress by the same title.

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

Cooperation for Rural Health
By Helen L. Johnston, Cooperative Research and Service Division, Farm Credit Administration. Washington, Farm Credit Administration, 1948. 55 p. Processed. (Miscellaneous Report 123) Free from the Director of Information and Extension, Farm Credit Administration.

Home Tanning of Leather and Small Fur Skins
Washington, U. S. Government Printing Office, 1947. 24 p. (Farmers' Bulletin No. 1334) 10 cents.

The Mexican Bean Beetle in the East and its Control
Washington, U. S. Government Printing Office, 1948. 18 p. (Farmers' Bulletin No. 1624) 10 cents.

Strawberry Culture, South Atlantic and Gulf Coast Regions
Washington, U. S. Government Printing Office, 1948. 40 p. (Farmers' Bulletin No. 1026) 15 cents.

Tree Breeding at the Institute of Forest Genetics
Prepared in the Forest Service. Washington, U. S. Government Printing Office, 1948. 14 p. (Miscellaneous Publication No. 659) 10 cents.

The Use of Logs and Poles in Farm Construction
Washington, U. S. Government Printing Office, 1948. 26 p. (Farmers' Bulletin No. 1660) 10 cents.

Department of the Interior

Lincoln Museum and the House Where Lincoln Died
Washington, U. S. Government Printing Office, 1948. [5] p. (Folder) Free from the National Park Service.

Statue of Liberty
Washington, U. S. Government Printing Office, 1947. [5] p. (Folder) Free from the National Park Service.

Thomas Jefferson Memorial
Washington, U. S. Government Printing Office, 1947. [5] p. (Folder) Free from the National Park Service.

Department of Labor

The Political and Civil Status of Women in the United States of America; Summary including the Principal Sex Distinctions as of January 1, 1948
(Preliminary) Prepared by the Women's Bureau. Washington, U. S. Government Printing Office, 1948. 6 p. 5 cents.

Department of State

The United Nations—Three Years of Achievement
Washington, U. S. Government Printing Office, 1948. 19 p. (Publication 3255.) 10 cents.

National Archives

United States Government Manual—1948
Revised through June 30, 1948.
Prepared by the Division of the Federal Register. Washington, U. S. Government Printing Office, 1948. 722 p. $1.

Tariff Commission

Plastic Products
Washington, U. S. Government Printing Office, 1948. 58 p. (War Changes in Industry Series Report No. 28.) 25 cents.

Treasury Department

School Savings in Action
(Prepared by Education Section, U. S. Savings Bonds Division. Washington, Treasury Department, 1948. 13 p. Processed. Free.

Office of Education

Printed Bulletins

Education for Freedom (Bulletin 1948, No. 11) 20 cents.

Federal Funds for Education 1946–47 and 1947–48 (Leaflet No. 79) 15 cents.

Crippled Children in School (Bulletin 1948, No. 5) In press.

Intellectual Abilities in the Adolescent Period (Bulletin 1948, No. 6) In press.

Broadening Services of Small High Schools (Bulletin 1948, No. 9) In press.

Education in Venezuela (Bulletin 1948, No. 14) In press.

Teacher Education for the Improvement of School Health Program (Bulletin 1948, No. 16) 15 cents.

Postgraduate Education in High Schools (Pamphlet No. 106) 10 cents.

Classroom Growth Record, Rev. 1948 5 cents.

Life Adjustment Education for Every Youth. 45 cents.

State Aid for General Adult Education. Free.

Processed Materials
(Free—limited supply)

Guidance Bibliography (Misc. 2363–8, September 1948). Professional Books of Interest to Counselors 1947–48.

Low-Cost Publications on Safety! Selected References, No. 11, Division of Elementary Education. (December 1947. Rerun)

Planning Programs About Education. Education Briefs, No. 14. Elementary Education Division. (September 1948)

General Catalogs of Educational Motion Pictures and Filmstrips. Bibliography. Division of Auxiliary Services, Visual Aids to Education Section. (August 10, 1948)

Publications on Exceptional Children. Bibliography. (July 1948)

Project for Adult Education of Negroes. Third Progress Report. (Circular No. 246, October 1948)

School Life Reprints
(Free)

Fellowship Opportunities and Teaching Positions in Other Countries. (December 1947)

Salaries for School Library Service. Free.

What Are Good Teachers Like? (June and July 1948)

Higher Education Reprints
(Free)

Professional Education for Librarianship: Trends and Problems. (September 15, 1948)

Volume 31 Number 4
JANUARY 1949

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School Life

The President Enjoys Gingercake at Girard

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education • • • • • • • • Federal Security Agency

CONTENTS for January 1949

Volume 31 Number 4

Cover photograph shows President Truman enjoying an afternoon gingercake snack with a group of the youngest pupils at Girard College, Philadelphia. The President was guest of the College upon its recent centennial anniversary. See article, "President Truman—On Education," pages 8 and 9.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

"ALL teachers, regardless of grade taught or age taught, should be as familiar with the elementary principles of mental hygiene as they are with their subject matter." . . . . . p. 3

★ ★ ★

"In a few States anyone who can get a license that can be used to transport a truckload of cattle can use the same license to transport a bus full of children." . . . p. 5

★ ★ ★

"Several million children of school age are unable to attend school, largely because of lack of facilities or teachers." . . . . . p. 8

★ ★ ★

"Indeed, I would go so far as to say that this is the number one educational need of the present moment." . . . . . p. 12

★ ★ ★

". . . surely the schools of all nations should look for ways to develop attitudes of tolerance and thoughtful approaches to international understanding and fellowship." . . . . . p. 15

Published each month of the school yeor, October through June.

To order SCHOOL LIFE send your check, money order, or a dollor bill (no stamps) with your subscription request to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. SCHOOL LIFE service comes to you ot a school-year subscription price of $1.00. Yeorly fee to countries in which the frank of the U. S. Government is not recognized is $1.50. A discount of 25 percent is allowed on orders for 100 copies or more sent to one oddress within the United States. Printing of SCHOOL LIFE hos been opproved by the Director of the Bureau of the Budget.

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GEORGE KERRY SMITH... Chief, Information and Publications Service
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Address oll SCHOOL LIFE inquiries to the Chief, Informotion ond Publications Service, Office of Educotion, Federol Security Agency, Woshington 25, D. C.

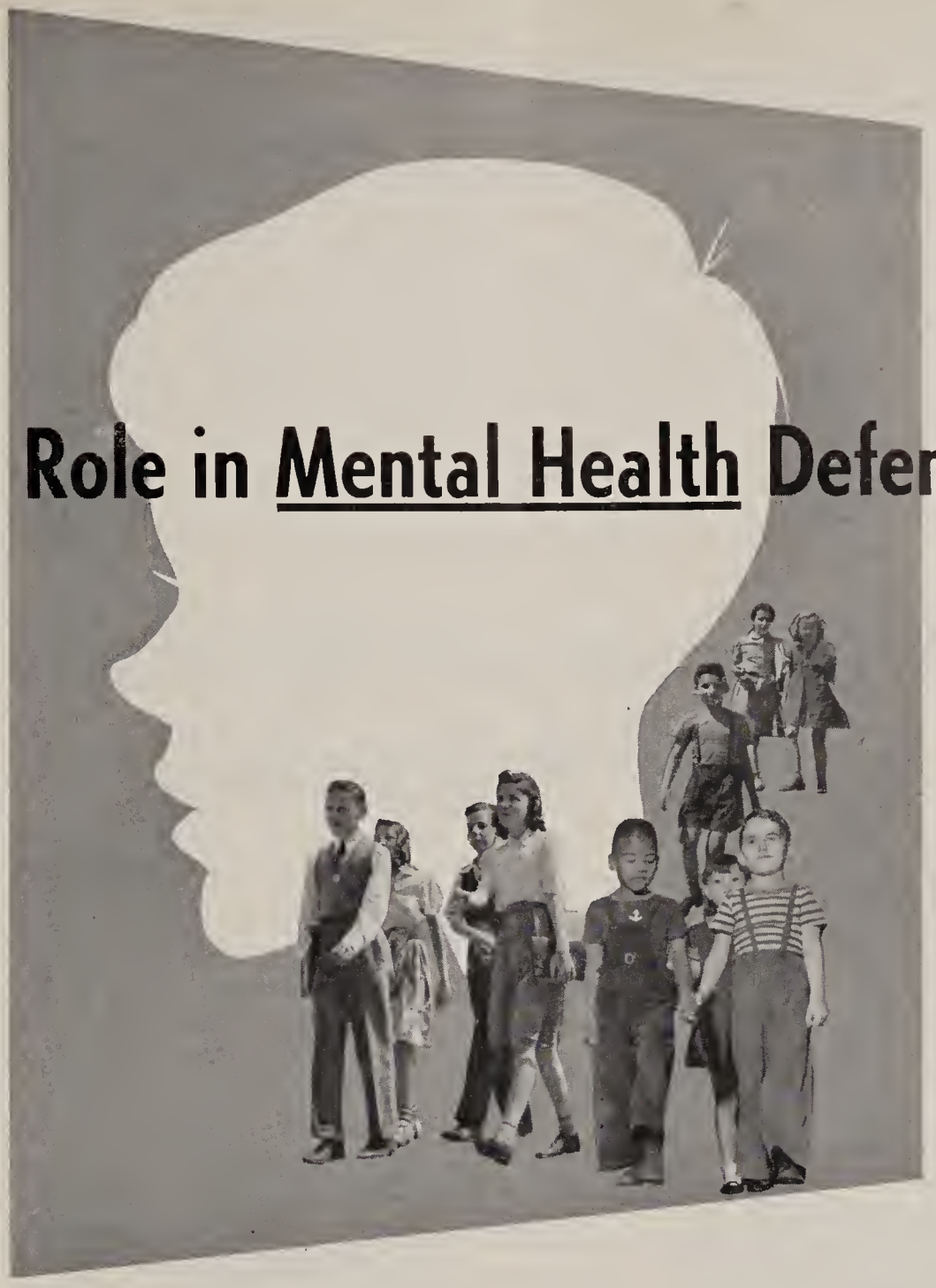
THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."

The Teacher's Role in Mental Health Defense

by Robert H. Felix, M. D.
Chief, Mental Hygiene Division
Public Health Service

Federal Security Agency

The Office of Education is pleased to join with the Public Health Service in presenting this information on mental health to the Nation's teachers and school administrators. Working together, education and medicine can do much in this vital field which touches millions of youth and adults each year.—*Rall I. Grigsby, Acting Commissioner of Education.*



ONE of every TWENTY children may be destined to spend time in a mental hospital

MANY school administrators can well remember when epidemics of scarlet fever, measles, or whooping cough brought the community's physicians into the schools for mass preventive check-ups. There are no statistics to prove how much serious illness was avoided by these precautionary measures; the point is that American medicine and American education, in getting together, helped to achieve brilliant results in routing the old scourges of the communicable childhood diseases. Not even the newly developed vaccines, serums, and powerful drugs could have done this alone. Cooperation and education were both needed, and as science marched triumphantly forward our schools continued to give assistance—generally in two significant ways: First of all, since teachers are housed with children relatively many hours of each day, they stand as the physician's first line of defense against disease. Second, teachers give children the precious all-important principles of staying healthy.

Today, thanks in no small part to the Nation's schools, American physicians can put more and more emphasis on preventive medicine.

Such attacks as the schools helped to make against the contagious diseases give us stout heart today in tackling what now amounts to America's number one health problem, the problem of mental health.

Mental health is fast becoming understood as a *positive* quality, which is all to the good. For too many years, of course, we were considered to have sound mental health if we got through our youth without any outright delinquency and managed our adulthood without neighbor trouble, alcoholism, or divorce. Today, fortunately, we know that mental health can and should be as robust as physical health. Further, most of us know that the signs of questionable mental health are signs that literally flag our attention, sometimes over a period of years. If only we give them our attention!

Be Alert to Symptoms

Here are such typical early symptoms in a group of average school children. Harry, age 14, looks as if he'll be a chronic liar all his life; he is also aggressive and

picks fights. Jane, 8, is overtimid and too quiet. She still wets the bed. Martha, 4, has violent temper tantrums. Johnny, 6, a war baby, is also a cry baby; he is overdependent on his mother and deeply resents his father—a stranger who came and disrupted Johnny's secure claim to all his mother's time and affection.

Unhealthy, "abnormal," children? No, of course not. I deliberately selected children with problems rather than problem children for my examples in order to underscore this important fact: Mental health is today an everyday matter of everyday concern. Protecting it, recognizing the early symptoms that may mean later trouble, must be a matter for the everyday understanding of the classroom teacher.

Since early diagnosis is of the utmost importance, the chief responsibility for the prevention of mental ill health actually rests with the public at large rather than with the psychiatrist. People such as teachers, the clergy, social workers, and public health personnel—who, by the nature of their work, are constantly presented with opportunities for recognizing and helping to some extent with emotional problems—are in a position to observe such problems long before the specialists or even the family doctor see them.

It seems to me that of all these workers who are in wide contact with the public, however, teachers hold the key observation post. I say this for two reasons. First, they deal with children in their formative and impressionable years and they deal with them over a highly significant stretch of time, singly as well as in groups. Second, teachers have a golden opportunity to work together with parents and other teachers in learning about each new child, his past history, and his present personality.

Recognizing the unique role that the school situation plays in the emotional de-

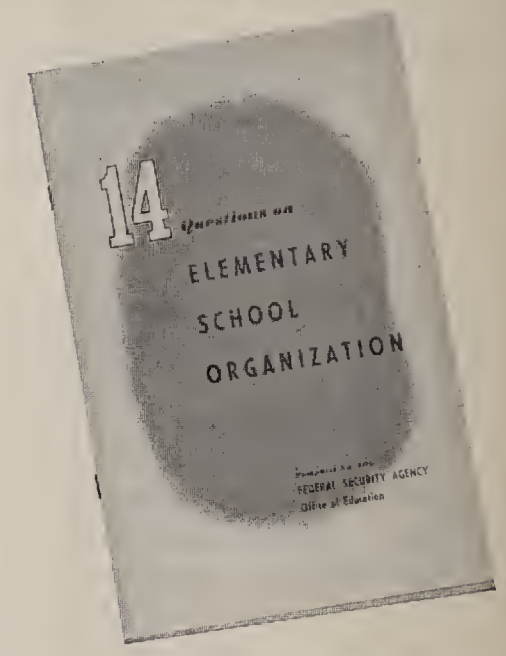
14 Questions on Elementary School Organization

WITH ELEMENTARY school enrollments at a record peak, and further increases predicted for years to come, today's school administrator views the organization of the elementary schools with serious concern. He has seen the elementary school increase in size and complexity over the years, and now faces new problems which must be solved as efficiently and expeditiously as possible.

In its effort to help the Nation's administrators and teachers of elementary education answer some of their most current and pressing questions today, the Office of Education detailed six members of its Elementary Education Division staff to work with a selected group of superintendents and other designated school officials during the past year. Superintendents or their representatives in 52 cities of varying population sizes were interviewed by the Office specialists—Effie G. Bathurst, Mary Dabney Davis, Jane Franseth, Hazel Gabbard, Helen K. Mackintosh, and Don S. Patterson.

Facts were gathered by these Office of Education specialists to help answer the questions most frequently asked by people in the field about elementary school organization. Findings of their study are reported in an Office of Education pamphlet titled "14 Questions on Elementary School Organization."

■ For SCHOOL LIFE readers there are listed 14 questions which are asked frequently in the field about elementary school organization. Pamphlet No. 105 helps answer these questions, presenting information gathered by Office of Education specialists from educators in many communities. You may wish to ask the same questions regarding the organization of elementary schools in your community. Order copies of Pamphlet No. 105, price



10 cents each, from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

14 Questions on Elementary School Organization

1. Is there a separate division of elementary education?
2. What are the existing types of elementary school organization?
3. Who is responsible for general supervision of elementary education?
4. What schedules or other arrangements are made to facilitate children's use of school time?
5. What is the length of the school day?
6. What is the size of classes?
7. What is the percentage of nonpromotion?
8. What is the unit of class organization?
9. What pupil records are used?
10. What types of progress reports are used in elementary schools?
11. Are there central office policies about progress reports?
12. What coordinating committees or councils are sponsored by the schools?
13. In what way do parents participate in the school program?
14. Is there a bureau of instructional materials or bureau of visual aids?

velopment of each child, the Office of Education and the Mental Hygiene Division of the Public Health Service are joining forces to help make that role wholly constructive. Specifically, they hope to determine what can be done to help school administrators and teachers develop and teach the elementary principles of mental hygiene with the same high confidence and effectiveness with which they developed and began to teach the elementary principles of physical hygiene.

This is a vast challenge, in part because the need is so urgently upon us, in part because of the crowded conditions of our classrooms and our teachers' schedules. And, of course, the millions of war babies, already starting to school, will crowd our schools even more unmercifully. But the very scarcities of elbow room and of individual attention for our children—greatly aggravating the already serious question of their emotional well-being in school—can only add strength to our resolve. Certainly, with 1 out of every 20 of our present generation of school children destined to spend time in a mental hospital, unless present rates of mental illness are curbed, the schools cannot wait for some dimly seen "ideal" future time before they launch a large-scale offensive against the greatest disabler of all diseases: mental illness.

Points of Emphasis

In drawing up the joint plans with which we hope eventually to assist all the Nation's schools, we have several encouraging points of emphasis upon which educators and psychiatrists are in complete agreement. First, we feel unanimity about this first goal: It is, very simply, to keep well children well. In other words, preventive psychiatry, or mental hygiene, is, like preventive medicine, the ultimate goal. Next, we are in unanimous agreement upon this second goal: All teachers, regardless of grade taught or age taught, should be as familiar with the elementary principles of mental hygiene as they are with their subject matter. Let me expand this second point.

In some quarters there is a tendency to believe that nothing can be done about mental health without the services of such highly specialized personnel as psychiatrists and psychologists. While the ultimate objective of the mental health program is to make such personnel available wherever needed, members of the teaching and other professions can do much to protect mental health if they are well informed about the problem. Furthermore, I would like to emphasize that the average child, with his average cargo of emotional problems, has no need of specialization; rather, it is far better for him that he be understood and helped in as normal a situation as possible.

Questions To Be Answered

With long-range planning, we are confident that every teacher in the land can eventually obtain a thorough understanding of the elementary principles of mental hygiene. Indeed I have met numbers of teachers who are already highly sensitive to its fundamentals, and, in my opinion, they are doing a superb job of teaching their children the art of human relations. In helping the child make healthy and comfortable adjustments to his school experiences, and to his classmates, they are helping him lay foundations firm enough to withstand the mental, emotional, and social strains of his adult life.

With this brief introduction of our larger goals, let me now indicate a few of the preliminary questions we are examining with a view to cooperative effort between the Office of Education and the Public Health Service. Some of the projects that have been proposed for study include:

1. What is a good method of handling emotional problems of teachers? What information and techniques should be given to supervisory groups to enable

(*Continued on page 14*)

Classroom Growth Record

Just off the press is a new *Classroom Growth Record* developed by the Office of Education, Federal Security Agency. The chart, in color and with photographic illustration, is a revision of the Classroom Growth Record printed in 1945. Space on the chart is provided for names of 50 pupils. Gains in height and weight may be easily recorded by the teacher or pupil. Full instructions for use of this chart and the individual Record of Growth, also prepared by the Office of Education, appear on the lower part of the Record. The photograph shows pupils and teacher at the Georgetown Day School, Washington, D. C., using one of the new Classroom Growth Records.

Order the *Classroom Growth Record* and the individual *Record of Growth*, each 5 cents, from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

ESTIMATES for 1947–48 show approximately 5,000,000 children are transported to school each day in 90,000 busses which travel 3,000,000 miles. The annual cost is nearly $140,000,000.

☆ ☆ ☆

OUTGROWTH of the recently-held National Conference on School Transportation, sponsored by the NEA Department of Rural Education, American Association of School Administrators, NEA Commission on Safety Education, National Council of Chief State School Officers, and the Office of Education, will be new national standards for school bus construction and school bus driver training programs.

Transportation of Pupils —a Growing Problem

Dr. E. Glenn Featherston, Office of Education Specialist in Pupil Transportation, Division of School Administration, discusses factors in public transportation which are of major concern to school administrators, teachers, and parents.

THE IMPORTANT problem in pupil transportation is what can be done to increase efficiency and economy in providing this service in order to hold to a minimum the part of the school dollar which must be devoted to it.

One fundamental change which must take place in many cases is a change in the attitude and in the training of the local school administrator. There must be a recognition on the part of many school administrators of the fact that pupil transportation has become one of the important parts of the school program before they can contribute much to the planning of this service.

School authorities must come to think of pupil transportation as an integral part of the school program. When a school administrator has accepted this point of view he will make more effort to acquire training which will aid him in efficiently administering a program of pupil transportation.

I do not know of a single course at the present time which deals solely with the problems in this field. Most graduate schools in education do have some course in school administration in which 2 to 8 clock hours are devoted to such problems. This is merely scratching the surface. There is urgent need for more training for school administrators at the graduate level on methods and procedures in operating transportation programs.

A second vital need in many States is to work out a sound scheme for financing and administering the transportation program. The need for transportation has little relation to the wealth of a school unit and the relation that does exist is usually an inverse one because the units with large programs of transportation are not as a rule as wealthy as some with smaller programs. When a local unit has to use a large percent of its income for transportation, it is handicapped in offering an education program. Therefore, transportation needs should be considered in any State plan for financing the education program. At the present time over three-fourths of the States are making available some State funds which are specifically for or may be used for pupil transportation. In at least three States a minimum program of pupil transportation is financed in full by the State. In several others the amount provided by the State is insufficient to be a determining factor in deciding whether the service is to be furnished. Some of these States furnish aid only for transportation of elementary pupils or for high-school pupils but not for both. The pattern more frequently used today than any other is to make the transportation service a part of the minimum program which is guaranteed to the local unit in determining equalization aid.

Administration Extremes

Related to the financing of the program is its administration. There are now two extremes in practice. Several States accept absolutely no responsibility for this service and, unless the local unit sees fit to provide it, the child who should be transported gets to school any way he can. At the other extreme there is one State which accepts the entire responsibility. It buys the busses, allocates funds for the salaries of the drivers, approves the bus routes, and, in a sense, operates the entire program. It does delegate certain responsibilities to county superintendents but theoretically it discharges the entire responsibility for a minimum program. To most school administrators a happy medium probably would be a desirable approach to this problem. The operation of the transportation program by

the local unit within a framework set up by the State would constitute such a medium. This framework would consist of certain standards and regulations designed to promote safety, efficiency, and economy. Many States have established some of these standards and regulations but many others have not. In a few States anyone who can get a license that can be used to transport a truckload of cattle can use the same license to transport a bus full of children. In some of these few States the driver may even use the same vehicle to transport children he used in transporting the cattle. All would agree that such things as this should not be permitted. Not until a sound basic plan for financing and administering pupil transportation has been developed can there be maximum progress toward economical and efficient transportation.

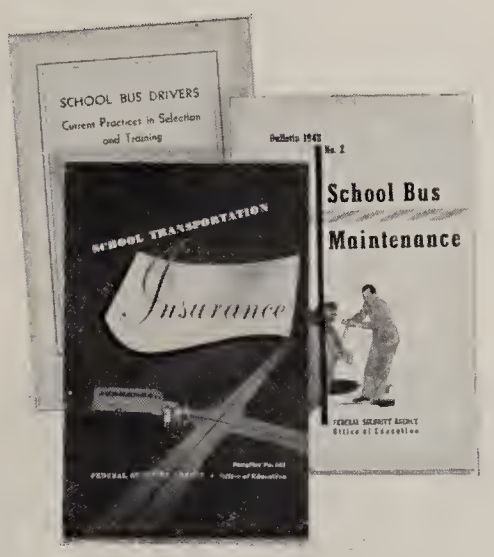
Efficiency and Economy

A third fundamental need in many States is for a local unit which will operate a large enough program of pupil transportation to make at least reasonable efficiency and economy attainable. The local school unit in the typical State is the school district which, in many States, will contain 9 to 15 square miles. Obviously, such a unit could not develop a transportation program, even when needed, which would be the most economical possible, nor could a cooperative program involving several of these units be the most economical possible. As a general rule, it is in States with such small administrative units that one will find the highest costs of pupil transportation. This is understandable because such units will normally operate only 2 to 5 busses. On the other hand lowest costs are usually in those States in which the typical local administrative unit is comparatively large. In those States the local unit is one large enough to own 40 to 50 busses and many of these units operate their own repair shops. The routing is such that there is a minimum waste of mileage. Whenever possible, drivers are employed for full-time work which permits the use of the services of some of them in a well-organized maintenance program. An effective program of preventive maintenance is one of the keys to lower transportation costs. In general such a program has been effective where the transportation unit is large enough to operate its own garage. In most of the States the county or a similar large area would be a much better unit for the administration of a pupil transportation program than the small school district unit.

These are basic changes which must be made to achieve maximum efficiency and economy in pupil transportation. However, there are many improvements which could be made within the present framework of organization and administration which would bring about greater economy in the local units in many States. Most of these improvements are concerned with business practices in the program.

Eventual Change

One change which will eventually take place in practically all States is to move over to school ownership and operation of school busses. First, it must be said that school ownership is no cure-all for all of the problems involved in pupil transportation. In the first place, a poorly managed program under school ownership can be more expensive and more unsatisfactory in every respect than a well-managed program under the management of an efficient contractor. Second, school ownership places greater and more varied responsibilities on the school administrator. He must purchase busses and supplies, employ and supervise drivers, and operate an efficient maintenance program.



The type of content in each of these three publications may be gathered from their titles. "School Transportation Insurance," Pamphlet No. 101, price 15 cents, was prepared by the Research Division of the National Education Association. "School Bus Drivers," Pamphlet No. 100, price 10 cents, by E. Glenn Featherston, reports State requirements for school bus driver selection and training. Bulletin 1948 No. 2, "School Bus Maintenance," also by Dr. Featherston, price 15 cents, gives information on maintenance of the Nation's more than 90,000 school transportation vehicles which costs more than $20,000,000 a year. Order the publications from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

On the other hand, if two programs under private and school ownership are given equally efficient management, there are certain advantages of school ownership over private ownership. One of these is that under school ownership school authorities will have much greater control of the program than is usually possible under the contract system. Routes can be changed without consulting contractors or adjusting contract prices, busses can be used in the instructional program as directed by the school authorities, drivers are employed and supervised by school authorities, and the whole program is directly controlled.

Saves School Funds

A second big advantage is that school ownership makes possible the saving of some school funds. There are two reasons for such a saving. One is that there is no profit motive, no need to make interest on an investment. If a private contractor invests $3,000 in a school bus he must have at least $200 per year, excluding depreciation and maintenance, to make the investment a profitable one. He must also have something for management unless he is willing to undertake the enterprise simply to provide himself with a job. The second reason for the saving is that the private operator must pay certain taxes which the school is not required to pay. While this is not, in the long run, a saving to the taxpayer, it is a saving of school funds; and this is important where these funds are limited by some kind of a ceiling, as they are so frequently. These taxes include Federal and State gasoline taxes, Federal taxes on motor vehicles, and State license taxes, and frequently amount to as much as $100 per bus per year. In a program of considerable size this could amount to several thousand dollars per year.

A third big advantage of school ownership is that it makes possible more efficient business procedures than is possible for the small operator. A contractor with a large fleet of school busses may be able to work out such procedures, but if he operates a program large enough to make such procedures possible, it is probable that few individuals in the community could bid on the contract, and thus the element of competition would be lost in awarding contracts. One advantage of public operation is in purchasing of busses, equipment, and supplies.

The procedure ordinarily followed by the small contractor is to purchase busses and supplies at ordinary retail prices. He may be able to get truckers' prices on gasoline and he may be able to get some slight discount on repair work, tires, and other supplies at a local garage. He is not likely to get much of a price concession in the purchase of a bus, particularly on the present market. If the contractor happens to operate a filling station or a garage he will be able to make some savings, but usually in such cases they will be added to his profit instead of being passed on to the school.

North Carolina Program

In marked contrast is the procedure followed in some school operations. Probably the best example of good purchase procedures for the whole transportation program is to be found in the State of North Carolina. In the first place, the State Board of Education in North Carolina sets definite specifications for the busses to be purchased and the State Purchasing Commission sets up definite specifications for tires, batteries, and other supplies. The State Purchasing Commission actually purchases in one transaction all of the school busses to be used at any one time in all of the counties of the State. Bids are requested from the major distributors and the purchases made on the basis of these bids.

In the spring of 1948 North Carolina purchased 500 48-passenger all-steel busses on a medium chassis for approximately $2,650 each. At the same time similar quality busses were being sold to individual purchasers in other parts of the country for prices as high as $3,500 to $4,000. The State Purchasing Commission does not actually purchase the tires, batteries, and other supplies, but it does make a contract with distributors to supply these items at a given price. Each county makes its own purchases from the distributor awarded the contract for a given item and at the State price.

As a result of this procedure all counties in North Carolina were purchasing gasoline at about one-half regular retail price last year and they were purchasing other items needed in the operation and maintenance of school busses at discounts ranging from 25 to 45 percent. The purchase procedures in use in the State are one of the important factors in making the per pupil cost of transportation in North Carolina the lowest in the Nation.

Other States have followed the same procedures for parts of the program and counties in other States have used much the same approach for all of the program. The State of New York has established State prices on gasoline, oil, and certain other supplies purchased by school districts, but they do not use State machinery for purchasing school busses. The State of Mississippi uses State machinery for the purchase of school busses but does not use it for the purchase of supplies. Counties in Alabama are allowed to use the State Purchasing Agency and through it they get prices on school busses comparable to those paid in North Carolina.

Federal Security Administrator Oscar R. Ewing tours the "Folding Cot Hotel" in Kansas City during the recent Future Farmers of America Twentieth Anniversary Celebration Convention. The New York Future Farmers pictured with Mr. Ewing were a part of the 1,240 who slept on cots set up in the basement of the Municipal Auditorium. More than 6,500 FFA members, from 47 States, Hawaii, and Puerto Rico, attended the convention. Mr. Ewing, keynote speaker, called for a strong and healthy rural community.

Purchasing and Records

In addition to purchasing supplies to greater advantage under school ownership than under private, the school-owned program should have the benefit of a more effective maintenance program and at less cost. When a local unit operates as many as 15 busses, it can operate an excellent maintenance program in a school-operated garage. It is a common contention that contractors will take better care of their own property than anyone would of public property, but this has been disproved by several studies. All but about 2 of the counties in North Carolina operate their own garages and employ their own mechanics. Busses are inspected regularly and thoroughly. The mechanics are trained in the point of view that it is their primary job to prevent break-downs instead of fix them. They try to prevent any interruption in service and as a result the busses are usually in good condition.

One other thing that should be done in most States and most local units that would lead to greater efficiency in the operation of transportation programs is the keeping of more adequate records. At the present time the information that can be obtained on elements of cost is very sketchy. A few States have prescribed uniform record and report forms which give this information in considerable detail but the majority of others have not.

These are only a few of the problems in the field of transportation. Another pressing one is insurance, which involves the kind and extent of liability that should be assumed for transported pupils, the manner in which this liability may best be met, and the cost of discharging the obligation. This problem is one of major concern for school business officials. Another is the setting of proper standards for school bus drivers and developing training programs for them. The school-bus driver has more to do with the efficiency and safety of the transportation program than any other person and yet most States have done relatively little to see that the position is filled by the best person it is possible to get for it. However, it is impossible within the limits of this article to do more than outline some of the major problems that might be of greatest interest to school administrators. There is considerable food for study and planning in the few sketched.

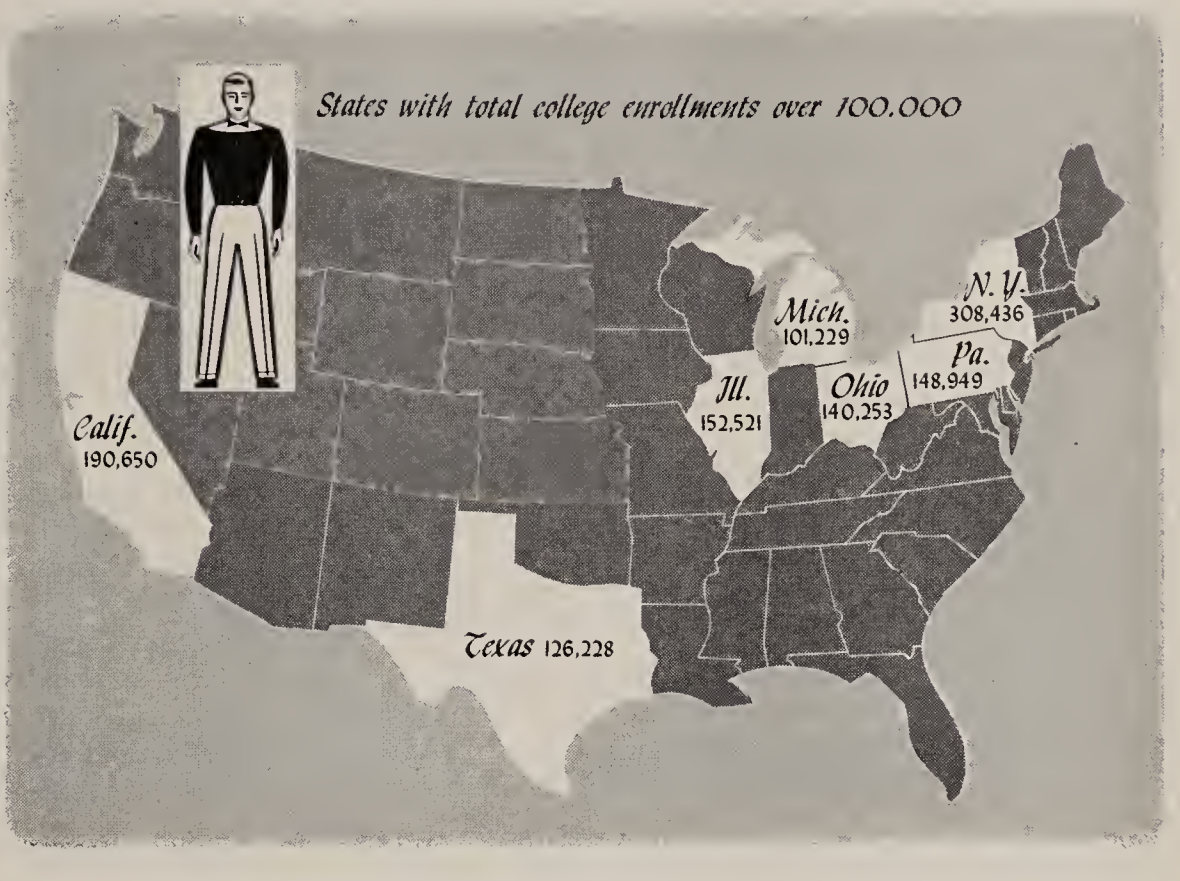
Fall 1948 Enrollment in Colleges and Universities

FOR the third successive year the Nation's college and university enrollments have climbed to a new peak, the Office of Education reported at a press conference in the Federal Security Agency recently.

The conference was called to release enrollment figures furnished by substantially all of the 1,800 institutions of higher education in the United States.

High lights of the college-university enrollment figures reported by Acting Commissioner of Education Rall I. Grigsby and John Dale Russell, Director, Division of Higher Education, Office of Education, are pictured graphically on this page.

Major trends: Number of freshmen last year—593,000; this year, 569,000. Veterans, who formed about half of the Nation's college student body in 1947, this year account for only 42 percent of the total enrollment. The greatest drop in veterans' enrollment came in the junior colleges, probably because the heaviest enrollments of veterans have moved into the upper college years.



Approximately 50 percent of the veterans in college this year are enrolled in 131 of the country's largest universities. And men still outnumber women almost 3 to 1, according to the Office of Education report.

Those interested should write for Office of Education press releases Nos. 456, 457, and 458 for more detail on the press conference reports on this year's college-university enrollments. Now available also is Office of Education Circular No. 248, "Fall Enrollment in Higher Educational Institutions," by Robert C. Story, Educational Statistician, Office of Education.

Twenty Largest Universities

Institution	*Enrollment*
New York University	47, 647
University of California	43, 469
City College of New York	28, 567
Columbia University	28, 000
University of Minnesota	27, 243
University of Illinois	25, 920
Ohio State University	23, 929
Northwestern University	23, 788
University of Indiana	23, 131
University of Southern California	22, 740
University of Wisconsin	22, 353
University of Michigan	21, 002
Syracuse University	19, 698
University of Texas	19, 676
University of Pittsburgh	19, 526
University of Pennsylvania	18, 644
Boston University	18, 617
Wayne University	18, 455
Temple University	17, 212
University of Washington	16, 650

What the Fall Enrollment Figures Show

	Fall 1947	*Fall 1948*
Total students	2, 338, 000	2, 408, 000
Men	1, 659, 000	1, 712, 000
Women	679, 000	696, 000
First time in any college	593, 000	569, 000
Men	400, 000	370, 000
Women	193, 000	199, 000
Veterans	1, 122, 000	1, 021, 000
Men	1, 098, 000	1, 001, 000
Women	24, 000	20, 000

Over the years the prosperity of America and its place in the world will depend on the health, the education, the ingenuity, and the integrity of its people and on their ability to work together and with other nations.

The most basic and at the same time the most difficult task of any country is the conservation and development of its human resources. Under our system of government this is a joint responsibility of the Federal, State, and local governments, but in it the Federal Government has a large and vital role to play. Through its research, advice, stimulation, and financial aid, it contributes greatly to progress. . .

—Message transmitting Reorganization Plan No. 2 of 1946, May 16, 1946.

President Truman

I regard the proper education of our youth as a matter of paramount importance to the welfare and security of the United States. . . . . . .

Crisis in Education

First, the Congress should provide Federal assistance to the States in meeting the present crisis in education. The children in our schools, and the men and women who teach there, have been made the victims of inflation. More children are entering school than ever before. But inflation has cut down the purchasing power of the money devoted to educational purposes. Teachers' salaries, for the most part, have lagged far behind increases in the cost of living. The overcrowding of our schools is seriously detrimental to the health and the education of our boys and girls. Every month that we delay in meeting this problem will cause damage that can never be repaired. Several million children of school age are unable to attend school, largely because of lack of facilities or teachers.

—Address before joint session of the Senate and the House of Representatives, July 27, 1948.

Elementary and Secondary Education

For education, the first step, which should not be deferred, is to provide Federal aid for elementary and secondary education to help remedy the deplorable shortages and the maldistribution of school facilities and teachers. At present, our ten poorest States are spending about $64 annually for each school child, while our ten wealthiest States are spending about $177.

—Economic Report of the President, January 14, 1948.

Although the major responsibility for financing education rests with the States, some assistance has long been given by the Federal Government. Further assistance is desirable and essential. There are many areas and some whole States where good schools cannot be provided without imposing an undue local tax burden on the citizens. It is essential to provide adequate elementary and secondary schools everywhere and additional educational opportunities for large numbers of people beyond the secondary level. Accordingly, I repeat the proposal of last year's Budget Message (from President Roosevelt) that the Federal Government provide financial aid to assist the States in assuring more nearly equal opportunities for a good education. The proposed Federal grants for current educational expenditures should be made for the purpose of improving the educational system where improvement is most needed. They should not be used to replace existing non-Federal expenditures, or even to restore merely the situation which existed before the war.

—Message on the State of the Union and transmitting the Budget for 1947, January 21, 1946.

The American people have long recognized that provision of an adequate education for everyone is essential in a democratic system of government. It has become evident in recent years that the financial resources of many States and their subdivisions are not sufficient to meet minimum educational standards. Therefore, I urge the Congress to take prompt action to provide grants from the Federal Government to the States for elementary and secondary education. The Budget estimates provide for beginning this program in the fiscal year 1949.

—Budget Message, 1949, January 6, 1948.

Our generous provision for education under the veterans' program should not obscure the fact that the Federal Government has large responsibilities for the general improvement of educational opportunities throughout the country. Although the expenditure estimates for the coming fiscal year are limited to present programs, I have long been on record for basic legislation under which the Federal Government will supplement the re-

on Education

. . . we must make possible greater equality of opportunity to all our citizens for an education. Only by so doing can we insure that our citizens will be capable of understanding and sharing the responsibilities of democracy.

—State of the Union Message, January 7, 1948.

. . . it is necessary and proper that the Federal Government should furnish financial assistance which will make it possible for the States to provide educational facilities more nearly adequate to meet the pressing needs of our Nation.

—Communication to the Speaker of the House of Representatives, May 26, 1948.

sources of the States to assist them to equalize educational opportunities and achieve satisfactory educational standards.

—Budget Message, January 10, 1947.

I am . . . convinced that the increases which have become necessary in other Federal expenditures present no valid reason for delaying Federal aid to education. On the contrary, I consider that such assistance will be a major contribution to the vitality of American democracy, which is the foundation of all our efforts toward peace and freedom.

—Communication to the Speaker of the House of Representatives, May 26, 1948.

Higher Education

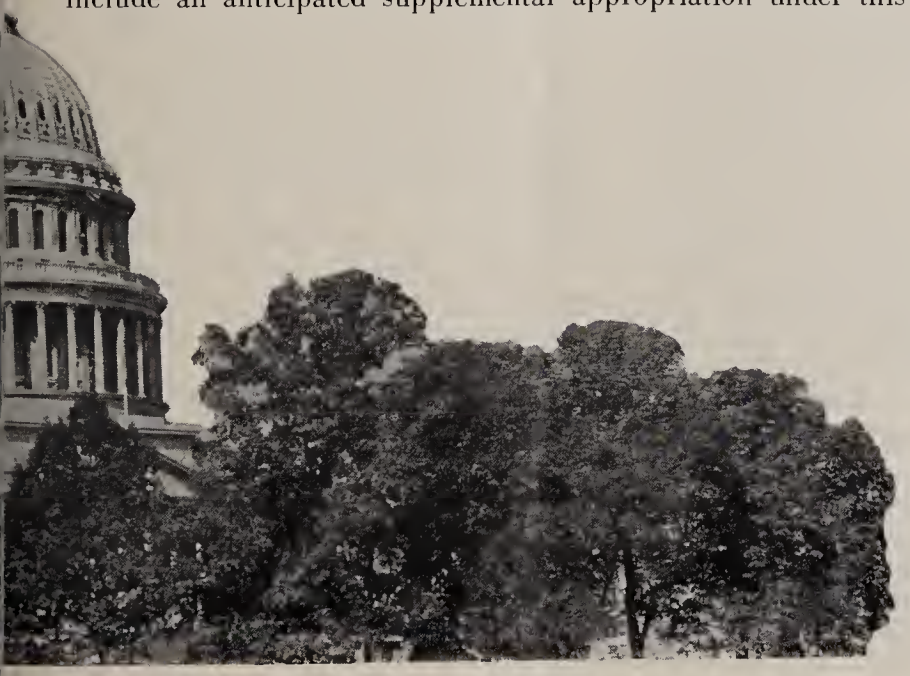
. . . The relationship of the Federal Government to higher education also demands serious consideration.

—Budget Message, January 10, 1947.

Vocational Education

In August 1946, the Congress increased the authorization for vocational education by 15 million dollars. It is not possible at this time, however, for the State and local governments to make firm commitments on the availability of matching funds for the development of new programs of vocational education or the expansion of existing programs. Therefore, although the estimates of appropriations and expenditures for the fiscal year 1948 include an anticipated supplemental appropriation under this authorization, it may be necessary to increase the amount on the basis of later information from State and local governments. Money for this purpose has been included in the reserve for contingencies.

—Budget Message, January 10, 1947.



School Building Needs

As a part of our total public works program, consideration should be given to the need for providing adequate buildings for schools and other educational institutions. In view of current arrears in the construction of educational facilities, I believe that legislation to authorize grants for educational facilities, to be matched by similar expenditures by State and local authorities, should receive the favorable consideration of the Congress.

—Message on the State of the Union and transmitting the Budget for 1947, January 21, 1946.

Federal Leadership

The Federal Government has not sought, and will not seek, to dominate education in the States. It should continue its historic role of leadership and advice, and, for the purpose of equalizing educational opportunity, it should extend further support to the cause of education in areas where this is desirable.

—Message on the State of the Union and transmitting the Budget for 1947, January 21, 1946.

. . . Public provision for education has been primarily the concern of the several States, and must remain so. The maintenance of freedom of thought and expression depends in large measure upon keeping our systems of education free from central control. . . .

—Communication to the Speaker of the House of Representatives, May 26, 1948.

Equal Opportunity

We cannot be satisfied until all our people have equal opportunities for jobs, for homes, for education, for health, and for political expression, and until all our people have equal protection under the law.

—Message transmitting recommendations for Civil Rights Program, February 2, 1948.

Health and Education

The Federal Government is now spending a large amount of money for health and education programs for war veterans, but general expenditures in these fields are relatively small. I urge the Congress to give early consideration to expanded peacetime programs of public health, nutrition, and education.

—Economic Report of the President, January 8, 1947.

". . . For the Future Security . . ."

SO MANY questions relating to national and international security are asked today both in the classroom and in the community that educators must be armed with facts if they are to furnish the correct answers. For the information of SCHOOL LIFE *readers, the National Military Establishment was asked to prepare an article which might help clarify for school administrators and teachers the present structure of the Establishment, which today directs the training of thousands of youth who have left the classroom and the community for service in the armed forces. The article was prepared by William M. Hines, Jr., of the National Military Establishment.*

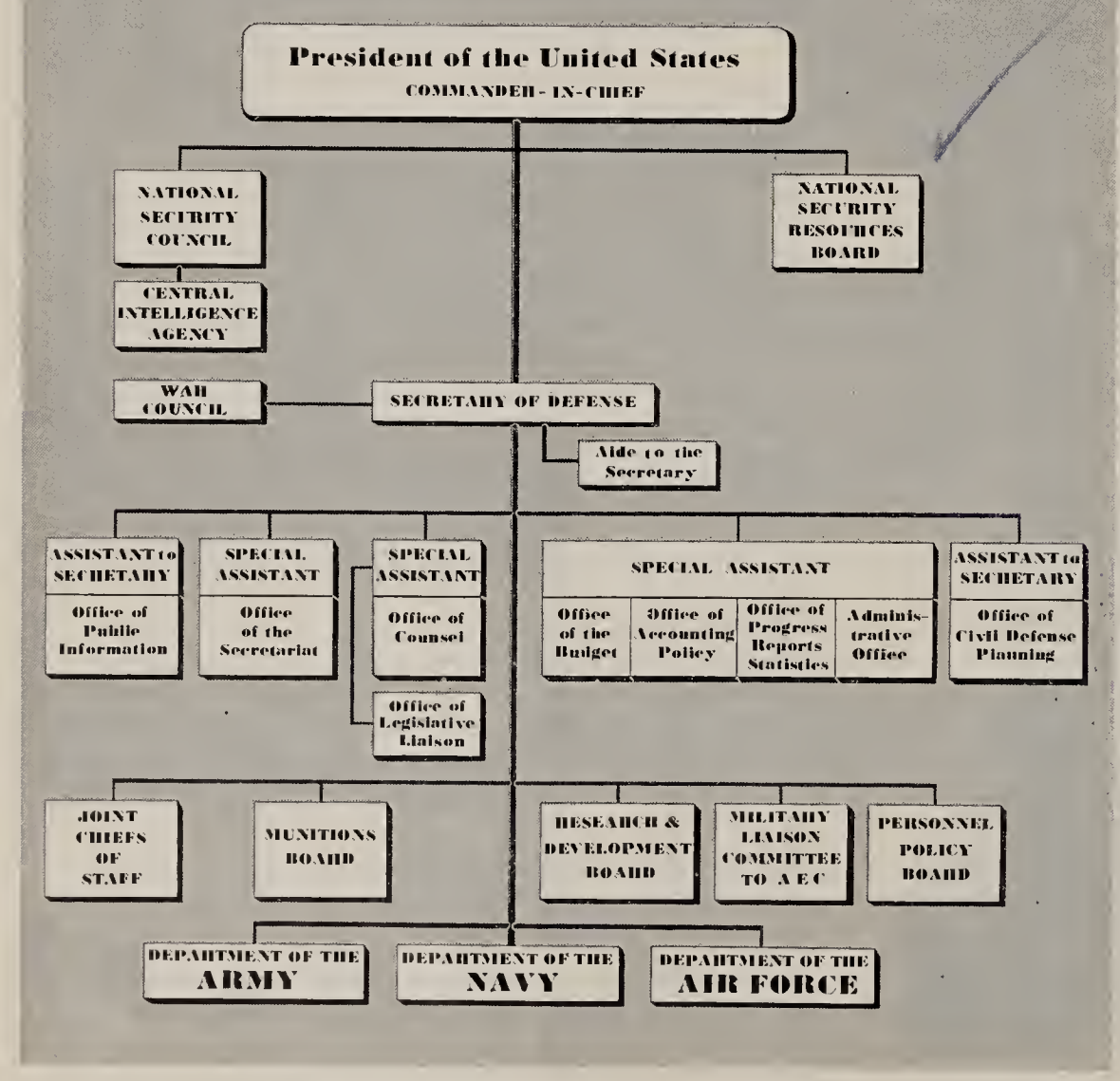
IF THE CONGRESS ever spelled out its intent in "words of one syllable," it did in Public Law 253, 80th Congress: the National Security Act of 1947.

Though it is the subject of at least as much public misunderstanding as any far-reaching and important new law, the National Security Act's aims are made plain by a declaration of policy at the outset of the text:

". . . it is the intent of Congress to provide a comprehensive program for the future security of the United States . . ."

In a day when war is total and three-dimensional—with the fearful fourth dimension of time an ever-increasing additional consideration—the future security of the United States requires unified direction of the Nation's military potential. Though the Armed Forces are and always have been under the command of the President, the growth of the Nation and its government has made this command ever more theoretical than practical. A realistic approach to unification today requires a central directing agency subordinate to the President and exercising control only over the Armed Services.

NATIONAL SECURITY ORGANIZATION



No Department of Defense

Congress recognized this need with the creation, under the Act cited above, of the National Military Establishment, headed by the Secretary of Defense. The disparity between the title of the office and that of the official has caused no little confusion in the public mind; there is *no* Department of Defense, as there is a Department of State presided over by the Secretary of State, or of Treasury headed by the Secretary of the Treasury.

The Secretary of Defense is now the only representative of the Armed Forces in the President's cabinet. His three principal assistants, Secretaries respectively of the Army, Navy, and Air Force, are not of cabinet rank but have access to the President under certain conditions.

Because the Office of the Secretary of Defense is a coordinating rather than an operating agency, it is numerically far smaller than the subordinate Departments of Army, Navy, and Air Force. A corps of assistants in charge of various specialties and five boards, each concerned with a particular problem relating to the national defense, assist the Secretary of Defense in over-all supervision of the Military Establishment. The civilian and military chiefs of the three Armed Services, together with the Secretary of Defense, make up the only other major office in the headquarters organization. This last-named group, the War Council, is responsible for advising the Secretary of Defense on matters of broad policy relating to the Armed Forces and for considering and reporting on such other matters as the Secretary of Defense may direct.

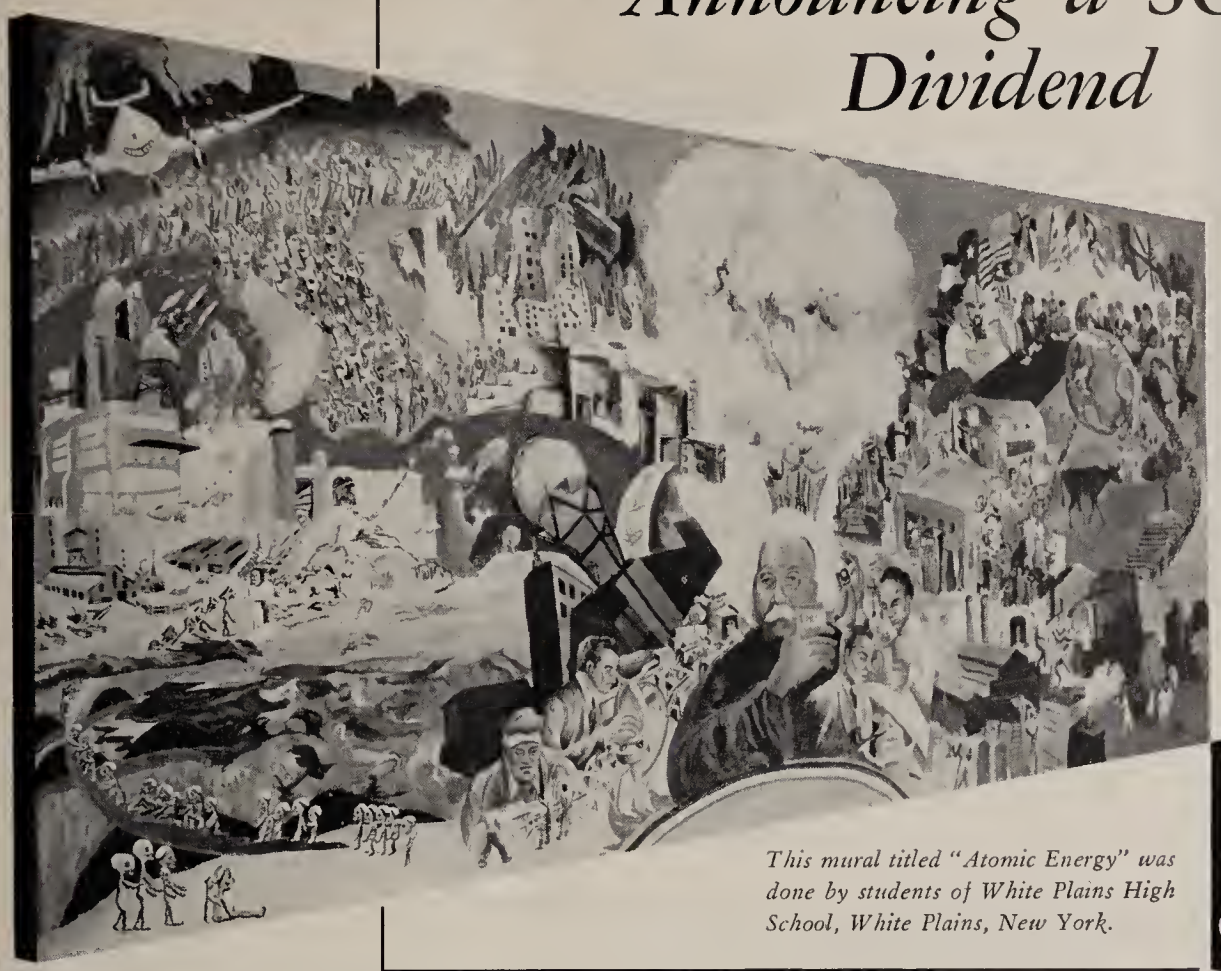
The assistants to the Secretary of Defense are charged with the organization of proper budget and management procedures, furnishing of legal counsel, supervision of planning, and dissemination of public information.

Boards and staffs in the National Military Establishment are:

Joint Chiefs of Staff, charged by law with strategic planning. A Joint Staff is the operating agency of this group.

Munitions Board, headed by a civilian appointed by the President. By close coordination with the military services and with outside agencies, the Board keeps the Military Establishment in touch with the

Announcing a SCHOOL LIFE Dividend



This mural titled "Atomic Energy" was done by students of White Plains High School, White Plains, New York.

Early in the year *School Life* subscribers will receive a special *School Life* supplement on ATOMIC ENERGY. Produced jointly by the Atomic Energy Commission and the Office of Education, this dividend issue will emphasize the theme, Atomic Energy Is Your Business. Reporting what schools are doing or can do, the issue will present basic facts and social implications, with cartoon and photographic illustrations, selected references, audio-visual aids. Watch for your copy.

SCHOOL LIFE SUPPLEMENT on ATOMIC ENERGY

national industrial and manpower potentials and how they compare with the sum of military and civilian needs. Among its outstanding duties are the evaluation of service requirements under the Selective Service Law and the recommendation of interservice procurement responsibilities by which the service best equipped to buy supplies makes purchases for the entire Military Establishment.

Research and Development Board, its chairman a civilian named by the President, which deals with all matters relating to scientific research and development.

A Military Liaison Committee which provides contact between the National Military Establishment and the Atomic Energy Commission.

A Personnel Policy Board, under whose supervision the personnel plans of the Military Establishment are coordinated.

No part of the National Military Establishment are two Presidential groups, the National Security Council and the National Security Resources Board. Both groups were created by the National Security Act of 1947. The Security Council, headed by the President, has as its responsibility the task of integrating the plans of the Military Establishment into those of the Government as a whole. Serving with the President are the Secretaries of State, Defense, Army, Navy, and Air Force, and Chairman of the National Security Resources Board, together with others in the President's discretion as prescribed by law. Directly subordinate to the National Security Council is the Central Intelligence Agency, charged with advising the Security Council in matters of intelligence activities of Government departments as relate to national security and coordinating such activities of Government departments. The law provides that the C. I. A.'s chief may be either military or civilian, and states that if he be a military man, "he shall be subject to no supervision . . . other than would be operative with respect to him if he were a civilian."

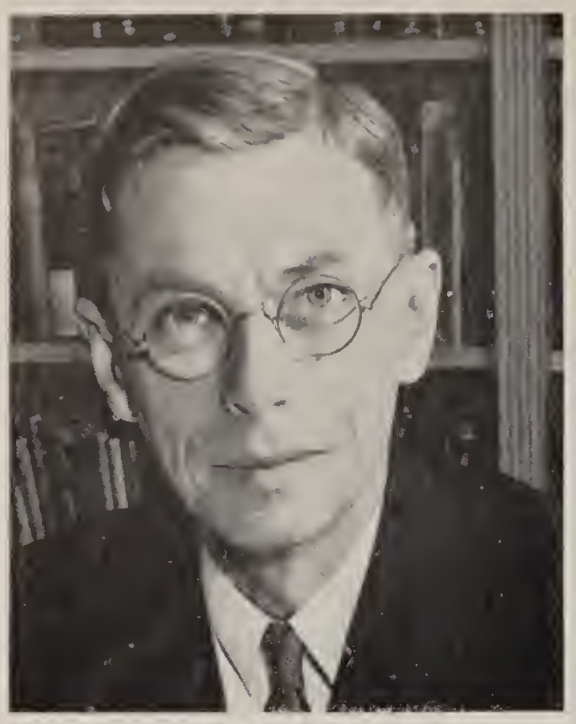
A Tradition

The National Security Resources Board, headed by a civilian appointee, advises the President concerning the coordination of military, industrial, and civilian mobilization. The Congress, in creating the Board, took cognizance of the fact that modern war is total; that it touches not only the man with the gun but every individual behind him, all the way to the factory, the farm, and the office in the heart of the homeland. The members of the Board are cabinet officials.

The creation of a National Military Establishment has not altered one of the oldest and finest traditions of the Nation: That the Armed Forces are servants of the people, and that the apex of leadership in the Armed Forces is vested in civilian persons. The Secretaries of the three Armed Services are civilians, but the law with respect to the chief of the Military Establishment contains an additional safeguard, "That a person who has within ten years been on active duty as a commissioned officer in a regular component of the Armed Services shall not be eligible for appointment as Secretary of Defense."

Because a Joint Staff is provided to coordinate policies of the three services, the Secretary of Defense is forbidden by law to maintain a military staff, although he is authorized to have officers of the Armed Services detailed to duty in his office. The operating military staffs are organized on

(Continued on page 14)



Dr. James B. Conant, President of Harvard University.

Strengthen Education To Strengthen Democracy In a Divided World

Addressing the seventeenth annual New York Herald Tribune *Forum in New York City recently, Dr. James Bryant Conant, President of Harvard University, discussed the "number one educational need of the present moment," and the "future development of our public schools." For SCHOOL LIFE readers, selected excerpts from President Conant's address are presented.*

TO DEAL WITH a person or group of persons intelligently one must have some idea of their presumptions. Whether you take an optimistic or a pessimistic view of the chances of turning the present uneasy truce into a peaceful competition of ideologies, the fact remains that we must deal in one way or another with the fanatic yet capable followers of Lenin. Therefore, it seems to me, it behooves us to understand them. We must examine and debate the creed of the Communist party as it has been formulated and defended both here and in foreign lands. Indeed, I would go so far as to say that this is the number one educational need of the present moment.

"I PROPOSE to sketch in very briefly the relation between the future development of our public schools and the nature of the ideological conflict which now divides the world . . . One's conclusions on these, as on so many other matters, derive, it seems to me, from one's analysis of what goes on behind the Iron Curtain.

"There are roughly three points of view current in the United States which in their extreme forms may be summarized somewhat as follows: there are those who think the dwellers in the Kremlin are Slavic followers of Thomas Jefferson or at worst the early socialists of the nineteenth century; that all their aggressive actions are based on fear of the capitalistic and imperialistic United States. The second viewpoint, the antithesis of the first, is expressed by those who feel the rulers of Soviet Russia are equivalent to the men who once surrounded Hitler and Mussolini; that they are military gangsters planning to conquer the world by force or a variant of this theme is to believe that they are the military descendants of Peter the Great, bent on Russian expansion of a nationalistic sort by force of arms. The third position, to which I myself am inclined, lays far greater emphasis on the ideology of Soviet Russia and of the parties which follow the Soviet line. According to this view, the leaders of Soviet Russia and the governors of their satellite countries are fanatic supporters of a philosophy based on the writings of Marx, Engels, and Lenin. While military force would be used by the totalitarians whenever it was found advantageous, the chief reliance, it seems to me, would be on the efficiency of their own doctrine."

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"A great many consequences for the United States flow from the analysis of the Russian attitude which I have outlined. The first is the need for a vast amount of scholarly work to determine to what degree this or any other analysis may be correct. Without a better understanding of the way the Russian rulers think—'how they are wired,' as one American delegate who argued daily with them has put it—without a better knowledge of Soviet philosophy and an accurate estimate of its hold on individuals, we are shadow-boxing in many areas."

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"We study cancer in our medical schools to learn how to defeat it. We must study the Soviet philosophy in our universities for exactly the same reason. No one must be afraid to tackle that explosive subject before a class. If an avowed supporter of the Marx-Lenin-Stalin line can be found, let him be forced into the open and his arguments torn to pieces with counterarguments. Some of the success of the Communist propaganda in this country before the war was due to the fact that it was like pornographic literature purveyed through an academic black market, so to speak. For a certain type of youth this undercover kind of knowledge has a special attraction. And doctrines that are not combated in the classroom but treated merely with silence or contempt may be appealing to the immature.

"If we do this, how are we to answer the thoughtful and troubled citizen who wonders if our universities are being used as centers for fifth-column activities? By emphasizing again the central position in this country of tolerance, of diversity of opinion, and by expressing confidence that our philosophy is superior to all alien importations. After all, this is but one version of the far wider problem: How are we to win the ideological conflict if it continues on a non-shooting basis? Clearly not by de-

stroying our basic ideas but by strengthening them; clearly not by retreating in fear from the Communist doctrine but by going out vigorously to meet it.

"I would place as the twin objectives of discussion groups, radio programs, and evening classes an understanding of the American democratic society and its historic goals, and a dissection of the Soviet philosophy and an exposure of its methods."

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"I need hardly argue before this audience that the cultural pattern of our society will be largely determined by the nature of our education. Our educational system reflects the social structure of this free and fluid nation. Our free tax-supported schools are the sinews of our society; they are the product of our special history, a concrete manifestation of our ideals, and the instrument by which the American concept of democracy may be transmitted to our future citizens. It is perhaps not too much to say that the strength of this republic is intimately connected with the success or failure of our system of public education.

"Our free tax-supported schools are committed to an educational philosophy which in contrast to those of other nations may be said to be peculiarly democratic. We believe in providing education for *all* American children and *all* American youth, not a privileged few, and have a deep concern to make them all men and women imbued with a high sense of dignity as individuals and devoted to the historic freedom of this nation. Our educational goal is admittedly ambitious—first-rate free education for all future citizens of this country. In some localities we are near this goal; in others, far removed. In the near future we should aim to bring all elementary and secondary schools up to a minimum standard in terms of adequacy of plant, teachers' salaries and ratio of teachers to students. Closely allied to this objective is the need for improving the guidance program and supporting the research on which these programs must be based. With the same priority as these two, I should place my third item of a four-point program, namely, increasing the number of two-year local colleges in nearly every State. My fourth and last proposal would be to institute a scholarship program for talented youth destined for a few professions.

"All this will cost the taxpayers money, but will be well worth the cost. For let us remember that our vast system of public schools is both the embodiment of the unique features of our idealism and the vehicle for the transmission of our idea of a free democracy to subsequent generations. Surely, it is of prime importance that this instrument of democracy be strengthened as never before in these grim days of a divided world."

Publications on Cerebral Palsied Children

MANY EDUCATORS are focusing their attention upon the educational needs of cerebral palsied children. Three publications on this subject were developed in whole or in part by Romaine P. Mackie, now Specialist for Physically Handicapped, when she served as Consultant, Education of Physically Handicapped Children, California State Department of Education. Walt Disney Studios contributed art for the story of a cerebral palsied child, *Gary Grows Up.* Eva G. Hanson, formerly Head Teacher, California State School for the Cerebral Palsied, Los Angeles, was the coauthor of this pamphlet. Carol M. Jensen, Consultant, Education of Physically Handicapped Children, California State Department of Education, was coauthor of the bulletin, *Twenty Questions on the Cerebral Palsied Child in California.* The third bulletin in the series prepared by Dr. Mackie is titled *Information For Parents of Cerebral Palsied Children.* Copies of these publications should be requested of the publisher, the California State Department of Education, Sacramento, Calif.

Educational Articles Elsewhere

CONTRIBUTIONS by Office of Education specialists appear regularly in many periodicals. SCHOOL LIFE readers are directed to these articles prepared both for educational journals and magazines reaching the general public. A number of recently appearing articles have been:

Adult Education Is Growing, by Homer Kempfer, Specialist for General Adult and Post-High-School Education, in *School and Society,* September 11, 1948.

Contributions of Geography to American Democracy, by Otis W. Freeman, Specialist for Geography in Higher Education, in *Education,* September 1948. (Reprints are available from the Office of Education.)

The Division of Secondary Education of the Office of Education, by J. Dan Hull, Assistant Director, Division of Secondary Education, in *High School Teacher,* December 1948.

How To Use a Newspaper, by Howard H. Cummings, Specialist for Education in Government and Economics, in the "How To Do It" Series, National Council for the Social Studies, Dec. 1, 1948.

Industrial Arts in the Modern Secondary School, by Galen Jones, Director, Division of Secondary Education, in *The Industrial Arts Teacher,* Vol. 7, No. 5.

Measuring School Building Utilization, by Nelson E. Viles, Specialist for School Plant Management, in *School Executive,* September 1948.

(*Continued on page 15*)

MENTAL HEALTH

(*Continued from page 3*)

them to know how to help their teachers or to refer them for special help when needed?

2. If the careful selection of men for Officers' Training Schools by the screening of GI's is possible and desirable, wouldn't it be equally desirable to screen and select properly adjusted individuals for training as teachers? How can we help change the attitudes of the public toward the individual freedom of teachers?
3. How does mental hygiene fit into the curriculum of teachers colleges? How much mental hygiene should be included; how should it be presented, where, and at what place in the curriculum? What is a realistic or possible number of curriculum hours?
4. What are the varied ways of presenting mental health information in the classroom? How low in the grades can we start? What do we give? How do we build it up? What should be given at each age level? What should we include about sex education, problems of marriage and the family, emotional adjustments? Where in the curriculum? How should such material be presented—by word of mouth, by films, by special projects, or by what methods?
5. How can we identify and handle problem children in the classroom? The chief case-finder is the school teacher; how can we help her to learn how to identify emotional problems?
6. What training and what kinds of materials can we give teachers, or selected teachers, to help them in counseling students who have emotional or mental problems?

In our attempt to answer the above questions, we expect to raise others of equal importance. Meantime, let me earnestly suggest that administrators would be doing our research staffs a great service were they to send us accounts of their own experiences in indoctrinating themselves, their teachers, their P. T. A. groups, and their local school boards in the elementary principles of mental hygiene.

Concluding Suggestions

Until such time as a comprehensive program of assistance to schools can be put under way, we must be content to give teachers two homely but important bits of advice on how to help students who have emotional or mental problems:

1. Don't stick your neck out. With the best intentions in the world, amateur psychiatrists can do lasting damage to the emotionally unstable. As a matter of blunt fact, learning to do no harm is one of the basic tenets of mental hygiene.

2. Listen more and talk less. Teachers are trained to talk; they should also be trained to listen. The airing of problems is most important, and the teacher must inspire the confidence of children by permitting them the greatest freedom to talk about their problems—without fear of punishment, reproach, or moralizing.

Citizens Federal Committee on Education Meets

- Educational implications of atomic energy
- Education for children and youth tieing in with the 1950 White House Conference of Children and Youth
- Life adjustment education for youth at the secondary school level
- Teacher recruitment, improvement of teacher prestige, new or improved school buildings across the Nation
- New efforts to strengthen American democracy through education

These were among the Office of Education program activities reviewed by Rall I. Grigsby, Acting Commissioner of Education, at the recently held meeting of the Citizens Federal Committee on Education. Representatives of business, manufacturing, labor, agriculture, homemakers, religious groups, Negro groups, the professions, and veterans, attended the meeting. The Committee learned that through its Advertising Council-supported campaign on the teaching crisis in our schools more than $5,000,000 worth of advertising in national magazines, newspapers, and over the radio was contributed, and that more than 1,800,000,000 listener-impressions were accounted for during the past year by radio programs, announcements, and flashes. The Committee expressed the need for active support of national organizations and local school follow-up this year to stimulate concrete programs of school improvement. Consideration also was given to a special study, made at the request of the Committee, of educational activities in the Federal Government. Findings of this study will be announced in the near future.

Among those who attended the meeting shown in the accompanying photograph were: Sitting, left to right, Ralph L. Goetzenberger, John T. Corbett, Rall I. Grigsby, Kathryn McHale, Mrs. Brice Clagett; standing, Walter G. Ingalls, Norma E. Boyd, Frank Tishkins, Margaret A. Hickey, J. L. Horace, Agnes Samuelson, and Ashley Halsey.

FUTURE SECURITY

(*Continued from page 11*)

the level of the individual services, with the following as their responsibilities:

Army—organization and training of land combat and service forces and such aviation and water transport as may be organic therein.

Navy—organization and training of naval combat and service forces (including the Marine Corps) and such aviation as may be organic therein.

Air Force—organization and training of those activities formerly under the jurisdiction of the Army Air Forces.

Since the implementation of the National Security Act in September 1947, many steps have been taken toward the realization of that aim which Congress spelled out so plainly in the opening sentences of the law.

Educational Articles Elsewhere

(*Continued from page 13*)

The National Picture of Guidance and Pupil Personnel Service, by Franklin R. Zeran, Dean, School of Education, Oregon State College, and Galen Jones, Director, Division of Secondary Education, in *Bulletin,* National Association of Secondary School Principals, October 1948.

Recordings Are Here To Stay, by Gertrude G. Broderick, Specialist for Script and Transcription Exchange, in the *Journal of the Air,* September 1948.

Science Problems of National Significance, by W. Edgar Martin, Specialist for Education in the Biological Sciences, in *The Science Teacher,* December 1948.

Teaching Good Citizenship, by Howard R. Anderson, Chief, Instructional Problems, in *The School Executive,* December 1948.

The Young and Growing Student Council, by Ellsworth Tompkins, Specialist for Large High Schools, in *School Activities,* September 1948.

Useful Courses of Study; II Junior High School Social Studies, by Dorothy Merideth, Specialist for Education in the Social Sciences and Geography, in *Social Education,* October 1948.

Vocational Guidance: A Growing Factor in Labor Development, by Harry A. Jager, Chief, Occupational Information and Guidance, in *Monthly Labor Review,* December 1948.

Your Radio Has Wings, by Franklin Dunham, Chief, Educational Uses of Radio, in *Music Educators Journal,* September-October 1948.

Ways To Teach Peace

TO PROMOTE interest in the teaching for peace, the Alabama State research committee of Delta Kappa Gamma, national teachers society, conducted a survey which has revealed most interesting findings. Chairman of the committee directing this study was Eoline Wallace Moore, formerly director of teacher training at Birmingham-Southern College, whose report of the project is summarized for SCHOOL LIFE *readers. Two hundred teacher members of Delta Kappa Gamma, representing 15 school systems throughout Alabama, 2 State colleges, and the State university are continuing this study on a wider scale this school year.*

WHAT ARE the schools doing to educate for peace? If, as most of us believe, attitudes and practices in citizenship are largely influenced by the guided experiences of the schools, surely the schools of all nations should look for ways to develop attitudes of tolerance and thoughtful approaches to international understanding and fellowship.

In March 1948, two hundred teachers in Alabama public schools and colleges were asked this question: "What have you done in this school year to educate for peace?" Six answered that they had done nothing. Eight said that they had tried in a general way to create an atmosphere of interest in world peace. One hundred eighty-six gave specific techniques which they had used.

Thirty-nine different teaching-learning activities were named, and 724 instances were given of specific uses of these activities in classroom and in school-centered community experiences. This does not give the complete picture, since reports did not specify the number of times teachers used the techniques named, nor was the number of pupils participating stated. For example, in 3 schools pupils wrote letters for publication, and in 21 schools pupils corresponded with children in foreign countries. It is probable that these were continuing activities and that many letters were written and read. Sixty-three teachers told of aid given to people of other lands, but many did not say how many times this was done, nor the actual number of articles or amounts of money sent. No doubt the total was large. This summary shows the types of learning experiences involved and planned types of pupil guidance which may be of value to other teachers. It is hoped that it may stimulate teachers to a thoughtful analysis of things which they have done and may do.

FREQUENCY LIST OF TECHNIQUES USED IN TEACHING WORLD PEACE

Type of technique	*Number of teachers using*
Teacher speaking to community groups	64
Gifts to people of foreign countries	63
School group programs—assembly, parents' night, etc	53
Class forums and panel discussions	40
Class study of cultures of other lands	36
Guided units with peace theme as central problem	35
Group study of UNESCO	32
Teacher emphasis upon tolerance	30
Application of Golden Rule in school situations	29
Study of United Nations Program	28
Cooperation with Red Cross; Junior Red Cross work	23
Outside speakers invited to school for talks on peace	22
Pupil reports on world problems	22
Self government goals set for teachers and pupils	21
Correspondence with pupils in foreign schools	21
World fellowship films shown	18
Directed reading for information concerning other lands	17
Use of radio programs	16
Brotherhood week observed	16

Type of technique	*Number of teachers using*
Cooperation with various world fellowship organizations	16
Library and bulletin board exhibits	15
Books and periodicals added to school libraries	15
Appreciation shown for foreign pupils and visitors	11
Use of great literature	11
Study of ERP program	10
Science class study of the meaning of global living	8
Group study of the meaning of freedom	7
Faculty study groups, using reading lists on problems of peace	6
Vitalized map study	5
Planned picture study	4
Use of peace theme in speech classes	3
Atlantic Charter studied	3
Mathematics class study of the cost of war	3
Foreign orphan adopted	3
Becoming informed concerning the Friendship Train	3
School in Holland adopted	1
Collection of flags of all nations	1
Refraining from "talk of war"	1

New Books and Pamphlets

A REGULAR feature in each issue of SCHOOL LIFE is the listing of "New Books and Pamphlets" by Susan O. Futterer, Head. Reference and Bibliographical Services. Federal Security Agency Library. Books received in the Office of Education are added to the library collection for use by Office staff specialists and library patrons. Selected books and pamphlets received are called to the attention of SCHOOL LIFE readers each month.

Adventures in World Friendship, 1947–1948. Louisville, Ky., Public Schools, 1948. 56 p. Illus.

The American Way; Summarizing Present Practices and Suggesting Activities for the Development of Americanism in Education. San Diego, Calif., San Diego City Schools, 1948. 137 p. Illus.

Building Atlanta's Future. By John E. Ivey, Jr., Nicholas J. Demerath, and Woodrow W. Breland. Chapel Hill, The University of North Carolina Press, 1948. 305 p. Illus. $3.50.

Community Recreation. A Guide to Its Organization and Administration. By Harold D. Meyer and Charles K. Brightbill. Boston, D. C. Heath and Co., 1948. 701 p. Illus. $5.

Democracy in Education. Reprint Service Bulletin Compiled from Past Issues of *Childhood Education* and *Teachers College Record* by the Association for Childhood Education. Washington, D. C., Association for Childhood Education, 1948. 32 p. 50 cents.

Denver Serves Its Children. A Handbook of School and Community Resources for the Use of Parents and Teachers. Denver, Colo., Denver Public Schools, 1948. 48 p. Illus.

Graduate Training for Educational Personnel Work. By Corinne LaBarre. Washington, American Council on Education, 1948. 54 p. (American Council on Education Studies. Series VI—Student Personnel Work—No. 11) $1.

Selected Theses in Education

THESES in the field of school administration were listed in the November issue of SCHOOL LIFE. Featured in the December SCHOOL LIFE listing were theses in the field of the physically handicapped and socially maladjusted. This month Mrs. Ruth G. Strawbridge, Federal Security Agency Library Bibliographer, gives SCHOOL LIFE readers a varied assortment of theses subjects, selected from the Office of Education collection. Theses on file are available on interlibrary loan for use by administrators, teachers, and students.

A Comparative Study of Student Dislikes Found in Teachers With Special Reference to the Secondary Level. By Sterling G. Callahan. Doctor's, 1947. George Washington University. 231 p. ms.

Attempts to determine which traits high school, college and gradnate students dislike most in their secondary school teachers.

A Follow-up Study of the Ninth Grade Guidance Project Conducted in Eight Philadelphia Junior High Schools During the Year 1941–42. By Ellen S. Patten. Doctor's, 1945. University of Pennsylvania. 69 p.

Gives the results of the findings on the pupils who remained in school throughout the two years of the follow-up study, and on those pupils of the study group who dropped out of school during this period.

The Influence of Military Service Experiences on Prospective Secondary School Teachers. By Howard R. Schroeder. Master's, 1947. Indiana State Teachers College. 67 p. ms.

Studies the influence of military service on the objectives of education and on the personal and social traits requisite for high grade teaching in secondary schools. Pictures the typical veteran as a prospective teacher, considering only the influences of his military service.

Leadership Guidance for Public Secondary Schools. By George Q. Hill, Jr. Master's, 1946. Boston University. 287 p. ms.

Attempts to determine how potential leaders may be discovered, counseled, educated, and so placed that society may have the benefit of their leadership.

Pre-College Guidance Conference. By Marion L. Malcolm. Master's, 1945. Syracuse University. 60 p. ms.

Describes an experiment conducted with pupils in the junior year of the Syracuse, New York, high schools who planned to go to college. Suggests ways of improving the precollege guidance conference.

Requirements for Vocational and Teacher Training and Certification in Trades and Industries in the Various States and Territories. By Cecelia R. Earhart. Doctor's, 1946. University of Cincinnati. 2 vols.

Compares the various vocational teacher training preemployment and in-service courses required of these teachers in connection with the certification requirements of their States.

A Study of the History of Adult Elementary and Secondary Education and Possibilities for Future Service in Louisville, Kentucky. By Flora L. Morris. Master's, 1944. University of Louisville. 101 p. ms.

Describes the possibilities for service to adults in Louisville, including counseling and retraining, general education, classes in civic and social understandings, vocational education, and recreational opportunities.

A Textbook in Educational Guidance for Senior High School. By Mary Ford Detjen. Master's, 1946. University of Louisville. 221 p. ms.

Attempts to help pupils become orientated in school; to teach them to concentrate and to study effectively; and to guide them in planning their study time.

U. S. GOVERNMENT PRINTING OFFICE: 1947

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EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

Small Equipment for the School Lunch. Prepared by the Production and Marketing Administration.

Washington, U. S. Government Printing Office, 1948. 8 p. (Program Aid 59) Free from the Information Branch, Production and Marketing Administration.

Department of the Interior

Free Publications of the National Park Service.

Washington, National Park Service, 1948. 4 p. Mimeographed. Free.

Federal Security Agency

Mental Health Series, Nos. 1—Prepared by the Public Health Service.

Washington, U. S. Government Printing Office, 1948—

No. 1. For Mental Health. 5 cents.
No. 2. Training and Research Opportunities Under the National Mental Health Act. 10 cents.
No. 3. (Not announced.)
No. 4. The National Mental Health Program. 10 cents.

"A New Look at Child Health," by Brock Chisholm, World Health Organization.

Washington, U. S. Government Printing Office, 1948. 8 p. (Reprint from *The Child*, May 1948.) 10 cents.

Popular Health Publications. Prepared by the Public Health Service.

Washington, Public Health Service, 1948. 2 p. Mimeographed. Free.

Library of Congress

The Canterbury Pilgrims, Mural Paintings by Ezra Winter.

Washington, U. S. Government Printing Office, 1946. Folder. Free from the Publications Office, Library of Congress.

Folk Music of the United States and Latin America; combined catalog of phonograph records.

Washington, Library of Congress, 1948. 47 p. 10 cents. Obtainable from The Recording Laboratory, Division of Music, Library of Congress.

Superintendent of Documents

Half a Hundred; 50 selected and recommended United States Government publications.

Washington, U. S. Government Printing Office, 1948. Folder. Free.

Maps. 39th Edition.

Washington, U. S. Government Printing Office, 1948. 8 p. (Price List 53) Free.

Monthly Catalog of United States Government Publications.

Washington, U. S. Government Printing Office (current). Yearly subscription $3.

What Is Your Hobby? 1948 Edition. Selected United States Government publications on your favorite recreation.

Washington, U. S. Government Printing Office, 1948. Folder. Free.

Office of Education

Printed Publications

14 Questions on Elementary School Organization. (Pamphlet No. 105) 10 cents. See p. 2 this issue.

The Enigma of Class Size. (Misc.) Free.

Processed Materials

(Free—Limited supply)

Arithmetic in Elementary Education. Elementary Education Division Selected References No. 13, April 1948.

Business Periodicals. Misc. 3148, May 1948.

Child Growth and Development. Elementary Education Division Selected References No. 10, June 1947, rerun November 1948.

Conference of Leaders in Elementary Education, Report of Second Conference, Washington, D. C., May 20–22, 1948. (August 1948.)

Demonstration Workshop on Teacher Education for Health. (September 1948.)

Education for the Aging. Adult Education Ideas, Division of Secondary Education, No. 1, September 1948.

Games and Self-Testing Activities for the Classroom. Elementary Education Division, Education Briefs No. 11, March 1948; rerun November 1948.

General Workshop Information, Understanding Workshop Methods. Secondary Education Division. (October 1948.)

Homework in the Elementary School. Elementary Education Division, Selected References No. 15, August 1948.

Home Economics in the Public Schools of the U. S. A. Misc. 3306–1, August 1948.

List of Instructional Materials for the Supplementary Training of Apprentices and Other "On-the-Job" Trainees. Misc. 3243, September 1948.

Materials and Apparatus for Teaching Elementary Science. Elementary Education Division Education Briefs No. 1, April 1947, rerun November 1948.

Machine Shop Training, Suggested Job-Sheet Series, Part I—*Suggestions to Teachers on the Use of the Job-Sheet Series.* Misc. 3423–1, rerun October 1948.

National Conference on Family Life, Action Area: Education Report of the Committee on Home-School Relationships. May 1948.

Periodic Reports of Children's Progress. Elementary Education Division, Education Briefs No. 9, September 1948.

Pointers, Zeal for American Democracy. *Reports of State and Local Implementation of Zeal for American Democracy Program.*

Pointers Supplement, Zeal for American Democracy. *What One County Has Done to Promote Zeal for American Democracy.*

Planning for America's Children, Committee 6, *Desirable Schoolhousing, Equipment, and Instructional Supplies,* 1948. Elementary Education Division.

Report of a Life Adjustment Education Work Conference at Indiana University, July 25–30, 1948. Secondary Education Division.

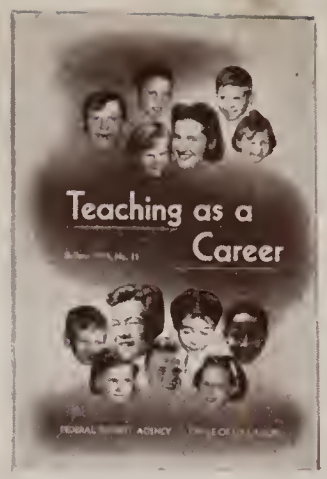
Selected References on Federal Aid to Education. (September 1948.)

The School Comes to the Home-Bound Child. Elementary Education Division Education Briefs No. 13, August 1948.

Significant Dates in the Early History of Institutions for the Higher Education of Women in the United States. (Circular No. 244, October 1948.)

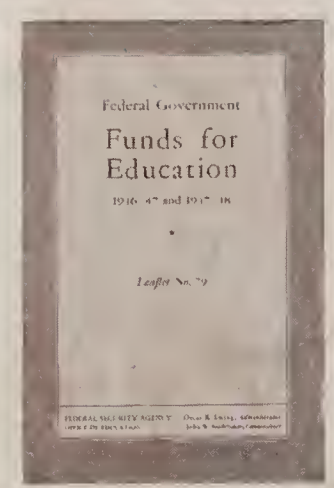
State Elementary and Secondary School Statistics. (Formerly Statistical Circular No. 10, September 1948.)

PUBLICATIONS of the OFFICE of EDUCATION



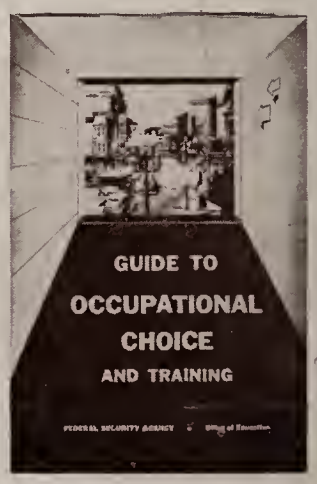
INFORMATION on teaching as a career presented by the late Benjamin W. Frazier, Specialist for Teacher Education . . Bulletin 1947 No. 11 . . 15 cents.

THIS MOST recent publication on postgraduate education was prepared by Homer Kempfer, Specialist for General Adult and Post-High School Education . . Pamphlet No. 106 . . 10 cents.

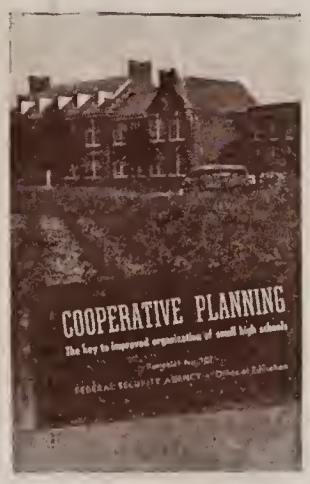


Timon Covert, Specialist in School Finance, reports on funds which the Federal Government provides for distribution to States and Territories . . Leaflet No. 79 . . 15 cents.

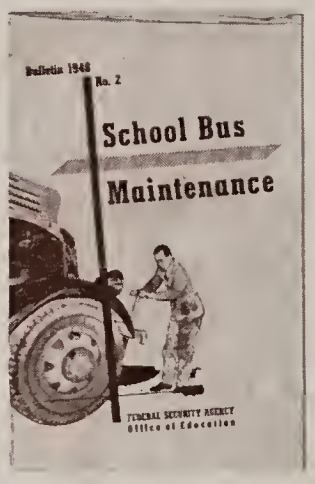
SUGGESTED methods of teaching elementary science offered by Glenn O. Blough and Paul E. Blackwood, Specialists in Elementary Science . . Bulletin 1948 No. 4 . . 15 cents.



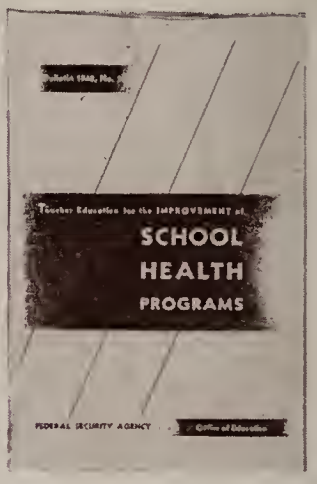
GUIDANCE sources and references presented by Walter J. Greenleaf, Educational and Occupational Information Specialist . . Vocational Division Bulletin No. 236 . . 35 cents.



Walter H. Gaumnitz, Specialist in Small and Rural High Schools, and Wilbur Devilbiss, Supervisor of High Schools, State Department of Education, Baltimore, Md., suggest how educational services for rural youth in small high schools can be improved . . Pamphlet No. 102 . . 10 cents.



E. Glenn Featherston, Specialist for Pupil Transportation, discusses factors related to school bus maintenance . . Bulletin 1948 No. 2 . . 15 cents.



Frank S. Stafford and H. F. Kilander, Health Education Specialists, report on two workshops in health education . . Bulletin 1948 No. 16 . . 15 cents.

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Volume 31 Number 5
FEBRUARY 1949

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for February 1949

Volume 31 Number 5

Cover photograph, showing school children at the Lincoln Memorial, Washington, D. C., is from Department of State exhibit on American education, sent to Japan. See article in early issue of SCHOOL LIFE.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

"School officials and teachers have been remiss in not teaching the pupils and patrons the essentials of school-plant adequacy." . . . . . p. 2

★ ★ ★

How many children age 5 to 19 are not in school in our nation? . . . . . p. 3

★ ★ ★

" . . . it is difficult to fathom the influence which the (Supreme) Court's vigorous views may have on future education." . . . . . p. 5

★ ★ ★

"Do the Armed Forces offer opportunity for continuing education or new learning for our young people?" . . . . . p. 8

★ ★ ★

"The ultimate strength of our democracy lies in the minds of its citizens." . p. 14

★ ★ ★

"Teachers, counselors, or administrators are not different from other human beings." . . . . . p. 15

Published each month of the school yeor, October thraugh June.

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THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

Adequate Housing and Modern Education

by Nelson E. Viles,
Specialist for School Plant Management

As citizens in a democratic society we are committed to the theory that:

1. Education pays;

2. Education is vital to industrial and economic sufficiency;

3. Education is an important factor in personal satisfaction and enjoyment;

4. Education is basic for democratic citizenship;

5. Basic education must be free and universal;

6. All capable youth must be encouraged to obtain a certain degree of educational proficiency.

THE SCHOOL PLANT is a vital part of our whole educational program. We will never be able to obtain better school plant facilities until the educators know what is needed and what is best for the children. Parents want what is best for their children, but will not know what plant facilities will best serve their children until the educators inform them. It is the duty of the educators to provide total educational leadership. This is a duty no true educator can afford to shirk. If we believe in adequate education, we should sell it. Telling the public once is not educating them. We must study our programs and develop them in a balanced manner. We should develop many ways of proving to the public that certain things will improve education for their children.

MODERN education is more than a study of the classics and the ologies. It is basically teaching youth and motivating their desire for the better things in life and then assisting them to develop the skills and abilities to attain, use, and enjoy these better things in life.

Housing and physical environment is a definite and important factor in life. The school plant is more than a shelter. It is an educational tool. Pupils feel that the school is theirs. Given the proper incentive, they will take pride in it. For many children their school home (plant) is the best home they will ever be able to call their own. It will have more conveniences, be more attractive, and provide more comfort than will the homes from which many of them come.

From the school many pupils will develop ideals and standards of arrangement, comfort, sanitation, illumination, decoration, and beauty that will serve as guide lines to them when they develop their future homes. We owe it to our citizenry to provide the brighter future outlook on life. Since our school plants are tools of education, shelter for protection, and instruments for teaching, we must strive to make them the most efficient that funds will permit.

In the past we have given insufficient attention to the funds for school-plant construction, maintenance, and operation. Nearly all parents want good schools for their children. Patrons, parents, and nonparents like to feel that they are providing good schools for the children of the

community. They like to have a feeling of pride in their schools. Many parents do not know the type of school buildings best adapted to the needs of their children. A majority of these patrons would be willing to assist in obtaining and maintaining adequate school plants if they understood fully the importance of such facilities and had some idea of what facilities are needed for their children.

School officials and teachers have been remiss in not teaching the pupils and patrons the essentials of school-plant adequacy. They have, in most cases, been absorbed in a few phases; the types and methods of class instruction, the adequacy of textbooks and teaching materials, and salaries to obtain and retain competent teachers. These are vital, but the other tools, the plants, are also important. The fact that many school administrators and teachers do not know what constitutes school-plant adequacy is little excuse. If they are to serve as educators they must know the school plant and the services it is to render. They must be able and willing to show the community what the local needs are.

There is another vital phase in this problem of financing school plants and schools. Pupils learn much more readily when they have the proper tools, when they have good seeing conditions, and when they are mentally alert. The child who is uncomfortable, who is in overheated or underheated rooms, or rooms that are noisy or poorly ventilated, or who must sit in ill-adapted seats will be less ready to participate in the educational activities than a pupil that is housed in comfortable surroundings. A part of the community and teacher money and effort, and, more important, of the time and effort of the pupils, is wasted because of the inadequacy of the school-plant environment. Educators must realize that adequate school plants can be economical and that poor or inadequate facilities are invariably uneconomical.

Some Features of a Modern Plant

A school plant need not be elaborate in design, massive in structure, or ornate to serve adequately the needs of a school and a community. There is so much need for essential space and facilities that few communities can afford to erect imposing buildings planned primarily to satisfy the vanities of a designer or a community.

"Keeping up with the Joneses" has no place in school-plant planning. This desire may be evidenced by costly exterior trim or design or the request by some communities for gymnasiums where more attention is given to tournament facilities than to physical education. In fact, the chief criteria often offered the designer by local communities is that the gymnasium must be larger than that in any other neighboring school. It is evidenced again in requests for large auditoriums which are filled once or twice a year and which are so large that they are utilized infrequently and never fully by the school. This is not to imply that the school should not be used by the community. It is to imply that community auditoriums should be recognized as such and that the costs should not be charged wholly against the per pupil costs. In any case, attention should be given to the problem of providing adequate class, shop, comfort, and other facilities before school-district funds are used for oversized gymnasiums and auditoriums.

One, if not the principal, consideration in planning, erecting, or operating school buildings is the safety of the occupants. It is possible to point out here only a few of the safety factors that must be considered and these will not be given in any order of importance. One-story buildings may be of any type of construction if adequate exits are provided.

Two-story buildings should have fire-resistive corridors and stairs. Doors should open out. In buildings of four or more rooms, corridor exit doors should be panic bolt-fitted unless each classroom has doors leading directly to the outside. Furnace rooms under or next to classrooms should be fully enclosed in fire-resistive masonry. If they cannot be so enclosed, they can be moved to the side of the building.

In-the-room stoves should be jacketed and should have metal floor shields under them. This same shielding applies to stoves and hot plates in shops and kitchens. All machinery in shops should have dangerous moving parts protected. Barbed-wire fences, thorny bushes, or trees with hazardous dead limbs should be removed. Playgrounds should be free from holes and ditches and splintered or hazardous playground equipment should not be allowed. Sharp corners and broken seats should be eliminated. Housekeeping practices that permit waste paper, oily rags, or rubbish to collect and become fire hazards should be corrected.

For Your Reference

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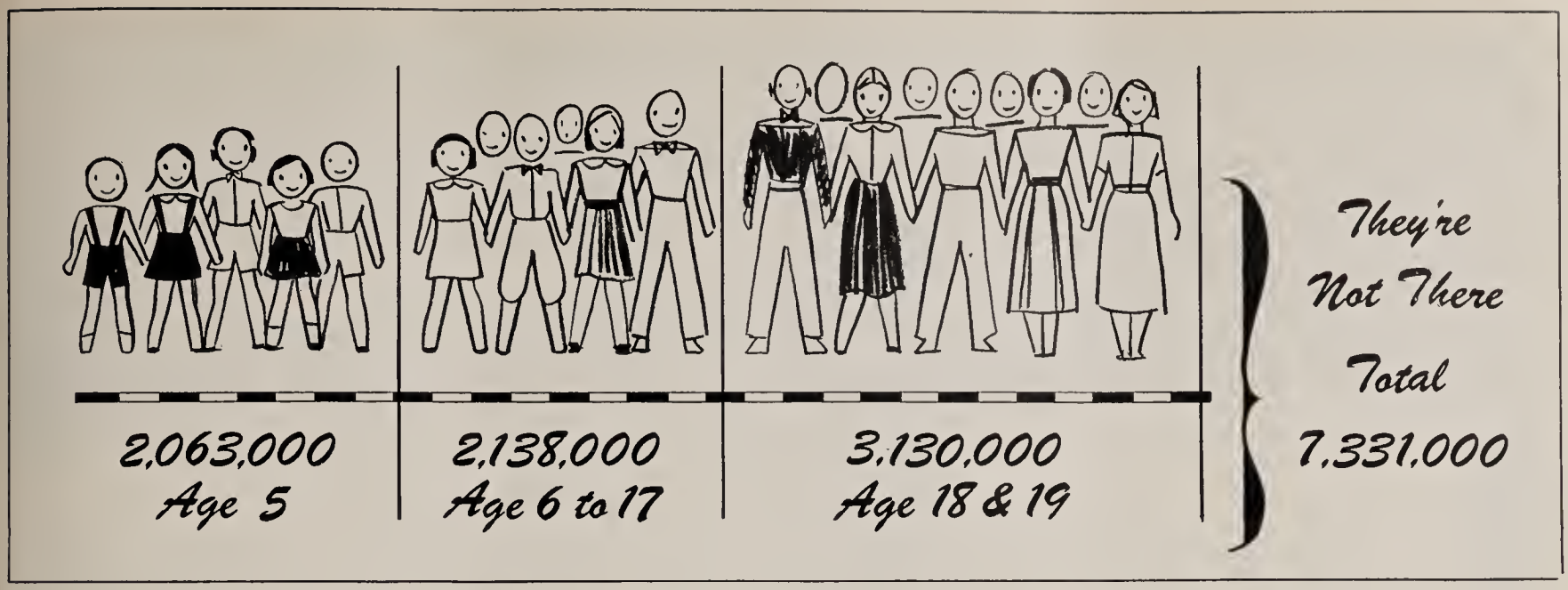
Health Protection

Almost of equal importance is the protection of child health. Many factors contribute to healthful school living. One of these factors is lighting. The two principal sources are windows and electric lighting. Windows should reach to the ceiling. The total glass area should be equal to one-fifth of the floor area. They should be so placed that no child faces them when seated at his desk. The windows should be clean and whole. They should be shielded by light-weight light-colored center double-hung shades.

The electric lights should be ample in number and size to give adequate illumination. The lamps should never be bare but should be adequately shielded. The room finish should be light in color but never glossy. This applies to all surfaces in the room. Dirty walls, ceilings, or floors (dark-oiled), dark-brown desk tops, and black chalkboards absorb light. Painting and refinishing are "musts" in most schoolrooms.

Heating facilities should be ample to provide the temperature ranges desired. The pupil should not be too hot or too cold for comfort. He should not be hot one minute and cold the next. He should not be hot on one side and cold on the other. The pupils in the far corners should have the same heat service as the one next to the heater. There should be some movement of air to carry off odors and foul air and to diffuse the heat. Hot heads and cold feet are too common in schoolrooms. This moving air should not produce cold drafts

(*Continued on page 11*)



Children Not in School

by David T. Blose and Emery M. Foster, Reports and Analysis Section, Research and Statistical Service

THREE FIGURES, 2,000,000, 4,000,000, and 7,000,000, are being currently used to represent the number of children not in school. Each is correct in its own context, but each has a different meaning.

The figure 2,000,000 applies to children of elementary and secondary school age, 6 to 17. This age group would ordinarily be in grades 1 to 12. In most States the compulsory ages are from 7 to 15, inclusive. Of the group aged 6 to 17, therefore, almost all of the 6-year-olds and the 16- and 17-year-olds are not required to be in school.

The figure 4,000,000 includes children 6 to 17 years of age, and also children aged 5, which is the kindergarten age. Of the 2,766,000 children 5 years old, slightly over 2,000,000, or about 75 percent, are not in school.

The figure 7,000,000 includes, besides children of 5 to 17 years, also young people of junior-college age, 18 and 19. Of the 4,137,000 in these two age groups, about 3,000,000, or again about 75 percent, are not in school.

These figures are shown in the accompanying table. Also important is the fact that of the 2,138,000 children of elementary- and high-school age not in school, 1,406,000 are 16 and 17 years old. This age level corresponds with that for the last 2 years of high school, and in most States is beyond the compulsory-attendance age, which typically is considered to be the end of the fifteenth year.

It is apparent that any effort to increase the national percentage of children in school must be concentrated chiefly on the kindergarten, the junior and senior years of high school, and the freshman and sophomore years of college. Almost 98 percent of the children of elementary-school age were in school in October 1947, and almost 92 percent of the high-school children within the compulsory-attendance group were in school. For the entire group from kindergarten through junior college, over 78 percent were in school.

School enrollment of the civilian noninstitutional population, by age, for the United States: October 1947.[1]

Approximate grade level	Age	Total non-institutional population	Enrolled in school		Not enrolled	
			Number	Percent	Number	Percent
1	2	3	4	5	6	7
Kindergarten	5 years	2,766,000	703,000	25.4	2,063,000	74.6
Elementary school—grades 1–8	6 years	2,522,000	2,366,000	93.8	156,000	6.2
	7–9 years	9,959,000	6,851,000	98.4	108,000	1.6
	10–13 years	8,570,000	8,451,000	98.6	119,000	1.4
	6–13 years	18,051,000	17,668,000	97.9	383,000	2.1
High school—grades 9–12	14 and 15 years	4,158,000	3,809,000	91.6	349,000	8.4
	16 and 17 years	4,334,000	2,928.000	67.6	1,406,000	32.4
	14–17 years	8,492,000	6,737,000	79.3	1,755,000	20.7
Elementary and high school—grades 1–12.	6–17 years	26,543,000	24,405,000	91.9	2,138,000	8.1
Kindergarten, elementary, and high school—grades K–12.	5–17 years	29,309,000	25,108,000	85.7	4,201,000	14.3
Junior college	18 and 19 years	4,137,000	1,007,000	24.3	3,130,000	75.7
Kindergarten, elementary, high school, and junior college.	5–19 years	33,446,000	26,115,000	78.1	7,331,000	21.9

[1] Data are taken from Current Population Reports, Population Characteristics Series P–20, No. 19, July 30, 1948. *School Enrollment of the Civilian Population, October 1947.* Department of Commerce, Bureau of the Census, Washington 25, D. C.

Is She a Teacher?

MANY PERSONS who saw the cover photograph on the October 1948 issue of SCHOOL LIFE have asked, "Is she a teacher?" The answer is "Yes." This photograph was taken by G. H. Holmes, Director, Bureau of Publications, Iowa State Teachers College, Cedar Falls, Iowa. It was snapped originally in color on a contax camera with a 35 mm. kodachrome film for use as a cover illustration on a publication, "A Career in Teaching." The subject is Mrs. Mary Smith, a former teacher in the public schools of Burlington, Iowa.

Supreme Court Decisions Affecting Education

by Ward W. Keesecker, Specialist in School Legislation

None who act under the color of law is beyond the reach of the Constitution.
U. S. Supreme Court.

WHAT the Supreme Court of the United States has said pertaining to State educational policies and their effects upon the rights and privileges of individuals is of wide interest and concern to school officials, teachers, and citizens generally. Recent years have witnessed an increasing number of legal issues affecting educational policies which have been passed upon by the Supreme Court of the United States. The opinions of that Court play an increasingly vital part in the shaping of State educational systems.

While education is primarily a State function, State educational legislation and administrative policies must conform to the Federal Constitution. A State must operate its educational system within the limits of the Federal Constitution and its principles as interpreted and applied by the Supreme Court. On this subject the Supreme Court itself has said:

The Fourteenth Amendment, as now applied to the States, protects the citizen against the State itself and all of its creatures—Boards of Education are not excepted. These have, of course, important, delicate, and highly discretionary functions, but none that they may not perform within the limits of the Bill of Rights. That they are educating the young for citizenship is reason for scrupulous protection of Constitutional freedoms of the individual, if we are not to strangle the free mind at its source and teach youth to discount important principles of our Government as mere platitudes (319 U. S. 624).

Generally speaking, a State is free to formulate by legislation or administrative regulation its own educational policies, but the Supreme Court may, upon properly presented issues, reverse these policies if they, in the judgment of the Court, constitute an arbitrary interference with the rights and liberties of the people as guaranteed by the Federal Constitution.

Significant Trends

The number and nature of educational issues over which the Supreme Court has accepted jurisdiction in recent years are significant. For more than a hundred years after the founding of the Court—to 1900—

Trends in number of Supreme Court decisions on education

20-year intervals	*Number of decisions*
1789–1808	0
1809–28	1
1829–48	1
1849–68	1
1869–88	0
1889–1908	3
1909–28	5
1928–48	14

only four educational decisions were rendered. From 1900 to 1920 only three such decisions occurred. However, from 1920 to date, no less than 17 decisions relating to education have been rendered by the Court. Among the factors which apparently contribute to the increase in Supreme Court decisions relating to education are:

The extension of governmental activities and regulations affecting the social and economic life of the people.

Extension of public educational activities touching upon deeply cherished principles of educational and religious freedom.

Judicial extension, especially in recent years, of the meaning of the first and fourteenth amendments of the Federal Constitution.

Should Supreme Court decisions relating to education continue at the recent unprecedented pace, their future influence upon education is most likely to result in significant and heretofore unexpeeted changes in education and Federal-State educational relations. Educators, in reflecting upon this tendency, are prone to recall what the Court itself once observed:

. . . the courtroom is not the arena for debating issues of educational policy. It is not our province to choose among competing considerations in the subtle process of securing effective loyalty to the traditional ideals of democracy, while respecting at the same time individual idiosyncracies among a people so diversified in racial origins and religious allegiances. So to hold would in effect make us the school board for the country. That authority has not been given to this Court, nor should we assume it.—*Justice Frankfurter speaking for the Court in first Flag Salute case* (310 U. S. 586).

The Court, however, has found it difficult to adhere to the viewpoint above expressed. For example, 3 years later the Court reversed its decision in the first Flag ease and held that compulsory flag salute by the State or its local school authorities "transeends constitutional limitations on their power and invades the sphere of intellect and spirit which it is the purpose of the first amendment . . . to reserve from all official control." In this decision the Court boldly asserted:

. . . we apply the limitations of the Constitution with no fear that freedom to be intellectually and spiritually diverse or even contrary will disintegrate the social organization. . . . Freedom to differ is not limited to things that do not matter much. That would be a mere shadow of freedom. The test of its substance is the right to differ as to things that touch the heart of the existing order (319 U. S. 624).

However much one may cherish the rightness of any decision, it is difficult to fathom the influence which the Court's vigorous views may have on future education, especially if the accelerating frequency of decisions continues.

There can be no question about the general principle of judicial review; and it is not within the purview of this article to question the soundness of any decision rendered. It is rather the frequency of the decisions in addition to the force of their views which now presents a new and important factor for consideration in the field of education. In view of the current extension of State educational legislative activities, and also the prevailing judicial emphasis upon defending the rights and freedoms of individuals under the extended meaning of the first and fourteenth amendments as against State legislative policies, it is reasonable to expect an increasing number of other decisions from the high tribunal which will in time significantly affect public education in the United States.

Slowing the Rate of Decisions

A possible procedure for slowing down these educational changes by judicial process has been suggested by the Court itself in the following language:

Judicial review, itself a limitation on popular government, is a fundamental part of our constitutional scheme. But to the legislature no less than to courts is committed the guardianship of deeply cherished liberties. . . . To fight out the wise use of legislative authority in the forum of public opinion and before legislative assemblies rather than to transfer such a contest to the judicial arena serves to vindicate the self-confidence of a free people (310 U. S. 586).

In the recent case of *McCollum* v. *Board of Education*, Mr. Justice Jackson qualified his concurrence opinion with the following noteworthy reservations:

. . . I think it is doubtful whether the facts of this case establish jurisdiction in this Court, but in any event that we should place some bounds on the demands for interference with local schools that we are empowered or willing to entertain. I make these reservations a matter of record in view of the number of litigations likely to be started as a result of this decision.

A Federal Court may interfere with local school authorities only when they invade either a personal liberty or a property right protected by the Federal Constitution. . . .

(Continued on page 6)

For Vocational Counselors

TWO MIMEOGRAPHED lists of books, pamphlets, and articles, *Librarianship as a Career* and *Recent Pamphlets and Folders Issued by Accredited Library Schools* are available to vocational counselors upon request from the American Library Association, 50 East Huron Street, Chicago 11, Ill.

In Portuguese and Japanese

A PORTUGUESE translation of an Office of Education publication titled, "Homemaking Education in Secondary Schools of the United States," has been made by the Department of State. The English version is available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., price 15 cents.

From Japan there recently came to the Office of Education a request for permission to carry a Japanese translation of Bulletin 1946 No. 8, "A Curriculum Guide to Fire Safety," for elementary schools in *Kyoto-shobo*, a monthly magazine published by the Kyoto City Fire Bureau. The magazine is distributed among all members of the Fire Bureau and to each fire station under its control to improve knowledge of fire fighting and fire safety. The Japanese translation also will be distributed to schools.

Copies of "A Curriculum Guide to Fire Safety" are for sale by the Superintendent of Documents, price 10 cents each.

Goals for 40,000 Librarians

THROUGH a program of action spearheaded by the American Library Association under its new Executive Secretary, John Mackenzie Cory, formerly of the Office of Education staff, 10,000 libraries and 40,000 librarians aeross the Nation are setting new goals. Planning and services of school, college, public, and other libraries are being redirected in terms of a statement of "Four Year Goals" adopted by the ALA Council. Main emphasis is to shape library programs and service through adequate, well-organized, and appropriate informational and educational materials so that library patrons and the public generally may gain proper understanding of urgent problems in today's world. To provide quality library service, the ALA-supported goals call for staffing of all libraries with an adequate number of competent trained librarians.

From: Keesecker, Ward W. "Supreme Court Decisions Affecting Education." SCHOOL LIFE 31: 4-7; February 1949.

Holdings of Principal Supreme Court Decisions Relating to Education

From Beginning of the Court to Present Date

Trustees of Dartmouth College* v. *Woodward, 4 Wheaton, U. S. 518, 4 L. Ed. 629 (1819) :

Held that a charter granted to a private college is in the nature of a contract and cannot be revoked or altered by the legislature without the consent of those to whom it was granted.

Vidal* v. *Girard's Executors (known as the Girard College case) , 2 Howard 127, 43 U. S. 126 (1844) :

Held that the will of Stephen Girard for the endowment of a college which by its provisions excluded ministers and missionaries of the Gospel from entrance to the college was not so derogatory to the Christian Religion as to make a devise for the founding of such a college void according to the constitution and laws of Pennsylvania.

Springfield Township* v. *Quick, 63 U. S. 56 (1859) :

Held that a State may refuse to apportion State funds to schools receiving township aid (derived from a Federal grant of land) until schools not receiving such aid are on a parity with them.

Cummings* v. *Board of Education, 175 U. S. 528, 2d S. Ct. 197, 44 L. Ed. 262 (1899) :

Sustained the validity of the maintenance of a high school for white girls without providing similar school for colored children.

Reuben Quick Bear* v. *Leupp, Commissioner of Indian Affairs, 210 U. S. 50 (1908) :

Sustained the policy of the U. S. Indian Office in using public Indian tribal and trust funds to obtain by contract the education of Indian children in private Catholic schools.

Berea College* v. *Commonwealth, 211 U. S. 45, 29 S. Ct. 33 1908) :

Held as valid an act of the Kentucky legislature which prohibited educational corporations from giving instruction to both white and colored students at the same time.

International Textbook Co.* v. *Pigg, 217 U. S. 91 (1909) :

Held that transmission of instruction or intelligence among the States by mail, such as teaching by correspondence and making contracts relating to transportation thereof, is commerce among the States within the meaning of the commerce clause of the Federal Constitution; and that a State cannot obstruct or unnecessarily encumber such intercourse.

Waugh* v. *Board of Trustees of the University of Mississippi, 237 U. S. 589, 35 S. Ct. 720 (59 L. Ed. 1131) (1915) :

Held that a State statute which prohibited secret societies in a State university did not violate any right guaranteed by the Federal Constitution.

Meyer* v. *State of Nebraska, 262 U. S. 390, 413 S. Ct. 625, 67 L. Ed. 1042 (1923) :

Held that a State law which prohibited the teaching of foreign languages to pupils in private schools deprived persons of liberty and property without due process of law; was an arbitrary interference with the liberty of parents to control and educate their children and with the liberty of teachers to pursue their lawful calling; and in violation of the liberty guaranteed by the 14th Amendment to the Constitution of the United States.

Pierce* v. *Society of the Sisters of the Holy Names of Jesus and Mary (known as "The Oregon Case"), 268 U. S. 510, 45 S. Ct. 571, 69 L. Ed. 1070 (1925) :

Held that a State statute which required children between 8 and 16 years of age to attend *public* school was void on the ground that it was in violation of the liberty guaranteed by the Federal Constitution in that it denied the parents the right to educate their children for purposes other than the State and that it deprived private schools of their property without due process of law.

Gong Lum* v. *Rice, 275 U. S. 78, 483 S. Ct. 91, 72 L. Ed. 172 (1927) :

Held that a child of Chinese blood, born, and a citizen of the United States, is not denied the equal protection of the laws by being classified by the State among the colored races who are assigned to public schools separate from those provided for the whites when equal facilities for education are afforded to both classes.

Pearson* v. *Cole, 29 U. S. 597 (1933) (Per curiam decision) :

In this case the Supreme Court dismissed an appeal "for want of substantial Federal question," and hence sustained the right of the State of Maryland to compel male students in its university to take military training.

University of Illinois* v. *United States, United States Supreme Court, March 20, 1932:

Held that a State university which imported certain scientific apparatus for use in its educational department was subject to import duty, that the principle of duality of our system of government does not touch the authority of the Congress in the relation of foreign commerce, and the fact that the State in the performance of State functions may use imported articles does not mean that the importation is a function of State government independent of Federal power.

Cochran* v. *Louisiana State Board of Education, 281 U. S. 370, 50 S. Ct. 335, 74 L. Ed. 913 (1930):

Sustained the validity of a State statute which provided for free textbooks to children in private schools.

Hamilton et al.* v. *Regents of University of California, 293 U. S. 245 (1934):

Held that compulsory military training of physically able male students at a State university was not an abridgment of the privileges or immunities covered by the first clause of the fourteenth amendment of the Constitution of the United States.

Phelps* v. *Board of Education of West New York, New Jersey, 300 U. S. 319, 57 S. Ct. 483 (1937):

Held that a New Jersey statute which authorized boards of education to fix the salaries of teachers and school employees, notwithstanding any such persons may be under tenure, was not in violation of any contractual right which the legislature had granted to teachers; the Court maintained the position that the status of tenure teachers, while in one sense perhaps contractual, is in essence dependent on a statute, like that of the incumbent of a statutory office, which the legislature at will may abolish.

Dodge* v. *Board of Education, 302 U. S. 74, 58 S. Ct. 98, 82 L. Ed. 57 (1937):

Held that where a State statute provides a pension system for teachers wholly out of public funds the relationship between the State and the teacher is not contractual but statutory.

Indiana ex rel Anderson* v. *Brand, 305 U. S. 95, 58 S. Ct. 443, 82 Law ed. (1938):

The Court held that under the teacher tenure statute of Indiana a teacher had a valid contract, the obligation of which could not be impaired by the termination of her employment. The Supreme Court accepted the theory that "a legislative enactment may contain provisions which, when accepted as a basis of action by individuals, become contracts between them and the State or its subdivision within the protection of Article I, section 10 of the Federal Constitution. In this case the Court, in referring to the decision of *Phelps* v. *Board of Education* (300 U. S. 319) stated that the New Jersey act there considered did not create a contract.

Missouri* v. *Canada, 305 U. S. 337, 58 S. Ct. 232 (1938):

Held that where a State afforded legal education within the State for white pupils and provided that Negro residents having the same qualifications must go outside the State to obtain it, was a denial of the equality of legal right to the enjoyment of the privilege which the State had set up for white persons, and that the provision for the payment of tuition fees in another State does not remove the discrimination. It was maintained that the obligation of the State to give the protection of equal laws can be performed only where its laws operate within its own jurisdiction. It is there that the equality of legal right must be maintained.

Minersville School District* v. *Gobitis, 310 U. S. 586, 60 S. Ct. 1010, 84 L. Ed. 1375 (1940):

Sustained a Pennsylvania State school board ruling which required children to salute the flag as a condition for school attendance. This decision was reversed in the case of *West Virginia State Board of Education* v. *Barnette* (319 U. S. 624).—See below.

Alton* v. *School Board of City of Norfolk, 311 U. S. 693 (1940):

The United States Circuit Court of Appeals held that a different salary schedule for Negro and white teachers performing similar duties and possessing identical certificates was in violation of the due process of equal protection clause of the United States Constitution. The United States Supreme Court denied a petition for a writ of certiorari to review the case; hence the Supreme Court in this manner sustained the validity of the United States Circuit Court.

West Virginia State Board of Education* v. *Barnette, 319 U. S. 624 (1943):

Held that a State board ruling which required all pupils to salute the flag and recite the pledge of allegiance thereto as a condition to school attendance was in violation of the first amendment to the Federal Constitution prohibiting infringement in the exercise of freedom of religion. In this case the Court said: "We think the act of the local authorities in compelling the flag salute and pledge transcends constitutional limitations on their power and invades the sphere of intellect and spirit which it is the purpose of the first amendment to our Constitution to reserve from all official control."

Everson* v. *Board of Education of the Township of Ewing, U. S. Supreme Court, February 10, 1947: (67 S. Ct. 504)

Held that the use of public tax funds by school districts in New Jersey for the transportation of children to parochial schools was not in violation of any provision of the Constitution of the United States.

Seipel* v. *University of Oklahoma, 68 S. Ct. 299 (1948):

Held that the State of Oklahoma, in conformity with the equal protection clause of the Fourteenth Amendment, was required to provide qualified Negro applicants with legal education equal to that afforded by the State institutions for white students.

McCollum* v. *Board of Education (Champaign County, Illinois), 69 S. Ct. 461, decided March 8, 1948:

Held that the mingling of religious education in the public school during public school time as was done in the Champaign City schools was in conflict with the first amendment of the United States Constitution and invalid.

(U. S. Supreme Court decisions are usually available for reference purposes at various public and private law libraries. Sometimes copies of decisions are available from the Superintendent of Documents. The decision in the McCollum case is still available from this source, price 20 cents.)

Educational Opportun

AT A TIME when enlistments and inductions into the Armed Forces are registering a new peacetime high, it is obvious that school administrators, teachers, parents, and students are vitally interested in knowing what happens to young men and women who enter the Army, Navy, or the Air Force. Do the Armed Forces offer opportunity for continuing education or new learning for our young people? All three services offer continuing full-time and off-duty educational opportunities. As pointed out recently by Dr. A. J. Brumbaugh, vice chairman, American Council on Education, and chairman of the committee on the United States Armed Forces Institute, known as USAFI, "Army, Navy and Air Force education officers will do their utmost to promote the educational welfare of the individual once he has entered upon active duty. But a large portion of the responsibility for maintaining information, enlisting support, furnishing counsel, and generally insuring that the months of service in the armed forces are not lost to education, is one that rests upon alert administrators, teachers, and counselors of the Nation's educational institutions."

Vocational training, whether in service schools or on the job, is supplemented by instruction in citizenship. During basic training each of the branches attempts to inculcate pride in its service through instruction in its history, customs, traditions, and etiquette. The Army-Air Force Troop Information and Education Division, and the Educational Services Section of the Navy make educational opportunities available to all men through 300 USAFI courses, college extension studies, General Educational Development Tests, and voluntary classroom work. Officer commissions are available for specially qualified men and women of the armed forces on a selective and competitive basis. This information has been furnished by the National Military Establishment especially for SCHOOL LIFE readers.

Army's own school at Fort Eustis, Va., trains for military transportation.

THE U. S. ARMY

THE ARMY RECRUIT is first sent to a training division, normally the one closest to his home. Here the initial classification of the serviceman is determined. The recruit is given an exhaustive individual interview and a battery of standard tests, and his basic qualifications, his aptitudes, his mental capacity, and his occupational interests are established. These tests, in combination with physical aptitude tests and a physical profile, determine initial classification. Results obtained, together with data on occupational experience, scholastic records, hobbies, avocations, and special skills, are recorded on the soldier's record.

The course of basic training, now set at 8 weeks, which each new serviceman is required to pursue, equips him to function as an individual soldier and teaches him the fundamentals necessary to further training. Although the largest numbers of hours are allotted to tactical training and instruction in weapons, great stress is laid upon physical conditioning, personal care and hygiene, hiking, camping, and drills. Citizenship instruction and the troop information program play important roles in basic training.

During the training period, selection is made of students to attend courses offered in career fields. Of a total of 230 school courses offered by the Army, over 170 are open to qualified men upon completion of basic training; some are available even to 1-year men whose short period of service does not warrant their attendance at the longer courses. Opportunities cover a wide range of subjects from photogrammetry to parachute packing, from X-ray operation to automotive electrical

(Continued on page 10)

...s for Nation's Youth in Armed Services

5. Navy training crews get submarine "know how" at New London, Conn.

THE U. S. NAVY

ENLISTEES who enter the Navy are sent to recruit training centers at Great Lakes, Ill., or San Diego, Calif., for 14 weeks of basic training, guidance, and classification. The training includes general information about the Navy, seamanship, and other factors necessary to convert a civilian into a sailor.

An important phase of this preliminary period of training is the classification of recruits to get the right man into the right job. The classification office acquaints all personnel with the various available assignments, followed by careful individual guidance. Each recruit is given a battery of classification tests to measure his interests, aptitudes, and abilities. This is supplemented by an individual survey which records not only the test scores and physical examination results, but also educational achievement, work experience, vocational interests and avocational activities. After this information is evaluated, and before a recommendation is made, a final interview is held between the classification specialist and the recruit to assure proper assignment in one of the following general fields: seaman, fireman, airman, hospitalman, dentalman, construction man, or stewardsman.

Upon satisfactory completion of recruit training, all hands are promoted to apprentices, and are given leaves which will enable them to spend at least a week at home.

The regular enlistees may be assigned to primary naval technical schools where the courses vary in length from 3 to 42 weeks, or they may be sent to the fleet or to shore stations for general duty and further training. Airman apprentices, however, attend the airman school for 8 weeks of instruction and

(*Continued on page 10*)

Air force teaches weather forecasting and observation at Chanute Base.

THE U. S. AIR FORCE

AN INCREASE in training facilities is one of the primary objectives of the United States Air Force in 1949. Here, in brief, is the way the training program works. The new recruit first reports to either Lackland or Sheppard Air Force bases in Texas for 13 weeks indoctrination training in Air Force life.

The curriculum includes such subjects as citizenship, personal adjustment, and military history of the United States, as well as elementary aeronautics, military science and tactics, sanitation, hygiene, and physical training.

Airmen who satisfactorily complete the indoctrination course are given a promotion and after a 10-day leave are assigned either to a technical school or an air base for on-the-job training.

Those assigned to schools are assigned to one of five Air Force bases in the training command. Airplane mechanics and radar students go to Keesler Air Force Base, Miss. Radio and control-tower trainees are assigned to Scott Air Force Base, Ill., and jet airplane mechanics, sheet metal and wood workers, and weather observers to Chanute Air Force Base, also in Illinois.

Armament, photography, intelligence, air comptroller, and automotive mechanics' courses are taught at Lowry Air Force Base, Colo., and future aviation engineers—the men who run heavy equipment like tractors, graders, and steam shovels—are trained at Fort Warren, Wyo. Fort Warren also operates the Air Force's clerical specialist school.

Men who were assigned directly to air bases for duty training may be selected later for training in the courses described or they may join selected graduates of the above schools in enter-

(*Continued on page 10*)

ARMY

(*Continued from page 8*)

system repair, from cooking to typewriting. In addition, some men possessing the necessary qualifications will be specially selected for research and development work.

Basic training completed, the recruit is ready for assignment to an organization of the Army. To be sure, his training is by no means completed, but he is prepared to join his "outfit" and to take his place in the daily duties and unit training carried on within the organization. His assignment may be in the United States or abroad, except, of course, in the case of 1-year volunteers, who cannot be sent overseas. If the man has been selected for special school training, he may be sent to school at once, reporting later to his organization; or, conversely, he may first join his unit, with subsequent assignment to a school. Incidentally, the fact that a man is not selected originally for technical schooling, by no means closes the door to future attendance.

Career guidance continues throughout the entire period of service. Once a man is school-trained or otherwise placed in an occupational field, every effort is made to restrict his assignments to that field.

Advancement depends, of course, upon ability and application. With satisfactory performance of duty, a man can look for his first promotion after 4 months of service; he is eligible for a second promotion after 16 months, and for a third after 30 months. From that point on, promotions are based, for men classified into career fields, on competitive examinations.

NAVY

(*Continued from page 9*)

orientation in the various types of work performed in naval aviation. Upon successful completion of this course they may be sent to technical schools for specialized training, or directly to naval aviation duty ashore or at sea.

Apprentices who are sent directly to the fleet or to shore stations have opportunities to obtain training on the job under the supervision of experienced personnel, and through the study of training course manuals. At a later date, technical schooling will be available to those who qualify.

The Selective Service Act of 1948 provides for a limited number of 12-month enlistments for 18-year-olds. Following recruit training these men are promoted to apprentices on the same basis as the regular enlistees. A number are assigned to preliminary training schools, but most are sent at once to sea for general duty and training.

After 6 months of service as apprentices, all are eligible to take examinations for advancement, provided they have been proficient in their duties and satisfactory in their conduct.

In order to further advance, in petty officer ratings, all personnel must qualify in their respective fields of technical knowledge and skill. In addition, they must meet the general qualifications required of all petty officers.

The Navy attempts to utilize all men in accordance with their backgrounds, interests, abilities, and aptitudes, and to classify them for duty and training in one of the 62 job-family groups which make up the peacetime rating structure. Men who qualify for commissions in the naval aviation cadet program receive 18 months of training prior to their regular duty assignments.

Space prevents an adequate discussion of the Navy's vast technical organization whose vocational subdivisions include training for more than 4,000 jobs as listed in the Dictionary of Occupational Titles. However, this information can be obtained from the United States Navy Occupational Handbook which is now being distributed to all the secondary schools of the country, where it will be available to students, teachers, librarians, and counselors.

The Marine Corps is, of course, a part of the Naval Establishment and, therefore, much of what has been said about the Navy applies to that branch of the service. However, since the marine is the "Soldier of the Sea," much of his training must necessarily parallel that given by the Army or by the Navy's air arm. Additional schooling, service ashore or afloat, follows the period of recruit training.

AIR FORCE

(*Continued from page 9*)

ing advanced classes to qualify in one of the 325 special skills required in the Air Force.

One-year volunteers are not usually accepted for technical training because, after completing the indoctrination course and the technical course, their services would be available to the Air Force for only a few months. Since training facilities are not yet adequate to accommodate all airmen, those who enlist for 3 years or more are given priority for technical training.

After completing the year's regular service, however, those who join the Air National Guard or an active unit of the Air Reserve are eligible to attend regular Air Force technical schools, providing that they meet the same minimum requirements as regular airmen and that the organization to which they are assigned has sufficient funds available to pay them during the training period.

Pilot training in the Air Force is on the increase. Some 3,000 aviation cadets will be in training before the end of 1949. This is a 1-year course, with graduates trained to fly either twin-engined bombers or jet-propelled or conventional fighters. To qualify as an aviation cadet, an applicant must be between 20 and 26½ years of age, in top physical condition, and must have completed either 2 years of college or demonstrated its educational equivalent in a written examination.

Educational Articles Published Elsewhere

(By Office of Education staff members)

Analysis of the Georgia Program of Education Supervisors, by Jane Franseth, specialist for rural education, in *Educational Leadership*, December 1948.

Basic Needed and Desired Functions of the Student Council, by Ellsworth Tompkins, Specialist for Large High Schools, in *School Activities*, October 1948.

Counseling Students on the Draft, by Harry A. Jager, Chief, Occupational Information and Guidance, and Arthur L. Benson, Specialist for Individual Inventory and Counseling Techniques, in *Occupations*, October 1948.

Experiences in Austria—What Elementary Education Needs, by Helen K. Mackintosh, Chief, Instructional Problems, in *National Elementary Principal*, October 1948.

Helping Children See Relationships, by Glenn O. Blough, Specialist for Science Education, in *Childhood Education*, November 1948.

Inter-American Conference, by Romaine Mackie, Specialist for Education of Physically Handicapped, in *Spastic Review*, November 1948.

The Measurement of Adult Education, by Homer Kempfer, Specialist for General Adult and Post-High-School Education, in *Adult Education Bulletin*, October 1948.

Plant Services of the School Housing Section, by Ray L. Hamon, Chief, School Housing, and N. E. Viles, Specialist for School Plant Management, in *American School and University*, 1948–49. (Reprints are available from the Office of Education.)

Teaching More Than Science, by Glenn O. Blough, Specialist for Science Education, in *NEA Journal*, November 1948.

HOUSING

(*Continued from page 2*)

during cool weather. If windows are used to admit fresh air for ventilation, they should be so shielded and operated that pupils are not subjected to drafts. During warm weather facilities should be provided for circulating air currents ample to serve as a cooling effect on the pupils.

It is not possible to discuss here all of the school conditions that affect health. It is desirable to give some attention to cleanliness, sanitation, and to sanitary facilities. In this modern age ample supplies of pure running water are almost a necessity for schools. There should be available suitable drinking fountains and ample washing facilities. It is also desirable to have sanitary water-flushed toilets. The dark, dirty, unscreened pit toilets or the inside toilets that are not properly maintained are a distinct menace to pupil health, and, in addition, are conducive to the promotion of poor health habits by the pupils.

One of the chief keynotes to school health protection is cleanliness. The school plant should provide the facilities—water, toilets, lavatories, fountains, etc.—and the teachers should arrange for their proper use. Dirty schools are inexcusable and a condemnation of the teachers and others in charge. Paint and clean up. Keep things clean. This applies to floors, walls, ceilings, toilets, desks, and all other parts of the plant. Provide foot scrapers and door mats and compel pupils to use them.

Adequacy of Teaching Facilities

Books could be written on the various phases of school-plant adequacy. One of the first factors in adequacy is space. Pupils must have room to move about and to participate in the learning process. Pupils are not sponges that they sit massed together and have knowledge poured into them. There must be room for individual and group work or activity. The seating should be comfortable and adapted to the sizes of the pupils. There should be ample tackboard and less blackboard space. Chalkboards should be at the proper height for the pupils using them. Storage facilities should be ample for the books, supplies, and equipment used in the room. The piling of books and supplies on desks and at the front of the room should not be necessary or permitted.

All learning is not confined to the academic classrooms. Not all pupils or even a large share of them will go to college. They need a type of training that will best fit them for community living and for earning competence; they need to learn by doing; they need shop facilities where they may learn to use tools; they need growing plots that they may learn more about growing things. The girls and boys need to know something about homemaking and the girls need training in food selection and preparation, and in the art of developing and making the best use of clothing.

Learning is more than arithmetic or Latin. Attention must be given to the balanced development of the physical body. Facilities should be provided for recreation, for team games, and for the development of individual physical skills. Of course, gymnasiums are desirable. However, the lack of them need not prevent the development of desirable physical education and recreation programs. School sites should be ample in size to permit the laying out of suitable spaces for various games. There should be space to permit the segregation of the games for the small pupils. The game tools should be provided.

Arrangement and Maintenance

The school plant should be so laid out that full utilization is possible. Some small rooms or spaces for group conferences or activities are desirable. There is often need for larger spaces where two or more classes can be brought together for visual education, for dramatics, or music.

The best school plant soon loses its effectiveness if not properly maintained. Broken windows, leaking roofs or walls, and broken furniture should be repaired as soon as possible. The custodian or ones in charge should keep the heating plant in good condition. Above all, the building must be clean. Toilets, floors, and all other parts of the building should be cleaned as often as needed. If this means more than once each day, then it should be done. Old dark desks and furniture should be sanded and finished with a light nonglossy finish. Carved desks should be made smooth. Dark, stringy window shades should be replaced.

Nearly every one of our school buildings could be made more attractive. It is true that some of our buildings are ugly and dilapidated. In many or most instances improvement can be made without much cost. In most cases there will be more effort than cost involved. Even the worst can be improved. Of course, there are some buildings that should be replaced immediately. However, there is little excuse for not improving them as long as we must use them.

One of the easiest spots to improve is the site. Each school ground should have a beauty spot. A green lawn around the front is a great asset. Shrubs or flower beds properly arranged for attractiveness, but where they won't interfere with games or block window lighting, are assets in aesthetic appeal. Trees along the outer border provide shade and add to the attractiveness. A clean building well painted, inside and outside, has much more appeal than a drab, dingy building.

In our American system we want public approval and support of our schools. Sometimes we don't do much to obtain and hold this support. A lot of the patrons of the community really know little of what goes on in the school. Some of them judge the school from what they see of it as they pass by. The yards and the building are the showcase they see. Unless these have some appeal, many citizens have little pride in their schools, and pride is a vital part in public approval and support. This is an area which should be given more attention.

Community Use

We say repeatedly that we want the schools to serve as community centers. If we mean this, we must so plan and use the buildings that the public will be encouraged to use them. The lighting should be adapted for evening use. Arrangements should be made for evening control of the heating plant. Adults will not come often to sit for hours in primary seating. However, the addition of adult folding seats will provide more comfort for them. Storage space should be provided so that room teaching supplies can be put away so as not to be in the way. This will make for more attractive meeting places and obviate the frequent objection that the teaching and children's supplies are hard to find after adults have used the building. Arrangements should be made for custodial service for evening meetings. It is preferable that this be done by a reliable custodian or other representative of the school. An outside light is desirable for evening use. A parking area should be provided and provisions made to prevent the driving of cars up to the front door or in other places where not wanted.

John R. Steelman.

"To Preserve Democracy We Must Improve It"

by John R. Steelman, Assistant to the President of the United States

THE MAIN thesis of a recent address by Dr. John R. Steelman before the Southern Governor's Conference in Savannah, Ga., was the role education must play in strengthening democracy. He spoke of cooperative Federal, State, and local governmental responsibility needed at this time in our Nation's history to provide for the national defense and the general welfare of our people. *School Life* is pleased to present excerpts from Dr. Steelman's address.

I SHOULD like to speak of some specific areas in which the Federal and State governments are jointly interested and need to act cooperatively.

I select these subjects because I am sure they are of immediate interest to you, and because I have been privileged to gain a more intimate understanding of some of the problems connected with them.

General Education

The first subject I wish to discuss is that of education.

If America is to survive and prosper in this complex postwar world, we must demonstrate that we can make our form of democracy function. We must make sure that our political, economic, and social system is not static but is flexible enough to meet the needs of our people. We must always move forward toward the full realization of the ideals which are the spiritual foundation of our American society. "To preserve our democracy, we must improve it."

The best way to improve our democracy in the long run is to make sure that our children are well educated. Our schools teach what democracy is, why it is important, and why it requires each citizen to take part in the work and life of the Nation.

Our children are facing a tremendously complex world. Serious economic and social problems inside and outside our country require solution. The best possible training and education will be needed to enable them to achieve peace and happiness.

As a Nation, we have long recognized the basic importance of education. We have been moving forward toward the goal of education for all. In 1870 there were only 80,000 students in all our high schools. In 1940 there were more than 7,000,000. In 1870 there were 60,000 in our colleges, while in 1940 there were 1½ million students. In those 70 years while our population went up 3 times, the number in secondary schools went up 90 times and the number in colleges 25 times.

At the present time we are having an extraordinary increase in the number of children reaching school age, as a result of the high birth rate in recent years.

Thus the clear goal before us is to provide better and better education for more children.

Three Difficulties

Let us consider first the problem of elementary and secondary schools. There seem to be three major difficulties to be overcome.

One is primarily a State problem. That is the problem of better organization—better organization of State education departments, in some States, and better organization of school districts which are economically sound and able to finance a more adequate school program.

The other two major difficulties facing elementary and secondary education need to be considered by both Federal and State Governments. One is the problem of attracting and holding enough competent teachers. The other is the question of replacement and new construction of school buildings.

Both of these problems force us to face the hard facts of Government finance. To recruit more and better teachers, we must pay them salaries that come somewhere near meeting the competition of jobs in private industry and in other types of Government service. To repair and build schools requires a heavy investment of funds particularly in view of the present high construction and maintenance costs.

In the face of these high costs the State governments have provided more money for education, even though their general financial situation is not an easy one.

There is another important financial fact in this picture. The ability of States to pay for adequate schools is by no means uniform, because income and wealth in this country are not uniformly distributed. Accordingly, many States have to tax their people and their business very heavily in order to provide a standard of education that other States can afford with much lower taxes.

We know that the States have done a remarkable job in the last few years in increasing funds for education. We also know that some of the States with the most limited taxable resources have made relatively the best record of all. Even with

the effort the States are making, however, the situation remains critical.

Possible Solution

What can we do about it? In my opinion, the first thing is for the Congress to enact legislation authorizing Federal grants to the States for operating expenses of elementary and secondary education. That is the highest priority need today. The peak wave of children of school age which is starting to hit the elementary schools now will be felt in the secondary schools in the next 6 years. The urgent need now, above all else, is to secure more teachers and to meet the other increased operating costs.

As to Federal funds for school construction, the situation is not so clear. The total size of the construction job, the rate of construction needed, the degree of Federal assistance which should be provided, if any, all need careful study.

Over the past 10 years or more, substantial consensus has been achieved on a method of providing Federal financial support for operating costs. There is general agreement that this can be done without interfering with State responsibility for the scope and content of education. There is general agreement on a method of distribution to take account of both the varying financial capacity of different States and the number of children of school age.

However, as yet, there is no such general agreement in the case of Federal financial assistance for construction. I would not say that we should never look forward to Federal aid for building schools. I do think, however, that careful study is necessary to determine the need for the location and kind of building required to provide educational opportunity for children, youth, and adults. Such planning, evident in some areas now, should precede and accompany long-range programs of school construction.

Higher Education

Let us look beyond elementary and secondary education to the colleges and universities.

It becomes increasingly clear that as our national economy grows more complex, and as the United States assumes a greater position of leadership and responsibility in international affairs, higher education must be made available to every young American who is able to profit from it.

The President recognized this problem when he appointed his Commission on Higher Education. He stated the Commission's first concern to be "Ways and means of expanding educational opportunities for all able young people * * *."

The President's Commission found that, in terms of the number of young people with the ability to complete college and postgraduate work, the total enrollment in our institutions of higher learning should be more than double what it is today. It was found that the economic barrier is the greatest single factor that has so far restricted the number who receive higher education.

What part should the Federal Government play in meeting this problem?

Federal assistance to higher education is not new and is based on sound precedent. For many years the Federal Government has encouraged and assisted the colleges and universities, through grants of land and money and by exempting nonprofit institutions from Federal taxation. Recently, during the 1930's, more help has been given through construction grants for tax-supported institutions, and a program of student aid under the National Youth Administration.

Scholarship Aid

At the present time, over a million veterans of World War II are attending higher educational institutions all over the country, and under the GI bill they receive their tuition and subsistence from the Federal Government. This greatly increased enrollment, while it has taxed the facilities of our colleges, has at the same time given us an indication of how many young people really want to continue their education, if they have the opportunity to do so.

In the next few years, I believe we must plan, in the light of the report of the President's Commission on Higher Education, the best means by which the Federal Government can give scholarship aid to worthy young people who desire to continue their education.

We Americans believe in a "free market of ideas." We are convinced that in the struggle between democracy and totalitarianism, only people who have been trained to make sound individual judgments, can effectively resist a dogma or "party line" imposed from above. If America is to retain its freedom in a world of conflicting ideologies, we must take steps to assure every American youth the opportunity to receive the highest level of education by which he can profit. A soundly conceived Federal scholarship program is a necessary step in achieving this goal.

Scientific Research and Development

At the same time, we should consider another matter, closely related to higher education. That is the problem of scientific education and research.

All of us are aware how much our modern civilization depends on the advance of scientific knowledge. From the broad problems of national defense down to the questions of better methods of building houses or organizing municipal police departments, modern science is the pivot for action and progress.

We know that as the frontiers of our knowledge have been pushed forward, the wealth of America has increased by leaps and bounds and the American way of life has improved. There are no known limits to the discovery of knowledge. We have discovered considerable new knowledge in our time—some of it under the stress of emergency.

Some of the knowledge we gained in wartime has awed and appalled us, but one good thing we gained. That is the deepening realization that we stand only at the gateway to a world of new knowledge. The use we make of our new knowledge is mankind's to decide. Our responsibility is to

". . . all of us are made aware every day that there are very few problems that are confined to the State governments alone. We must think of Federal, State, and local governments together, for together they make up our American system of government—a system of 'multiple governments for a single nation.' "

proceed intelligently in our search for this knowledge.

The President's Scientific Research Board, of which I had the honor to be Chairman, reported that as a Nation we need more trained scientists, and in the next few years we should seek to double the amount of money we are spending on scientific research.

This Board pointed out that in the past our scientific strength lay in development rather than in discovery. They warned us that we were woefully lagging in the field of basic scientific research, the area most vital to progress and for which we were almost completely dependent upon Europe. We can no longer afford the luxury of importing basic scientific knowledge. We must develop our own.

What should we do about this problem? I believe that the State government and the Federal Government have similar roles to play. The State universities and colleges need support from State governments for greatly expanded programs for training all kinds of scientists and for scientific research. The Federal Government should devote more funds to scientific training and research in its own laboratories and research agencies, through grants to colleges and universities, and through scholarships and fellowships.

Doubling of Budgets

Although such programs require money, the amount is very small compared to total Government expenditures—either State or Federal. Consider your own State universities—a doubling of their budgets for scientific training and research would be a very small percentage of the total State education budget. In the case of the Federal Government, outlays such as I have recommended are almost negligible beside the total cost of the Army or Navy or Air Force.

And yet these relatively small outlays can be tremendously fruitful. If through support of basic research we can find a preventive or cure for cancer—or if by scholaships we give training to men who can lead the way to a successful United Nations—think of the enormous dividends we would receive on our investment.

These are the reasons why I believe so strongly that the Federal legislation for a National Science Foundation should be enacted soon. This Foundation would provide the coordinating agency we need to gear together the various Federal research and scientific training programs. And the Foundation would provide the national focus so badly needed to give guidance to all scientific research and training—public and private—guidance not in the sense of direction and control but in the sense of suggestions for program balance and emphasis.

It is clear, for example, that a portion of the funds expended by the National Science Foundation should be used to strengthen the weaker, but promising, colleges and universities, and thus to increase our total scientific potential. It is clear, also, that the Science Foundation would aid students in every part of the country to contribute to the advance of scientific knowledge.

In the Minds of Citizens

I want to conclude my remarks to you tonight by referring to the last report of the Executive Director of the Council of State Governments. He said that more and more our local and State governments must concentrate on improving and preserving the American type of democracy wherein lies our strength and our welfare. With that statement I thoroughly agree.

That is why I have wanted to talk to you tonight about better education and increased knowledge. The ultimate strength of our democracy lies in the minds of its citizens. And it is through an enlightened citizenry devoted to right principles that our democracy will be improved and preserved.

I believe that your work along the lines I have discussed tonight will carry us forward toward that goal. In all these enterprises the Federal Government is not an overseer but a partner. Upon the success, my friends, of this partnership in the safeguarding of our liberties and in the strengthening of our democracy, depends the safety not only of our own great America, but of the world.

If Teachers Have Security—
They Accept In-Service Education

by Clifford P. Froehlich, Specialist for Training Guidance Personnel

IN A STRANGE and imaginary city, the Superintendent of Schools was called before the Board of Education. He was told that he and all the teachers and principals in his schools would not have their contracts renewed the next year. The President of the Board said, "Yes, sir, we are cleaning house this year. We have just had a survey made by those college professors, and they found out that when pupils leave our schools they are not educated. Why, they say that when pupils leave our schools they have to keep on learning! Now we have been behind our schools, but we have no other choice than to fire all of you. Children should get all the education they need by the time they graduate from our schools. They shouldn't have to spend the rest of their lives learning."

It is improbable that such an event will ever occur. Teachers do not agree with the statement made by the President of the Board. Why then do they fail to take advantage of opportunities to continue their education? Why is there resistance to an in-service training program among teachers? I have heard these questions asked by those who would conduct in-service training: How can I do anything when I have to get out of the way or be trampled to death when teachers and pupils rush out of school at 3:30 in the afternoon? Do teachers really believe in the value of education? Do they realize they cannot live forever on the knowledge they picked up twenty years ago? Are they interested only in a pay check? (These allegations against teachers are unfounded.)

Facing the Facts

At the same time, let us face facts. Teachers do not participate in in-service training programs very readily. In fact, visits throughout the country during the last few years have convinced me that not one out of fifty schools has an organized in-service training program. Why not more? Repeatedly, the schools have placed the blame on the lack of interest or unwillingness of teachers to participate in any training program. How can we secure their participation? How can we get teachers and counselors to expend the extra

effort? This is more than the $64 question; it is the crux of the entire problem of in-service training. To answer completely such a question within the limits of this article is impossible. But it is more than a space limitation. Our knowledge of motivation is still too fragmentary for such a task.

As a partial answer, we may find that lack of attention to the psychological principles involved in motivation has caused our difficulty in securing participation. Certainly these principles are frequently overlooked in the organization of in-service programs. For example, we have announced in-service training programs and expected teachers to attend because it was good for them. We have depended solely upon an appeal addressed to them on an intellectual plane, with little regard for their feelings. It would not be wise to organize an in-service training program solely on the basis of emotional appeal. However, we can no longer neglect the needs and drives of potential enrollees in our in-service training program.

One of the most important of these needs is a feeling of security, and if in-service training is to succeed, we must consider this factor. Teachers, counselors, or administrators are not different from other human beings. We cannot forget this fact when we organize a training program. Like others, they need a feeling of security, and they resist with all that is in them any activities which threaten to destroy that security. We cannot blame them. We do it ourselves. But, if we are to organize effective training programs, we must give attention to this need. In fact, it is a tenable thesis that by organizing training programs in such a way that they do not threaten security, we not only build stronger programs, but also get greater participation.

Three Important Considerations

How can we meet the need for security? First of all, *teachers must feel secure enough in their employment to risk admitting their shortcomings.* Picture if you will the resistance that must be overcome in a school where no one dares admit he is doing less than a perfect job. In a certain school a teacher-rating system completely destroyed the value of supervision. Promotions and dismissals were based on the rating made by supervisors. Would these teachers admit the need of help to the person holding their job in his hand? Not on your life! Teachers in that situation did what we would have done—they put their best foot forward. So the relationship became one of putting on a good show every time the supervisor came into their room. Unless teachers can feel secure in their jobs. we cannot have effective in-service training.

Secondly, *teachers must feel secure with their fellow teachers.* This security must be felt strongly enough to allow them to engage in in-service training. Most of us are greatly influenced by our estimate of others' opinion of us. In a school where the majority of the faculty is unsympathetic with guidance procedures, and where they make such remarks as, "It's all a fad"; or, "We have gotten along all right without any of that so far"; and, "I wonder how long before this storm blows over"; we cannot expect to have very much participation in an in-service training program devoted to guidance work. Teachers have to live and work with their fellow teachers. If their associates think it foolish to enroll in a training program, teachers are not likely to participate. Unless an atmosphere is created in which in-service training is accepted, and in which those who participate in an in-service training program are respected rather than scorned, participation will be limited.

Of more importance than job security or security with their fellows is another factor: *In-service training participants must feel secure enough to try out the new skills or to operate on the basis of new understandings derived from the in-service program.* When we try anything new, we wonder whether or not we shall be successful. A teacher who learns to prepare anecdotal records during an in-service training program must feel that it would be safe for her to try the procedure out in her own school. A person who learns to confer with parents must be given the support of the administration in conducting parent interviews, even though mistakes are made. Here training may conflict with administration. Principals want their schools to run smoothly. Using the old procedures will almost certainly guarantee that the school will run about as well as in the past. The introduction of new procedures may upset the routine. Some of the suggestions gleaned from an in-service training program can be expected to fail when put into practice. But if teachers are to see a purpose in in-service training, the administration must guarantee the freedom to put their learnings into practice. What point is there in spending hours in improving your techniques only to meet the actual problem and find that you must use the old, the traditional, and put your new, if imperfect, techniques on the shelf.

Security Key to Participation

The task of increasing teacher participation in in-service training extends beyond the planning of an interesting and stimulating program. The school must follow practices which contribute to the teachers' feelings of security. This article has pointed out that teachers should feel secure in their jobs, with their fellows, and in putting their new learnings into practice. Schools fostering these feelings of security are in a favorable position to secure teacher participation in the in-service training program.

Great Britain's Teacher Recruitment Plan

WHAT IS BEING DONE in Great Britain to recruit and train teachers? According to *Educational Notes No. 1,* a new periodical publication issued by the British Information Services, 30 Rockefeller Plaza, New York 20, N. Y., a 5-year plan for recruitment and training of British teachers has been initiated. The aim is "to raise the total number of teachers in the publicly financed schools from the present 196,000 to 237,000 by 1953.

"This meant that it was necessary to extend the permanent training facilities." In 1948, 6,000 women were admitted to 2-year courses in permanent training colleges, 750 more than were admitted in 1947, and nearly double the number admitted in an average prewar year. It is hoped to have facilities for 8,000 women entrants and for 2,000 men in 1949.

NOTICE

"Atomic Energy—Here to Stay," supplement to SCHOOL LIFE, is scheduled to be off the press March 1. SCHOOL LIFE addressees will receive one copy free. Order additional copies from the Superintendent of Documents, Washington 25, D. C. The estimated price per copy is 10 cents.

New Books and Pamphlets

The Administration of Schools for Better Living. Compiled and edited by Dan H. Cooper. Chicago. The University of Chicago Press, 1948. 161 p. (Proceedings of the Conferenees for Administrative Officers of Public and Private Schools, 1948. Vol. 11.) $3.50. Processed.

Extended School Services Through the All-Day Neighborhood Schools. Brooklyn. N. Y.. Board of Edueation of the eity of New York, 1947. 86 p. Illus. (Currieulum Bulletin. 1947–8 Series, No. 3.) 20 cents.

Planning Your Exhibit. By Janet Lane and Beatriee K. Tolleris. New York. National Publieity Counеil for Health and Welfare Services, Inc. (130 East Twenty-second Street, Zone 10), 1948. 28 p. Illus. $1.

Radio Workshop for Children. By Jennie Waugh Callahan. 1st ed. New York, McGraw-Hill Book Co., Inc., 1948. 398 p. Illus. (McGraw-Hill Series in Speeeh.) $3.75.

Virginia School Boards: A Manual for the Guidanee and Help of Members. Richmond, Va., The Virginia Association of Sehool Trustees, 1948. 82 p.

We the Parents: Our Relationship to Our Children and to the World Today. Rev. Ed. By Sidonie Matsner Gruenberg. New York, Harper & Brothers, 1948. 309 p. $3.50.

Your Mind and You. By George K. Pratt. New York, The National Committee for Mental Hygiene, Inc. (1790 Broadway, Zone 19), 1948. 71 p. 35 eents.

Your School District. The Report of the National Commission on Sehool District Reorganization. Washington. Department of Rural Edueation, Natioual Edueation Association of the United Statcs, 1948. 286 p. Flexible eover $2. board cover $2.50.

Federal Aid to Elementary and Secondary Education. By Charles A. Quattlebaum. Chieago, Publie Administration Serviee (1313 East Sixtieth Street), 1948. 191 p. $2. Proeessed. Excerpted in SCHOOL LIFE, July 1948.

—Compiled by Susan O. Futterer, Head, Reference and Bibliographical Services, Federal Security Ageney Library.

Recent Theses in Education

The Civic Competence of High School Seniors. By John W. Gates. Doetor's, 1945. University of Chicago. 198 p.

Analyzes data secured from 224 boys and 265 girls in the senior class of a high school in a midwestern community of approximately 65,000 popnlation.

Criteria of a Good Physical Education Program for Boys in the Senior High School. By Donald I. Minnegan. Doetor's, 1947. George Washington University. 477 p. ms.

Discusses the formulation of tentative criteria, their revision and validation; the testing of the criteria; and the development of a checklist for evaluating physical education programs for boys in the senior high school.

Education for Homemaking and Family Life. By Ruth R. Conin. Master's, 1947. George Washington University. 65 p. ms.

Analyzes causes of divorce, juvenile delinquency, and other evidences of maladjustment in modern society. Evaluates homemaking training given in a selected school.

The Effect of Three Variations in Home Report Procedure on Student Achievement, Citizenship and Attendance. By Irving A. Dodes. Doctor's, 1945. New York University. 253 p. ms.

Attempts to measure objectively the effect of a change in frequency of sending report cards from three to five times a semester; a change in method of reporting citizenship marks from a composite to individual ratings for each subject, and a change in the type of mark from the percent type to the five letter type on achievement, school citizenship, and attendance of male students in the first five terms of Woodrow Wilson Vocational High School, Jamaica, New York City.

A Guide for the Use of Films in the Teaching of Science in the Intermediate Grades. By Ellen Anglin. Master's, 1947. University of Cincinnati. 107 p. ms.

Reviews briefly the advantages of the film as an aid to learning. Presents teaching procedures when using films, and lists films which can be used by teachers desiring to know the materials available for the development of various units of work.

School Failure: The Problem and Its Causes as Determined by Objective Studies Completed Between 1925 and 1945. By Edward A. O'Keefe. Master's, 1947. Boston University. 63 p. ms.

Reviews a number of studies on the causes of failure, and finds a wide divergence of opinion as to the relative value of each.

Social and Personal Integration During Later Childhood. By Arthur W. Blair. Doctor's, 1946. Harvard University. 226 p. ms.

Discusses the need for study of the child from 9 to 12 years; the changing status of these children; and implications of sociological research for understanding this level of development.

A Study of the Effects of Certain Practices Upon Pupil Attendance. By Wallace W. Hixson. Master's, 1945. Syraeuse University. 108 p. ms.

Traces briefly the history of compulsory education in the United States. Studies attendance practices in a number of large cities. Compares attendance practices of Utica Free Academy with the revised practices of Proctor High School in Utica, N. Y.

Testing Civic Information. By Marie T. Cote. Master's, 1946. Boston University. 34 p. ms.

Compares the civic information of 339 adults with that of 367 pupils in the ninth to eleventh grades of five different communities, as shown by their answers to a test.

—Compiled by Ruth G. Strawbridge, Federal Security Agency Library Bibliographer.

U. S. GOVERNMENT PRINTING OFFICE: 1949

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the Agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of the Interior

Sales Publications Issued by the National Park Service.

Washington, U. S. Government Printing Office, 1947. [2] p. Free from the National Park Service.

Department of Labor

The Outlook for Women in Science. Prepared by the Women's Bureau.

Washington, U. S. Government Printing Office, 1948.

Bulletin No. 223–1. The Outlook for Women in Science. 81 p. 20 cents.

Bulletin No. 223–2. The Outlook for Women in Chemistry. 65 p. 20 cents.

Bulletin No. 223–3. The Outlook for Women in the Biological Sciences. 87 p. 25 cents.

Bulletin No. 223–4. The Outlook for Women in Mathematics and Statistics. 21 p. 10 cents.

Bulletin No. 223–5. The Outlook for Women in Architecture and Engineering. 88 p. 25 cents.

Bulletin No. 223–6. The Outlook for Women in Physics and Astronomy. 32 p. 15 cents.

Bulletin No. 223–7. The Outlook for Women in Geology, Geography, and Meteorology. 52 p. 15 cents.

Bulletin No. 223–8. The Outlook for Women in Occupations Related to Science. 33 p. 15 cents.

Department of State

International Educational Exchange; United States Advisory Commission and the Program of the Department of State.

Washington, U. S. Government Printing Office, 1948. 10 p. (Publication 3313.) Free.

Federal Security Agency

Immunization Information for Persons Proceeding Abroad. Prepared by the Office of International Health Relations and the Division of Foreign Quarantine, Public Health Service.

Washington, U. S. Government Printing Office, 1948. 22 p. 5 cents.

Toward a 1950 White House Conference on Children and Youth; suggestions for State and local action developed by Conference on State Planning for Children and Youth, March 30-April 1, 1948, called by the Children's Bureau in cooperation with the National Commission on Children and Youth.

Washington, Children's Bureau, 1948. 20 p. Processed. Free.

Library of Congress

The Thomas Jefferson Murals by Ezra Winter.

Washington, U. S. Government Printing Office, 1946. Folder. Free from the Publications Office, Library of Congress.

Smithsonian Institution

National Gallery of Art, Washington, D. C.

Washington, U. S. Government Printing Office, 1947. 16 p. Free.

Superintendent of Documents

Army Veterans' Affairs.

Washington, U. S. Government Printing Office. (Price List 19, 39th Edition, October 1948.) Free.

Insects. Bees and Insects Harmful to Man, Animals, and Plants.

Washington, U. S. Government Printing Office. (Price List 41, 41st Edition, October 1948.) Free.

United States Office of Education and Other Publications Relating to Education.

Washington, U. S. Government Printing Office. (Price List 31, 37th Edition, October 1948.) Free.

Office of Education

Printed Publications

Broadening Services of Small High Schools. (Bulletin 1948, No. 9) In press.

Crippled Children in School. (Bulletin 1948, No. 5) 15 cents.

Education in Panama. (Bulletin 1948, No. 12) 25 cents.

Education in Venezuela. (Bulletin 1948, No. 14) 30 cents.

Fundamental Education. (Bulletin 1948, No. 13) 10 cents.

Intellectual Abilities in the Adolescent Period. (Bulletin 1948, No. 6) 15 cents.

Working With Parents. (Bulletin 1948, No. 7) 15 cents.

Processed Materials

(Free—Limited Supply)

A Partial List of 16 mm. Film Libraries. Auxiliary Services Division AS–V–1, April 1948, rerun December 1948.

Articulation of Secondary and Adult Education. Secondary Education Division, Adult Education Ideas No. 2, December 1948.

Books To Help Build International Understanding, Tentative List Selected for Children and Young People With Special Reference to the United Nations. Auxiliary Services and International Educational Relations Divisions, October 1948.

Financial Assistance for Civilian College Students. Higher Education Division, November 1948.

Guidance Bibliograpy (Selected). Professional Books of Interest to Counselors 1947–48. Vocational Education Division, Misc. 2363–8, September 1948.

How To Interpret Cumulative Records, Part I, Personal and Home Information. Vocational Division, Misc. 3209, October 1947, rerun November 1948.

1948 Fall Enrollment in Higher Educational Institutions. Central Services and Higher Education Divisions, Circular No. 248, November 14, 1948.

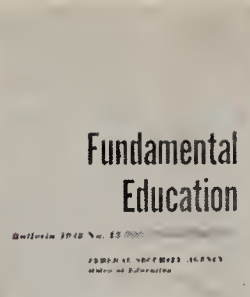
Rating, Accrediting, and Approval of Institutions of Higher Education in the United States. Higher Education Division, December 1948.

Sources of Materials on Child Development and Parent Education. Elementary Education Division Selected References No. 9, June 1947, rerun November 1948.

Suggested References in School Health for Teachers and Administrators. Secondary Education Division, November 1948.

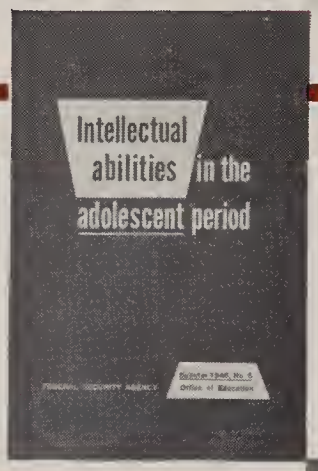
NEW

OFFICE PUBLICATIONS



Fundamental Education

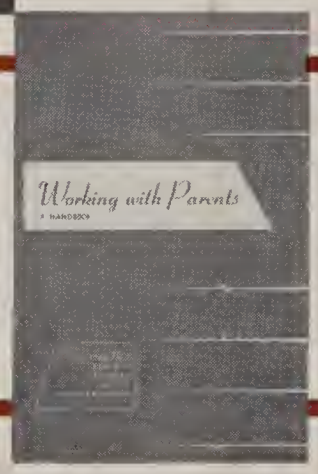
A publication which presents three sections of a report to Unesco by a number of educational specialists under chairmanship of the Commissioner of Education. Bulletin 1948 No. 13_____ 10 cents.



Intellectual Abilities in the Adolescent Period

Their Growth and Development, by David Segel, Specialist, Tests and Measurements, Secondary Education Division. Bulletin 1948 No. 6__ 15 cents.

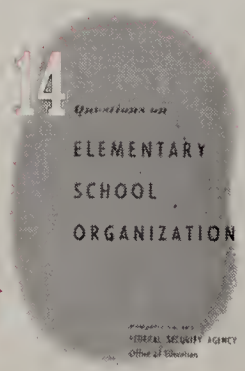
NEW



Working With Parents

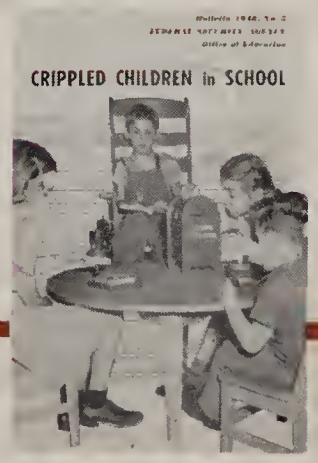
A handbook, prepared by Hazel F. Gabbard, Specialist for Extended School Services, Elementary Education Division. Bulletin 1948 No. 7__ 15 cents.

NEW



14 Questions on Elementary School Organization

A study by Effie G. Bathurst, Mary Dabney Davis, Jane Franseth, Hazel Gabbard, Helen K. Mackintosh, Don S. Patterson, Elementary Education Division. Pamphlet No. 105___ 10 cents.



Crippled Children in School

A publication by Romaine P. Mackie, Specialist for Schools for the Physically Handicapped, Elementary Education Division. Bulletin 1948 No. 5__ 15 cents.

Order from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. 25 percent discount on orders for 100 copies or more sent to one address

Volume 31 Number 6
MARCH 1949

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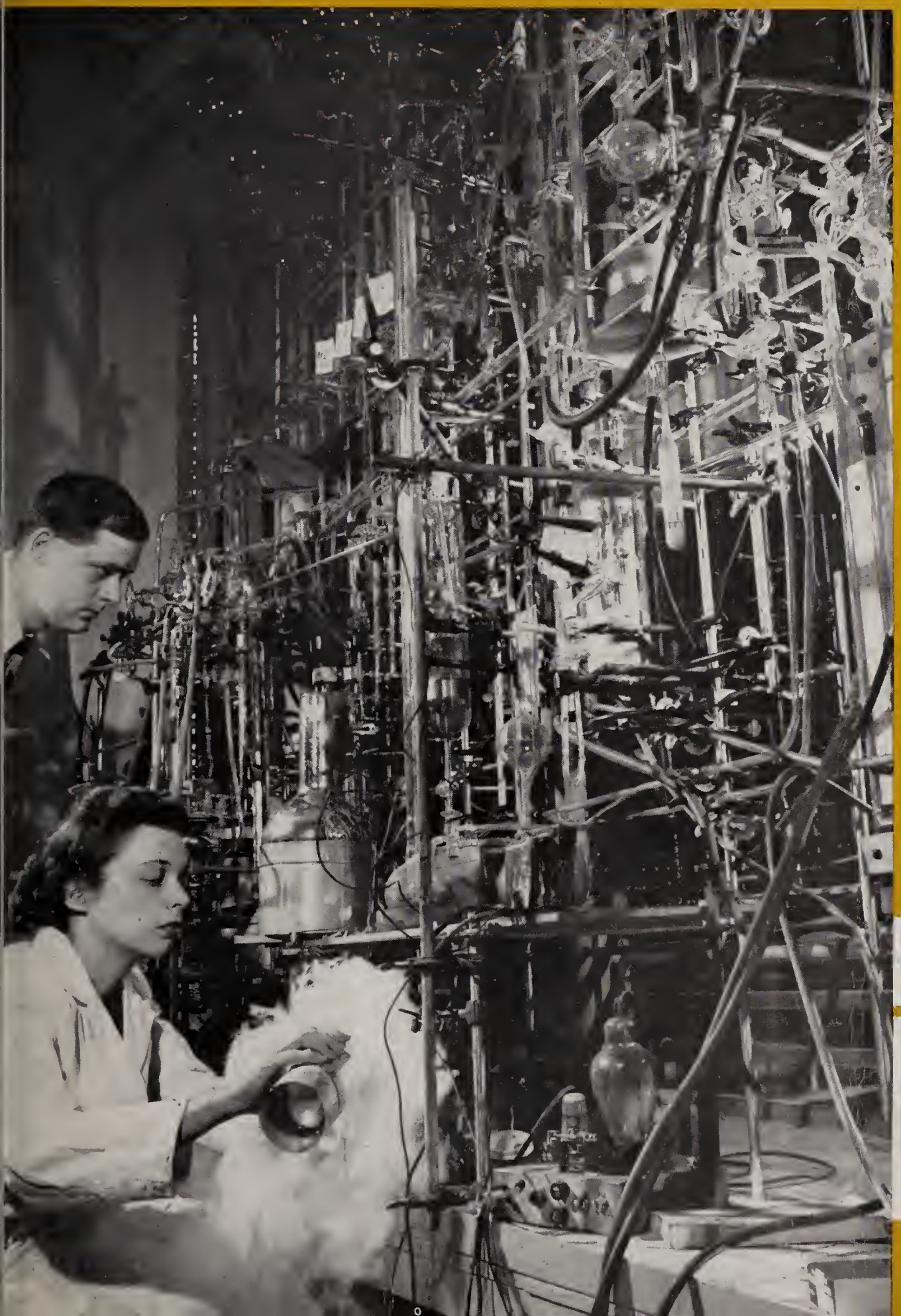
School Life



IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School ★ Life

Official Journal of the Office of Education . . . . . Federal Security Agency

CONTENTS for March 1949

Volume 31 Number 6

Cover photograph shows scientists doing research on methods to advance gasoline production from coal. In this particular type of research, radioactive atoms, called istotopes, are used to trace the course of the reaction. By courtesy of Gulf Oil Corporation. See other articles on atomic energy, pages 4–7, 11–13.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

"Study of the biological, emotional, personal, legal, and economic aspects of marriage are given too little attention in high school." . . . . . p. 2

★ ★ ★

"As tracers, these 'tagged atoms' are proving to be the most useful new tool in research since the microscope was developed three centuries ago. They offer a new mode of perception." . . . . . p. 7

★ ★ ★

"All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act toward one another in a spirit of brotherhood."—Article 1, Universal Declaration of Human Rights. . . . . p. 8

★ ★ ★

"The teacher's responsibility is surely to assist his students and his community in finding positive answers to the question: Can we make an effective social adjustment to changes as they are brought about by atomic energy research?" . . . . . p. 13

★ ★ ★

"The public schools would do well to take greater initiative in building sound programs of education for young adults as a foundation stone of a strong and vigorous America." . . . . . p. 14

Published each month of the school yeor, October through June.

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THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

New Commissioner of Education Named

PRESIDENT TRUMAN on February 17th appointed Earl James McGrath as Commissioner of Education.

In announcing the appointment, Oscar R. Ewing, Federal Security Administrator, said that Dr. McGrath will enter on his new duties immediately following his confirmation by the Senate.

Acting Commissioner of Education Rall I. Grigsby has been carrying on these duties since the resignation of John W. Studebaker in July 1948. Born in Buffalo, N. Y., Dr. McGrath graduated from the Buffalo Technical High School in 1920. He received his B. A. degree in 1928 and his M. A. in 1930, both from the University of Buffalo. In 1936, he received his Ph. D. degree from the University of Chicago. The degree of Doctor of Humane Letters was conferred on him by Coe College, Iowa, in 1946.

War Service

During the last war, Dr. McGrath had the rank of Lieutenant Commander in the U. S. Navy and was Officer in Charge, Educational Services Section, Bureau of Naval Personnel. Enrollment in the educational programs for Navy men, which Dr. McGrath formulated and supervised, reached some 300,000. Through courses primarily in elcmentary, secondary, and vocational subjects, many young service men and women were enabled to complete high school and receive their diplomas.

In the fall of 1946, Dr. McGrath was a member of a 10-man Mission to Germany to survey the school system in the American-occupied zone. The report prepared by this Mission formed the basis for American policy in German schools throughout the American zone.

Since College Graduation

With a history of outstanding achievements in the field of education, Dr. McGrath leaves a position as Professor of Education at the University of Chicago to become U. S. Commissioner of Education. Since finishing college he has held positions as Dean of Administration, Lecturer in Psychology, and Professor of Education, University of Buffalo, 1930–33, 1935–38, 1940–45; Specialist in Higher Education, American Council on Education, 1938–40; Lecturer, University of Minnesota, 1940–41; Assistant Chief, Division of Training and Employment, War Manpower Commission, 1942; Dean of College of Liberal Arts, University of Iowa, 1945–48.

In addition to his membership on the Mission to Germany, Dr. McGrath has had a number of other special professional appointments. He is a member of the American Council on Pharmaceutical Education. Under special appointments, he has also served as Member of Staff, Regents' Inquiry Into Character and Cost of Education in New York State; Member, Commission to Survey Education in the State of Utah; Executive Secretary, Survey of Louisiana State University; Consultant to the Teacher Education Commission; Member of Commission to Survey University of Illinois; and Member of President Truman's Commission on Higher Education.

On President's Commission

As a member of the President's Commission on Higher Education, Dr. McGrath was particularly concerned with the need for extending education at all levels to the underprivileged and minority groups. Among a number of colleges which he serves as consultant are Prairie View State College, Prairie View, Texas, and Bennett College, Greensboro, N. C.

He has been a member of the National Education Association for many years and since 1946 has served on the Executive Committee of the Department of Higher Education. Other learned societies of which he is a member include: Phi Beta Kappa, Sigma Xi, Association for the Advancement of Science, Phi Delta Kappa, Delta Chi, Delta Sigma Pi, and Delta Phi Alpha.

Dr. McGrath is Editor of the *Journal of General Education*. He is the author of a number of books on education, including: *Toward General Education; Science in General Education*, and *Social Science in General Education*.

Dr. McGrath is a resident of Iowa and a member of the Presbyterian Church. He is married to Dorothy Leemon who for 10 years edited the publications of the American Council on Education.

Educating Our Young Adults After School and College

Homer Kempfer, Specialist for General Adult and Post-High School Education

EVERY YEAR from two to two and a half million young people leave our schools through drop-out or graduation to face the three major problems of a lifetime—entrance into the world of work, the establishment of new families, and the acceptance of full responsibility as citizens.

Whether the value of previous schooling in assisting with these problems has been great or small, for most young adults systematic education is no longer in the picture when the crucial young adult years arrive. There are exceptions but for the most part the "prepare for" concept of education still prevails; for most young people organized education ceases when full-time schooling ends. When life patterns of vocation, family life, and citizenship are becoming fixed, organized education all too often is not there—this in spite of the fact that, by their own admission, half of all out-of-school youth would like to continue their education. The unaccrued dividends to society are tremendous.

Take the vocational angle. Schools often do a good job here—with the fourth or fifth of all high school youngsters who are enrolled in federally reimbursed vocational courses. According to one concept of long standing, the schools have a responsibility to help youth—*all* youth—select, prepare for, enter upon, and progress in an occupation. Vocational guidance, where it exists, can assist in occupational selection. Vocational courses help prepare. Few schools help any significant portion of young people enter upon their work, while only a handful follow up to assist young workers to progress in their jobs. After formal schooling, they are left to sink, swim, or flounder largely on their own. In periods of high employment the results may not be dramatic to the casual observer, but most of us remember the 1930's.

Too Few Being Reached

Figures are less complete for estimating the extent to which the secondary schools assist in the establishment of a satisfactory family life, the cornerstone of our democracy. However, it is known that all too few young people are being reached. Approximately 3,600,000 persons married last year. Most of them were less than 10 years out of school. While many school activities may help prepare for the complexities of modern family living, in high schools specific preparation is largely in homemaking departments. In 1940 an estimated one-third of all girls graduating from high school had not been enrolled in any homemaking courses. It is estimated that nearly 45 percent of all high-school girls in the United States were receiving homemaking instruction during 1946–47, and that at least one-half of these will take one or more additional years of instruction. Only the exceptional school offers homemaking courses for boys.

Too Little Attention

Study of the biological, emotional, personal, legal, and economic aspects of marriage are given too little attention in high school. Curricula in home economics are increasingly emphasizing the study of child development, consumer-buying, and family relationships. Even so, it is clear that a great deal remains to be done in schools in the preparation for home and family living.

One Out of Seven

Because of immaturity factors during the secondary years, instruction preparing for marriage and after cannot be completed then. Even if it were possible, most efficient learning would still come when an immediate need is faced. This means a program of family life education for out-of-school youth and adults. In a recent survey of over 3,000 school systems, chiefly of

communities above 2,500 population, approximately one out of seven claimed that it had activities in "family life and parent education" for out-of-school youth and adults, and less than 4 percent reported activities in "preparation for marriage." Regardless of the effectiveness of educational programs in earlier years, obviously most school systems have not accepted responsibility for helping *during* this crucial period.

Systematic education in citizenship, both theoretical and practical, drops to a low ebb as youth leave school. Most studies of the subject show that young people participate relatively little in our common civic life. Even though only recently removed from systematic instruction in citizenship, they tend to register and vote in smaller percentages than middle-aged and older groups.

A great deal of thinking, both lay and professional, is devoted to the "youth" group of high-school age without realization that over 25,000,000 in the next higher age group—between the school years and age 30—have unique needs worthy of special consideration but somewhat different from those of the lower age bracket. A great many communities have teen-canteens and youth programs of various kinds. For the most part they engage the out-of-school time of in-school youth. The New York Youth Commission reaches up to age 21 with its juvenile delinquency prevention activities. Other States have special programs for youth, but relatively few schools do much for young adults except to provide athletic and other physical recreation activities.

An Educational Vacuum

From the highly organized educational program of the secondary school, young people drop almost into an educational vacuum. Usually after school days only 10 to 15 percent—occasionally 25 percent—of out-of-school young adults up to age 30 maintain participating membership in any formally organized group. The YMCA, 4–H Clubs, certain church groups, and similar organizations, do yeoman's service with a limited number especially in the adolescent years. For the remainder, educational stimulation comes almost entirely from the mass media and from fortuitous individual and small group contacts.

Young adults, although full of energy and idealism, hold few leadership positions; indeed, they find it difficult to participate in groups dominated largely by older and more expericnced adults. Not until around age 30 to 35 do they normally start participating in the usual range of community organizations. In general, this age span neither belongs to nor contributes its share to the group life of the community. Young people are busy finding their occupational toeholds and establishing families and often do not turn readily to civic and community affairs, although, from a time viewpoint, they have most to gain.

Certain States and localities have started to explore ways in which these young people can be inducted through educational programs into fuller and earlier participation in community life. Through a properly conceived program geared to their needs, their interest in the future can be built into a great bulwark of American democracy. Possibly the usual lack of an adequate educational program under public auspices partly explains why some at this age become involved in programs not always firmly grounded in American principles. Both fascism and communism have capitalized on the idealism and energy of this young adult group for much of their strength. American democracy can afford to do no less.

For several years the Bureau of Adult Education, New York State Education Department, has been pioneering with this post-school group. Scores of local young adult councils under various names now associate together in a New York State Community Service Council for the carrying on of selected cooperative projects. While local councils usually are "backed" by boards of education, their activities are the antithesis of a school-prescribed program. Young adults select their own projects. A counselor assigned to a group by the school does not teach but provides consultation service and guidance in the best sense and helps the young adults maintain liaison with the older community. A number of councils also have advisory committees of sympathetic adults who help interpret the purposes and activities of the council and support it in other ways.

Schenectady Civic Youth Council conducts weekly radio series, Youth Wants To Know. Photograph on page 1 shows the Council members discussing public affairs by radio with young adults in London.

What Some Are Doing

Consultants from the Bureau do not suggest activities to local councils; instead they help the young adult groups define their own problems and work out ways of solving them. Sometimes young adults are most conscious of the lack of suitable recreational facilities and start with that as a civic project although they seldom limit themselves to recreation. The Richfield Springs Council, for instance, was instrumental in inducing outside industries to locate in rural Richfield Springs and in having houses numbered. Young adults left in Binghamton during the war took the initiative in the development and coordination of guidance services in the community for returning veterans.

The Schenectady Civic Youth Council has a comprehensive program of activities in

(*Continued on page 14*)

ATOMIC ENERGY EDUCATION

"WE MUST have a generation who understands atomic energy and its implications for a free people . . . This places a new load of responsibility on the leaders of American education," says Willard E. Goslin, president of the American Association of School Administrators.

It is ironical that the people of the United States are so little aware of new knowledge that has already begun to change many aspects of our economy and our society. New techniques in industry, medicine, and agriculture; a new method of keeping time; new conceptions of life processes—these have been accomplished. A new source of power awaits technical development. It is the drama of the Bomb that has obscured these other facts from our view.

In this issue, SCHOOL LIFE presents a few of the major misconceptions about atomic energy in "Is It True?"; and a review of current knowledge about atomic energy, "The Heart of Matter." In accordance with the counsel of David E. Lilienthal that the analyses of policies should come "from a variety of sources," and "not come solely from official sources," SCHOOL LIFE also presents the views of three educators titled "The Minds of Men" on the meaning of atomic energy to all of us.

Atomic Energy: Here to Stay is a supplement to this issue. It is a collaboration of the Federal Security Agency, Office of Education, with the United States Atomic Energy Commission. Primarily it contains handles for schools to take hold of in making information about atomic energy development available to boys and girls in our schools, and to adults in our communities. These are discussed in "Where the School Takes Hold," and "How the School Reaches Out." "The Ladder of Atomic Science," "New Facts—New Choices," are other feature articles, along with references, audio-visual aids, and suggestions for exhibits.

Atomic Energy: Here to Stay is available from the Superintendent of Documents, Washington 25, D. C., for 10 cents a copy, with the usual discount for quantities.

Is It True?

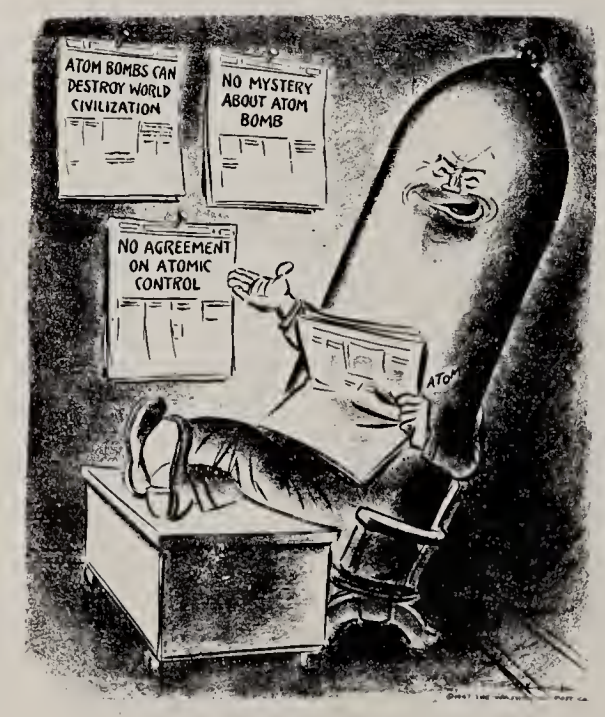
Misconceptions about atomic energy are dangerous: They lead to an unwarranted sense of security.

1. Does the United States hold the secret of atomic energy?

Scientific facts are secrets only until they are discovered. Many basic facts about atomic energy were not discovered in the United States. In 1940 the literature on atomic fission included papers by Fermi (Italy), Bohr (Denmark), Hahn (Germany), Joliot (France), Zeldovich (U. S. S. R.), and scientists of the United States. At that time at least four separate methods for producing fissionable material were generally known. "The real secret," says Selig Hecht in *Explaining the Atom*, "is that there is no basic secret."

2. Does the United States hold the secrets of the atomic bomb?

The "secrets" about the bomb are of the same general kind that leads a manufacturer of a cake mix or a new engine, for example, to guard against leaks in his formula or methods of production. It must be remembered that all nations have the Smyth report on the steps leading to development of the bomb. True, many details about the bomb are still "classified," i. e., not released or published. These details include thousands of technical facts about production methods. Much information on the peaceful use of atomic energy is available, but the details about bomb production are not. They are secret. Some scientists have expressed the opinion that if our "secrets" of the details on bomb construction were released, the information might shorten the time for other nations to build the bomb by perhaps a year. Even if the production secrets now held by the British, Canadian, and the United States Governments are not released, scientists estimate that other nations will probably be able to develop their own bomb-making plants in 5 to 15 years, dating from 1945.



By courtesy of The Washington Post.

"I Ain't Got Any Secrets."

3. Is atomic energy too difficult for the ordinary person to understand?

Actually, the basic facts about atomic energy can be taught and are being taught to elementary school children. The schools of Glencoe, Ill., for example, have successfully included instruction about atomic energy in the elementary school grades. Scores of other school systems have made study of atomic energy a part of their school activities.

Even if the teacher—or, for that matter, the student—does not familiarize himself with the scientific fundamentals, he can certainly understand the implications of atomic energy. A general knowledge of airplanes is enough for us to understand how they influence world relations. Most of us can't explain the chemical process of fire, but we had to learn how to keep it under control.

4. Even if you "understand" atomic energy, can you do anything about it?

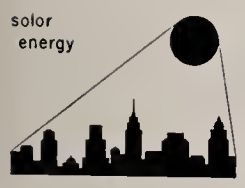
You can do as much or as little about atomic energy as you can do about the tariff, floods, and high prices. Americans *have* done something about all of those, and many other important problems. People make atomic bombs; people decide how atomic energy is to be used. The atom itself exercises no moral judgment. Only people do.

The Heart of Matter

by William H. Morris and Philip G. Johnson, Office of Education[1]

"Western civilization, if not the whole world, is now utterly committed to applied science."

STUART CHASE, *The Proper Study of Mankind*



NO ONE has ever really seen an atom. Perhaps no one ever will. But if you want to see atomic energy being produced in great quantities lift up your head. Look at the sun. There—if the present ideas of scientists are correct—is the mightiest atomic energy machine of all. Our sun and other hot stars.

Only within the past decade—since this year's high school seniors were in the early grades—have astronomers come to general agreement about the source of the sun's energy.

It seems quite obvious, when you think about it, that the sun could not have been "burning," in the usual sense, these millions of years. It would have consumed itself. Scientific evidence now attributes the energy of the sun to an atomic reaction which transforms hydrogen, a light element, into helium, a heavier one, yielding energy in the process. The process is called fusion. It is believed that a whole series of atomic reactions takes place. But the change of matter into energy is the heart of the explanation. These atomic reactions—when billions of billions of atoms are involved—release enormous quantities of energy, as is obvious on any sunny summer day.

In speaking of this concept in 1940, a writer in *The New York Times* said: "In earthly laboratories men have not yet been able to set the process going on a practical scale." Man has been able, however, to put under way another energy-liberating process known as fission (a cleaving or splitting into parts) by using atoms of uranium and other elements.

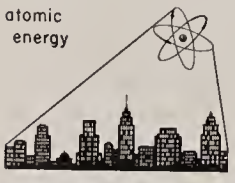
Architecture of the Atom

Even though no one has ever seen single atoms, we know a great deal about them. Most of our knowledge has come in the past half century. Since the discovery of X-rays in 1895, findings about the nature of matter have come with dizzy speed. If you are more than 50 years old, you were born in the paleozoic age of atomic science. This is where atomic science now stands:

All matter, from this sheet of paper to the walls of China, is composed of one or more of the 96 elements now known. All elements in turn are composed of atoms. Atoms are incredibly small. Millions of them could be lined up on the period at the end of this sentence.

Unpacking radio-iodine. (*University of Chicago.*)

The atom appears to be made up of two parts, an outer shell (or shells, sometimes called a cloud) and a very small but relatively heavy nucleus inside the shell. Small as the atom is, its nucleus rattles around in the shell like a pea in a stadium. The shell is composed of electrons (unit particles of negative electricity). The atoms of each element have a definite number of electrons in their shells (hydrogen 1, helium 2, and uranium 92). The nucleus of the atom (except for normal hydrogen) is composed of two other kinds of particles, protons and neutrons. Protons weigh almost 2,000 times as much as electrons and carry positive charges. Neutrons have about the same weight as protons but carry no electrical charge at all (neutral, as the word neutron suggests).



Because of the relationship of its parts, the atom has been likened to a solar system. In fact, the parallel is rather striking. Think of the nucleus as the "sun" and the electrons as the "planets." And note this: The relative distance between the nucleus and the electrons is roughly comparable to their counterparts in the heavens. The atom, therefore, is mostly space.

Families of Atoms

Not all atoms even of one element have the same weight. There are hydrogen atoms, for example, of three different weights. The scientist indicates the three hydrogen atoms as H–1, H–2, and H–3. Such atoms are called isotopes (from the Greek words for "same place"). Like most other elements, uranium has several isotopes, principally U–235 and U–238. Thus most elements actually are families of similar (chemically-identical) kinds of atoms.

Even though all atoms of a given element do not weigh the same, they have the same number of electrons. All of the hydrogen isotopes have 1 electron, and all of the uranium isotopes have 92 electrons. Furthermore, all of the hydrogen isotopes have 1 proton in their nuclei, and all uranium isotopes have 92 protons. Where then is the difference between H–1, H–2, and H–3; and between U–235 and U–238?

This is where the neutron comes in: Isotopes of a given element vary in the number of neutrons in their nuclei. For example, U–235 has 143 neutrons in its nucleus (143 plus 92 protons equals 235); U–238 has 146 neutrons (146 plus 92 equals 238). Because neutrons carry no charge, the atom remains electrically in balance—92 electrons and 92 protons. Yet because the neutrons have weight, the isotopes of a given element vary in weight.

All atoms of each element combine with atoms of other elements to form chemical compounds in the same way. H–1, H–2, and H–3 all combine with oxygen atoms to form water. Since H–2, called "heavy hydrogen" or deuterium, exists as 1 part in 5,000 of natural hydrogen, "heavy water" exists in ordinary tap water in ap-

[1] Acting Editor, Information and Publications Service and Specialist for Science, Division of Secondary Education, respectively.

> *"We do not see how it would be possible under the most favorable circumstances to have any considerable portion of the present power supply of the world replaced by nuclear fuel before the expiration of 20 years."*
>
> —Report to the U. S. Atomic Energy Commission by its General Advisory Committee (J. R. Oppenheimer, Chrm.) (in Fourth Semiannual Report of AEC, 1948, p. 46)

proximately the same proportion. Therefore, we say that all isotopes of an element have the same chemical behavior.

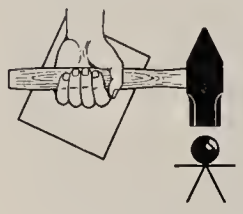
Isotopes are of two kinds, stable and radioactive (nonstable). The latter emit particles and energy, and break down, or "decay," into stable isotopes. Stable isotopes are common; radioactive isotopes (radioisotopes) occur naturally among only a few elements, mostly the heavier ones. Radioactive substances, however, are now produced artificially.

Among the 96 elements now known there are over 800 known isotopes. Carbon, for example, has 5 known isotopes; 2 are both stable and natural, and 3 are radioactive and man-made. Tin has 22 known isotopes.

Artificial production of isotopes was started about 1934. Within a few years, cyclotrons and other particle accelerators had produced radioisotopes of all 83 stable elements. This method was slow and costly. Wartime development of nuclear reactors (atomic piles) made it possible to produce radioisotopes cheaply and in great quantities.

Origin of Energy

For several decades, since the atom was shown to have a complicated structure, the key question has been: What force holds the atom together? The force that holds the electrons in place in the atom is fairly well understood. It is basically electrical in nature: A given number of electrons (negative) balance the same number of protons (positive). The forces holding the nucleus together, however, are more complex, and very great. A special binding force, in addition to conventional gravitational and electrical forces, must be assumed. The essential nature of that force remains, up to this time, not fully known to us. It is one of the most crucial and tantalizing puzzles in science. Many scientists now think that the puzzle may be solved by the study of mesons. Mesons are another kind of subatomic particle. Although short-lived they are found among the debris left when cosmic rays — the mysterious rays that rain ceaselessly on the earth from outer space—strike atoms in the earth's atmosphere.



The significance of atom-splitting and the size of the force involved can be better understood in light of Einstein's theory that E equals mc^2. This says that energy is equal to mass times a very large constant (the speed of light squared). Thus, when an atom (mass) is split so that atoms with different masses are formed, the difference in mass is released in the form of a very large amount of energy. That is what takes place in the sun: 4 hydrogen atoms are greater in mass than 1 helium atom; this difference in mass becomes energy as 4 hydrogen atoms are fused into 1 helium atom in the sun.

> *". . . the (Atomic Energy) Commission's Advisory Committee on Biology and Medicine stated that the availability of radioisotopes is contributing more than any other factor today to the advancement of medicine and biology."*
>
> —Fourth Semiannual Report, U. S. Atomic Energy Commission, 1948, p. 18.

That also is what happens when uranium atoms are split. In the splitting of the uranium atom to form atoms of barium and krypton, a small amount of mass is unaccounted for. Some of the mass is changed into energy. If the splitting (fission) can be made self-sustaining, as a "chain reaction," it is possible to obtain usable power. The key to the self-sustaining release of energy is the neutron. It has been found that one to three neutrons are released by each uranium atom that is split. These neutrons then become available to split other uranium atoms.

This brings us back to the isotopes. It was found that only U-235 split. U-235 exists in natural uranium only as 1 part in 140 (less than 1 percent). So it was necessary to concentrate the rare U-235 isotope. Suffice it to say that this was done, and it was found possible to control the speed of the chain reaction. As one end-result of this process, the atomic bomb was developed.

Making Atoms Work for Us

What about use of this energy for other purposes, as for producing power to operate ships or industrial plants? This is clearly possible, although most reliable authorities say that it is still some time away from actuality. Enrico Fermi, who helped to build the first chain-reacting atomic pile, says "atomic power is solely a question of eventual technical development." Some big problems to be solved are: (1) Availability of fissionable material, (2) efficient use of very high temperatures obtained from the

Radioactive fertilizer to be utilized by corn plants is checked with safety meter for radiation. This work goes on at the Research Division of the U. S. Department of Agriculture at Beltsville, Md.

reactions, (3) development of structural materials to withstand thesc high temperatures, (4) recovery of fuel materials from the reactor, (5) disposal of radioactive waste materials from the reactor. Studies today are under way on these and other important technical problems which must be solved before atomic power is available to lighten mankind's burden. Further, because about 90 percent of the effort that goes into obtaining the materials for atomic

By courtesy The Goodyear Tire & Rubber Co.

Radioisotopes aid in measuring thickness.

power plants is identical with that which goes into the construction of atomic bombs, the problem of international control of atomic energy is critical and urgent.

At present, the greatest application of atomic products comes through the use of radioisotopes. These actually are "tagged atoms" because their presence can be readily detected in the most minute amounts by the use of the Geiger counter and other similar detectors. Radioisotopes are now being used in medical, metallurgical, agricultural, and other research work.

As tracers, these "tagged atoms" are proving to be the most useful new tool in research since the microscope was developed three centuries ago. They offer a *new mode of perception.* For the first time, it is possible to follow in precise detail the fundamental processes of nature—including metabolism, photosynthesis, and the formation of hydrocarbons.

What do we mean by a "new mode of perception?" Briefly, the most minute quantities of radioactive materials can be detected to a degree millions of times more sensitive than by any previously known technique. Moreover, they can be detected at a distance: It is possible now to determine, not only whether certain kinds of cancerous tissue exists in a patient, but also where it is located, and whether it is benign or malignant—all without resorting to surgery. Finally, the technique can be freely used because radioisotopes are cheaply and abundantly available. Radioisotope tracers are rapidly becoming standard laboratory tools. Let us consider briefly their use in only one field, biological research. We have learned that:

Salt moves through the walls of the capillaries of the human body, is carried to the sweat glands, becomes part of the sweat, and is carried to the body surface, all in less than one minute;

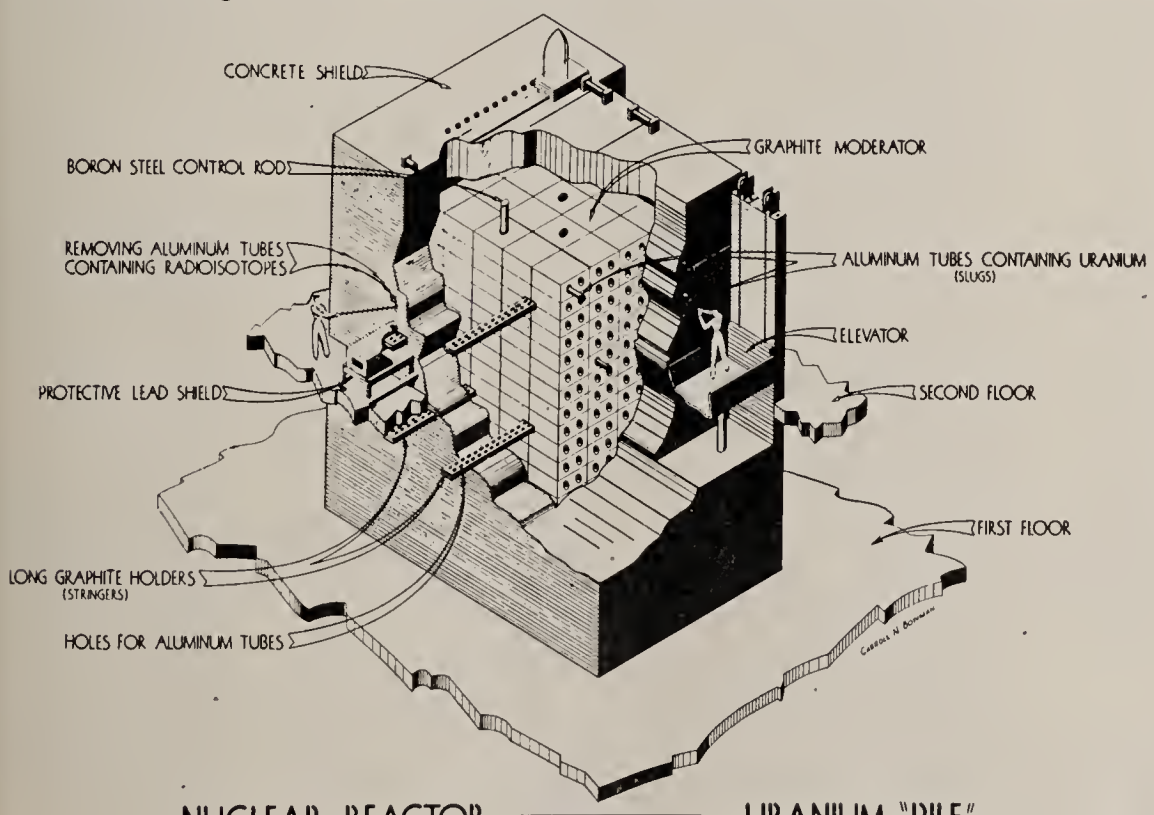
Fluid moves in and out of human blood vessels so rapidly that it carries back and forth with it 50 pounds of salt, on the average, every 24 hours;

About half of the atoms in the human body are replaced each two months. In this sense it is possible to say that each of us gets a new body every few months.

The extreme rapidity with which those changes take place brings a new concept of life processes that is nothing less than revolutionary.

Without going into detail, we can merely suggest the value of tracers in agricultural research by reporting that more progress has been made in the study of fertilizers than would have been possible in a decade or two without them.

How our new knowledge will be used poses social and economic problems of the greatest importance to all of us.



NUCLEAR REACTOR —— URANIUM "PILE"

Note size of reactor by comparing with size of man on elevator.

The Geiger-Müller Counter

THE GEIGER-MÜLLER counter is an instrument used for detective work of a most delicate kind—the counting of high energy rays or particles. It consists of a sealed tube, batteries (or some other source of high voltage), and some visible or audible indicator. The sealed tube contains a thin metallic cylinder, about as large as the tube, and a fine wire. The wire, which is insulated from the cylinder, runs through the center of the tube from one end to the other. A gas such as argon, or air at low pressure, fills the tube. In order to prevent damage, the tube is usually mounted in a metal grill or hood.

A high voltage between the wire (+electrode) and metallic cylinder (−electrode) is so adjusted that the tube is on the verge of discharging. When a high energy particle enters the tube, it sets off a sudden pulse or surge of electricity between the electrodes. This flow of electricity is made to operate headphones, clock-like counters, loud-speakers, and other devices.

A typical isotope shipment (carbon 14) from Oak Ridge is 1/300th of an ounce of barium carbonate. In that shipment, 37 million atoms are disintegrating every second. If that small quantity of barium carbonate were distributed among a million rats, the radioactivity would be detectable in each rat.

Universal Declaration of H

Preamble

Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,

Whereas disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,

Whereas it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law,

Whereas it is essential to promote the development of friendly relations between nations,

Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom,

Whereas member states have pledged themselves to achieve, in cooperation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,

Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge

Now therefore

THE GENERAL ASSEMBLY

PROCLAIMS this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of member states themselves and among the peoples of territories under their jurisdiction.

Article 1

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act toward one another in a spirit of brotherhood.

It is my sincere hope that the United States will take leadership in ratifying the Covenant of the complete Bill of Human Rights. With our Nation's leadership, I believe we can expect ratification of the pact or covenant by other member states of the United Nations more readily. On the other hand I do not anticipate full achievement of the goals set forth in the Declaration for many years, although their discussion in the classroom and in the community should help create a favorable climate for eventual acceptance.

—Mrs. Franklin D. Roosevelt

Chairman, United Nations Human Rights Commission

Article 2

1. Everyone is entitled to all the rights and freedoms set forth in this declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

2. Furthermore no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.

Article 3

Everyone has the right to life, liberty and the security of person.

Article 4

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5

No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6

Everyone has the right to recognition everywhere as a person before the law.

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United States Delegation to

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For *SCHOOL LIFE* readers we are pleased to present this full official wording of the Universal Declaration of Human Rights approved by the United Nations General Assembly Third Session in Paris, France, Dec. 10, 1948.

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Article 11

1. Everyone charged with a penal offense has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.

2. No one shall be held guilty of any penal offense on account of any act or omission which did not constitute a penal offense, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offense was committed.

Article 12

No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honor and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13

1. Everyone has the right to freedom of movement and residence within the borders of each state.

l Nations General Assembly Second Session. *Official United Nations photographs.*

2. Everyone has the right to leave any country, including his own, and to return to his country.

Article 14

1. Everyone has the right to seek and to enjoy in other countries asylum from persecution.

2. This right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.

Article 15

1. Everyone has the right to a nationality.

2. No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16

1. Men and women of full age, without any limitation due to race, nationality, or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage, and at its dissolution.

2. Marriage shall be entered into only with the free and full consent of the intending spouses.

3. The family is the natural and fundamental group unit of society and is entitled to protection by society and the state.

Article 17

1. Everyone has the right to own property alone as well as in association with others.

2. No one shall be arbitrarily deprived of his property.

Article 18

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20

1. Everyone has the right to freedom of peaceful assembly and association.

2. No one may be compelled to belong to an association.

Article 21

1. Everyone has the right to take part in the Government of his country, directly or through freely chosen representatives.

2. Everyone has the right of equal access to public service in his country.

3. The will of the people shall be the basis of the authority of Government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22

Everyone, as a member of society, has the right to social security and is entitled to the realization, through national effort and international cooperation and in accordance with the organization and resources of each state, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

Article 23

1. Everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment.

2. Everyone, without any discrimination, has the right to equal pay for equal work.

3. Everyone who works has the right to just and favorable remuneration insuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.

4. Everyone has the right to form and to join trade unions for the protection of his interests.

Article 24

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible on the basis of merit.

2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

3. Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28

Everyone is entitled to a social and international order in which the rights and freedoms set forth in this declaration can be fully realized.

Article 29

1. Everyone has duties to the community in which alone the free and full development of his personality is possible.

2. In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.

3. These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.

Article 30

Nothing in this declaration may be interpreted as implying for any states, groups or persons, any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

Research Aids the School Lunch

AMONG the foods donated from Government purchases to school lunch programs are certain nutritious but less familiar foods such as dried eggs and dry milk. Or they may include potatoes, dried fruits, or some other food which is locally in good supply—foods better known to meal planners and cooks.

But none of these foods need bring problems to the school lunchroom. Tasty, new recipes are called for, it's true. And such recipes—specifically planned to fit school lunch nutrition standards—can be had for the asking. They are the result of work in the school lunch laboratory kitchen of the U. S. Department of Agriculture's Bureau of Human Nutrition and Home Economics.

Recipes, aimed at children's food likes, get large-quantity cooking tests in the same amounts school lunch cooks must also use. Trained food specialists taste and judge the finished product. But there's an important final test—preparation in a real school lunchrom to check the reactions of both the cooks and the youngsters.

Not recipes alone but the results of study on equipment, food quantities, and cost estimates are in print for the use of all concerned with school lunch management. The complete list of school lunch publications follows and may be checked with those already on hand. They may be obtained by writing your State Department of Education:

1. **A Yardstick for School Lunches.** PA–50. August 1944.
2. **Handbook for Workers in School Lunch Programs.** NFC–3. August 1943.
3. **Suggested Outline for Training School Lunch Workers.** May 1948.
4. **School Lunch Facilities—One-Room School.** April 1946.
5. **Small Equipment for the School Lunch.** June 1947.
6. **Planning and Equipping School Lunchrooms.** PA–60. August 1948.
7. **Estimating the Cost of Food for a School Lunch.** PA–53. July 1948.
8. **Quantities of Food for Serving School Lunches.** PA–45. July 1947.
9. **School Lunch Recipes for 100 (recipe file cards).** Distribution limited to persons operating school-lunch programs. Others may purchase for $1 from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.
10. **School Lunch Recipes Using Potatoes.** PA–36. January 1948.
11. **School Lunch Recipes Using Nonfat Dry Milk.** PA–44. April 1948.
12. **School Lunch Recipes Using Dried Whole Eggs.** PA–58. August 1948.
13. **School Lunch Recipes Using Dried Fruits.** PA–57. August 1948.

—by Roberta Clark, Information Specialist, Bureau of Human Nutrition and Home Economics.

The Minds of Men

by R. Will Burnett, University of Illinois
Ryland W. Crary, Columbia University
Hubert M. Evans, Columbia University[1]

"Science has brought forth this danger, but the real problem is in the minds and hearts of men."

ALBERT EINSTEIN, in *The New York Times Magazine*, June 23, 1946.

WHAT ARE the thorny issues emerging from the development of atomic energy? Today's students must soon accept the kind of social responsibility that leaves small margin for error. They need help in analyzing and evaluating the issues connected with atomic energy. It would seem, therefore, that these critical issues must be subjected to the closest scrutiny in every schoolroom in America. The authors hope that their exploration of some of the issues will be helpful to the Nation's teachers.

Should the A-Bomb Been Used?

Some critics have suggested that a demonstration of the power of the A-bomb could have brought Japan to surrender as quickly as its actual use, but this is generally regarded as an unrealistic appraisal. Former Secretary of War Henry L. Stimson seems to have reduced the American choice to its clearest logic. He indicates that use of the bomb was the logical finale in a total war where the use of 10-ton-block-busters, saturation bombing, and war upon civilians had already been accepted by all belligerents. The problem seems to be reduced to the moral issue of total war itself.

We feel that teachers should not use this question for fruitless discussion of a decision already made and acted upon, but rather as a springboard for considering the problem of human survival. Mankind effectively destroyed many of his civilized works even with his pre-atomic weapons, and the promise of new unconventional instruments of destruction is appalling.

Man's scientific genius remains a two-edged sword. Its cutting edge may be turned against man.

What About Domestic Control?

In the words of Senator Brien McMahon (Conn.), "After Hiroshima came the dilemma. Would the people who had proved capable of producing the atom bomb be capable of controlling it? Would those who had split the atom be able to prevent the disintegration of our economic, social, and political structure under the impact of atomic energy?"

The Senate delegated 11 Senators "to make a full, complete, and continuing study and investigation with respect to problems relating to the development, use, and control of atomic energy." In October 1945, this special committee went to work. Like most American citizens at that time, the Senators had only limited knowledge about atomic energy, but with the help of the atomic scientists, they reached three conclusions:

First: While not risking such immediate military security as we now possess, we must cooperate with other nations to prevent war.

Second: The dangerous materials used in the release of atomic energy and the facilities for their manufacture must be under strict government control.

Third: Scientific research must be stimulated and encouraged and, above all, it must remain essentially free.

UN Atomic Energy Commission votes to suspend activities, May 1948. Two representatives (U. S. S. R. and Ukraine) raise hands opposing motion. *Official United Nations photograph.*

The Role of the Armed Forces?

Since the national security and a principal weapon of war are involved in the control of atomic energy, it is immediately apparent that the armed forces have a stake in its control. However, certain factors led to the decision not to give our atomic control and development directly to the armed forces. One factor was the reaction of scientists who, accustomed to principles of free and independent research, had for the first time experienced restricting influences in their research and in the dissemination of findings. A second factor was the powerful democratic tradition of the supremacy of the civilian aspect of government.

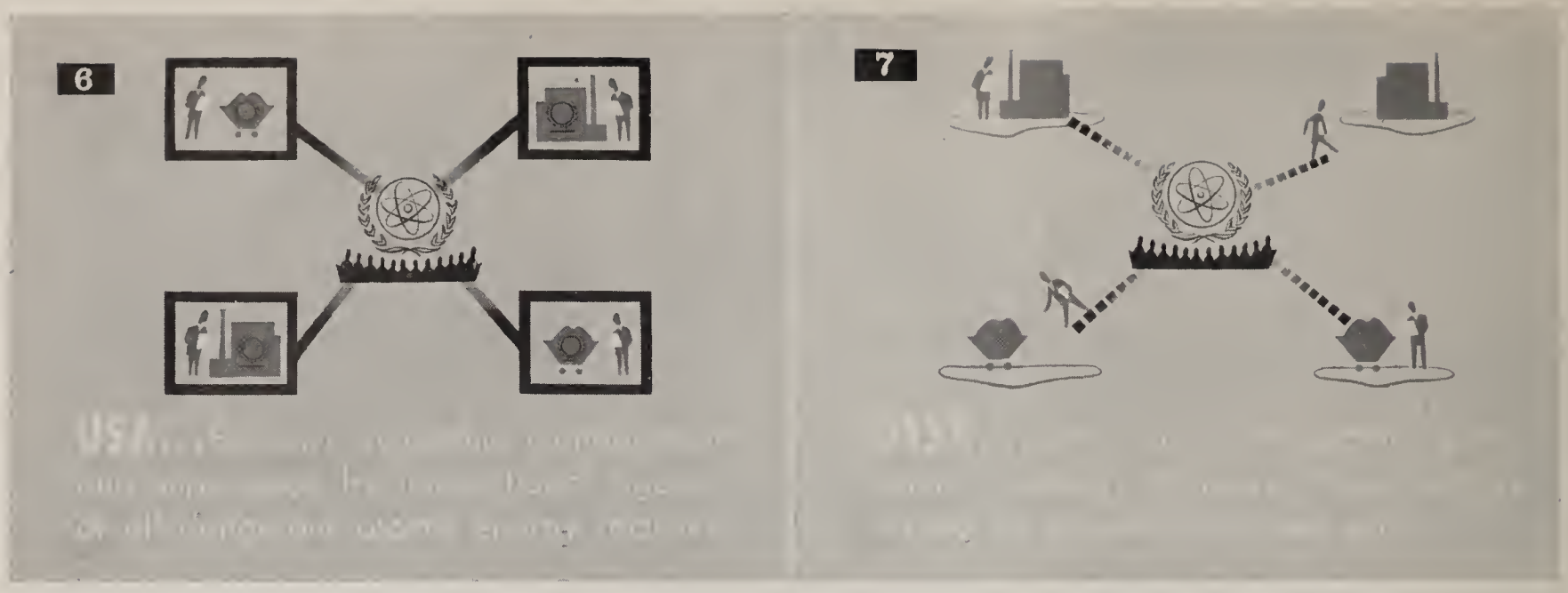
Security and cooperation with the military are fully protected through the Atomic Energy Act, with the provision for a Military Liaison Committee. But basic control is retained under a civilian agency responsible to the President and the Congress.

What About Private Enterprise?

The Atomic Energy Act nationalizes the control of atomic energy. But, at the same time, the act encourages private enterprise by licensing private uses of atomic energy where over-all security is fully guaranteed.

Three principal factors were involved in the decision to place atomic energy under national control: First, the need for an effective security program is clear. Second, tremendous expenditures with no immediate hope of profit are necessary to develop initial facilities. Only the Government can afford such capital outlay, and it is a job we cannot afford to fail to do. Third, with the full potential of this resource still to be explored, it seemed proper that atomic energy should be held in trust for the whole people.

[1] Professor of Science Education, College of Education; Assistant Professor of History, Teachers College; and Associate Professor of Science, Teachers College, respectively, at institution indicated.



UN filmstrip "Atomic Energy—Problems of International Control," shows differences United States and U. S. S. R. control plans.

There remains some dissatisfaction with this arrangement. Some people believe that the national Government has established a dangerous precedent. Some feel that private enterprise should have much greater freedom in developing atomic energy. It is likely that this issue will continue to be with us.

What Type of Control Was Adopted?

A bill was introduced by Senator McMahon. After much study, on Aug. 1, 1946, the Atomic Energy Act of 1946, sometimes called the McMahon Act, became law.

Briefly, the act provides for a five-man Atomic Energy Commission appointed by the President, subject to the approval of the Senate. The members of the Commission devote their entire time to the problems of the development of atomic energy. Specific provisions, based on the principles of *public ownership* and *civilian control*, include Government monopoly of atomic inventions and patents and all materials and facilities that can be used to produce atomic energy or atomic bombs.

The research of private industry in the uses of atomic energy, provided for through Government contracts and licenses approved by the Commission, can be carried on in public and private institutions or in the laboratories operated by the Commission. For this program, the byproducts of the fissionable materials, the radioisotopes, are released on a priority basis. The industrial use of atomic energy for power and other peacetime purposes remains, however, under Government control. No one can buy fissionable materials.

The AEC controls the research and productive activities related to atomic weapons. This part of the atomic development program is carried forward in cooperation with the National Military Establishment through the Military Liaison Committee.

Even a superficial reading of the brief statement of the main provisions of the Atomic Energy Act (our discussion covers selected main points) will reveal that public ownership and civilian control of atomic energy are definitely and specifically provided for in the act. This does not mean, however, that these issues have been settled for all time.

Problems of International Control?

Last May, 2 years of discussion, proposal, and counterproposal by the United Nations Atomic Energy Commission ended in a stalemate. The majority plan for international control of atomic energy, sponsored by the United States—an outgrowth of the Acheson-Lilienthal report and the Baruch proposal—ran counter to the minority plan sponsored by Russia.

The central issues are two. The United States desires that a vetoless system of international *ownership and control* (an International Atomic Energy Development Authority) be set up and put in operation before the United States relinquishes its atomic bombs. The Soviet desires that two treaties be signed. One treaty would outlaw the atomic bomb and would require the United States to destroy its present A-bomb stock piles. The other treaty would set up a control system under the Security Council where the veto is in force.

More recently, the problem was thrown into the United Nations Assembly, with the A-bomb currently the No. 1 item on its agenda. Although the strategy of the majority and minority has shifted, the fundamental issues remain the same. It remains to be seen whether or not the "smaller" nations can assume an effective role in resolving this critical problem. [In November 1948, the United Nations Assembly by resolution approved the majority plan, which had been vetoed by Russia; and at Russia's request, called on the United Nations Atomic Energy Commission to continue its work.—Ed.]

The difficulties in the way of an effective plan for international control of atomic energy are many. The most critical ones seem to challenge in one way or another the principle of sovereignty. Others seem to intensify old fears among nations or to create new fears. The very phrase "world control" is abhorrent to the strict nationalist. The idea of world control of atomic energy, with requisite inspections and en-

> ***"Today it is precisely in the departments where our scientific advances have been most decisive, where our technics has been most exquisitely refined—particularly in nuclear physics—that some of the most eminent exponents of science have begun to sound a note of deep anxiety, as they contemplate the social consequences of technical progress."***
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> —Lewis Mumford, Let Man Take Command, *Saturday Review of Literature*, Oct. 2, 1948.

forcements, comes hard to those schooled in sovereignty regardless of their particular national affiliation or citizenship. But one fact stands out more clearly every day. Adequate control of atomic energy, particularly the control or elimination of its destructive potential, must be established on a world basis. Such are the hard decisions that must be faced by all nations today.

The Larger Issue

The control of atomic weapons alone will neither assure peace nor deprive total war of its horrors. Incendiary bombs and 10-ton-blockbusters — old-fashioned instruments—have wrought devastation almost beyond belief, and the promise of self-propelled weapons and bacterial warfare is an ominous one. Nevertheless, the effective control of atomic energy is a significant factor in the search for peace. Who can fail to see that atomic fear is a factor in the insupportable state of world tension today? It is surely reasonable to assume that the minimizing of this threat would tend to relieve tension and make possible accord in other areas.

Once the problem is resolved, it is scarcely realistic to assume that aggressive totalitarianism will suddenly become amiable in its dealings with free nations. But there is a margin of hope in which the intelligence of man must operate. It is the hope that the very senselessness of total war which denies to itself no weapons, however devastating, nor any targets, however innocent, will impress itself on the minds of all men.

The road to peace is long. The price of peace, like that of liberty, may be eternal vigilance. The road to world order runs through rugged mountains of crises. The passes are ill-marked, even unexplored. But mankind must refuse to believe that there is no way through. We must act on the assumption that beyond the cliffs and crevasses, beyond the squalls and thunders, there lies a valley in which humanity can live and work out a happier destiny for itself.

What Are Some Current Developments?

The development of a new major power source inevitably affects the structure of a society. Effective and practical harnessing of atomic energy for power production is certain. Atomic power is unlikely to completely replace other sources of power, but in the next decade or two it is likely to create a total energy source of tremendous proportions.

That major social changes will eventually occur can hardly be denied. The issue is not whether we can gaze into the clouded crystal ball and predict the precise sweep of events to come. It is rather whether or not the American people will develop the understanding and insights to make sound *democratic* planning possible.

Let us consider for a moment the exciting potentialities of atomic energy as a research tool. The fact that radioisotopes or "tagged elements" can be followed in physical and chemical processes means that we have tremendous quantities of easily detected substances. For example, it is possible and even likely that we may learn the secret of the green plant's manufacture of food. If and when we do, the impact on methods of agriculture and on the lives of agricultural workers—and for that matter, all of us—will be nothing less than revolutionary. "Ocean farming" is even being discussed.

There are doubtless many developments before us in the research with radioisotopes. Current investigations are going forward in metabolism; in the nature of energy-producing compounds such as oil and coal; and generally in physiology, bacteriology, chemistry, and medical therapy.

The teacher's responsibility is surely to assist his students and his community in finding positive answers to the question: Can we make an effective social adjustment to changes as they are brought about by atomic energy research?

Is Social Science Research Lagging?

It is apparent that our genius for scientific development has outrun our ability to adapt our institutions to the use of these discoveries. Indeed, our social lag in this respect was marked long before the spectacular discoveries in nuclear fission.

Fortunately, scientists are coming to the conclusion that there is no real barrier between the natural sciences and social sciences. Witness the fact that many atomic scientists became social scientists when they called the Nation's attention to the social and political implications of these discoveries. Nevertheless, there is a long way to go.

If, as a nation, we are to subsidize scientific development, should we not also be alert to the necessity for discovery and invention in social science—so that our social institutions may more nearly keep pace? But there are two objections made to this argument. One is that society must simply evolve—that it is not possible to plan social adjustments since they are so complex. The second is that the need in social science is not so pressing, and that social advances can be adequately made by the existing organs of political democracy.

In our schools this argument is a tragically neglected issue. It seems to us that the whole problem of social lag is a deadly serious one that the schools cannot afford to ignore. It stands as one of the major objectives of the responsible teacher today.

What Can the Teacher Do About These Issues?

If the teacher can assist his students in finding authoritative information, his contribution will be endless. If he can assist them in sifting materials critically—so that the irresponsible and false can be discarded—his contribution will be priceless. Helping students to have a reasonable degree of literacy in the field of atomic energy is the teacher's first clear task.

And where will his influence go from there? A hundred different directions. Students can use the "letters to the editor" columns of the local newspaper to stimulate thinking. They can engage others in informal discussion and analysis. They can assist others to obtain written materials of merit. They can obtain competent speakers and arrange discussion groups, forums, and presentations for various service clubs in the community.

Individual persons may find effective action in concert with other persons. They can establish community groups to meet regularly for study, discussion, and analysis. They can call upon the services of existing organizations for educational purposes. Student church groups, for example, have been effective in many communities.

Various psychological blockages may have to be overcome before an individual youngster can become effective. Fear of a vague sort; "What's the use" apathy; and belief that one's own views are unimportant or ineffective in policy decisions are among these blockages. But the teacher must help to overcome them. Here is one place where the old saw, "One learns by doing," may be taken literally. The Atomic Age can become a Frankenstein monster if public apathy and ineptitude become widespread and persistent. The Atomic Age can also become a genuine golden age for democracy. The teacher's deep responsibility would appear to be clear.

EDUCATING OUR YOUNG ADULTS

(*Continued from page 2*)

the civic, recreational, and family life fields. Frequent radio programs, forums, discussion activities, and hobby and interest groups are organized and conducted. Rotary sponsors a Youth Service Club as a part of the total program. The schools provide counseling services and a testing service in cooperation with the Union College Psychology Laboratory.

In another community, development of a ski run was the first project; another council kept abreast of proposed State legislation; another carried on functional groups in photography, civic planning, dancing, and other interests; another sponsored a series of forums for the entire community, awakening people to the many needs of the town.

Community Ambassadors

Last summer, as a part of a State-wide project, four communities sent six young people to live for six weeks with European families as "community ambassadors." Out of this experience came a pamphlet, "The Community Project in International Understanding," which outlines procedures for obtaining maximum educational value for the young adults, the local council, and the whole community. This and other materials are available from Rita M. Cowan, Supervisor of Young Adult Services, State Education Department, Albany, N. Y.

The New York idea has several virtues. It is democratic; youth write their own ticket. Nothing is imposed; no national or State preplan tells them what to do or think. Little is done *for* them; they work out their own problems with sympathetic assistance of older adults. Youth live at home; the program develops in its normal setting; activities are integrated naturally into community life. The whole development is geared to increasing participation of young adults in community activities of value to them. It has potentially within it some of the answers needed if a no-work-for-youth situation should again develop.

Wisconsin Plan

Wisconsin has another plan. Because of the importance of participation in local government in our democracy and the fact that textbooks and the usual civics courses seldom deal concretely with community affairs, Professor R. J. Colbert, University of Wisconsin, over a decade ago started developing a program of new-voter preparation. Manitowoc County tried it out first. The program is designed specifically for each year's crop of 21-year-olds and capitalizes on this psychologically ripe time for a practical type of citizenship education and induction into voting.

Every county superintendent of schools in Wisconsin is made responsible by law for organizing the citizenship-training program. This usually becomes a joint school-community project through the active cooperation and leadership of a variety of service clubs and other community groups. The activities are geared specifically to the practical operation of local government; the program is nonpolitical, nonsectarian, and nonpartisan although it purposely is organized along political boundary lines. Township and ward discussion groups, county conventions of new voters, the development of manuals of local government, mass meetings, and other activities culminate in Citizenship Recognition Day. In recent years this coincides with the national I-Am-An-American Day.

For Young Voters

Single copies of the "Dane County Guide for Young Voters" and other information may be obtained from Dr. R. J. Colbert, Extension Division, University of Wisconsin, Madison. The Citizenship Committee, National Education Association, 1201 Sixteenth Street NW., Washington 6, D. C., can supply single free copies of "A Guide to New Voters" prepared by young people in the Manitowoc, Wis., program. "Organizing New Voter Programs" and "New Voter Preparation and Recognition," Personal Growth Leaflets Nos. 70 and 100, respectively, are available from the same source at 1 cent each in quantities of 25 or more.

A number of public schools in Wisconsin, Pennsylvania, and other States, serve some of the recreational and social needs of young adults. Illustrative are the extensive programs at Milwaukee and the well-known Young Adult Club at Madison which features dances, a photography club, picnics, skating and toboggan parties, athletic teams, dancing lessons, and an extended list of other recreational activities for those 19 and over. Some characterize the Madison YAC as a peacetime USO (see *Colliers*, May 22, 1948). The idea is being copied and adapted in a number of other places.

Practically all of the schools operating under the supervision of the Wisconsin State Board of Vocational and Adult Education have day and evening classes and activities designed for young adults in the vocational fields. A number have activities designed to improve competence in citizenship, family living and child rearing, use of leisure, and consumer buying.

About 10 years ago young farmers under the leadership of local departments of vocational agriculture started a post-high-school informal education program. Out-of-school young men up to age 30 meet for 15 or more sessions per year. Arkansas, California, South Carolina, and Utah have State-wide organizations of these groups and several other State associations are pending. The war slowed the development of these groups, but recently their growth has been rapid. The nucleus for local groups is often found among the 300,000 veterans participating in the institutional-on-the-farm training program. Similar organizations do not exist on any extensive scale in homemaking, the distributive occupations, and in the trade and industrial occupations.

On High Priority List

Many other activities for young adults are going on under the sponsorship of the public schools, junior colleges, colleges, the Cooperative Extension Service of the U. S. Department of Agriculture, and numerous other public and private agencies. The progress made in a number of communities in recent years is truly inspiring. An increasing number of schools are doing something, although few are doing as much as they could—and ought. The total number of young adults involved in organized educational activities is still small when compared with the size of this age group. There are enough successful illustrative projects and demonstrations to show the worth-while results obtained when a community puts money and energy into the task. When the intense interest, the great need, and the potential benefits are considered, the young adult field ranks high on a priority list as worthy of major development. The public schools would do well to take greater initiative in building sound programs of education for young adults as a foundation stone of a strong and vigorous America.

A super-cyclotron to be built in Berkeley, Calif., will cost about $9,000,000. The machine will accelerate protons almost to the speed of light. Its magnet will require 10,000 tons of steel.

Clyde A. Erwin.

John H. Bosshart.

State Schoolmen Consider National Educational Problems

NEW PRESIDENT of the National Council of Chief State School Officers, elected at the recent twenty-fifth annual session of the Council at Madison, Wis., is Clyde A. Erwin, State superintendent of public instruction, of North Carolina. Dr. Erwin succeeds John H. Bosshart, New Jersey Commissioner of Education, who, in turn, was elected first vice president of the Council. Miss Jessie M. Parker, superintendent of public instruction of Iowa, was named second vice president.

Top State school officials in attendance at the Madison meeting adopted a number of resolutions calling for action on important educational problems. Among these were the following:

1. Federal Aid to Education

The Council again directs attention to the national need of Federal financial aid to elementary and secondary education, to be channeled through the U. S. Office of Education and through the several State education authorities with administrative direction and control reserved by law to the States.

The Council further recommends that Federal grants be made available for school building planning and construction in the several States, Territories, and possessions; that such funds be channeled through the U. S. Office of Education to the chief school officers of the several States, Territories, and possessions; and because it recognizes that great disparities exist among and within the several States with respect to educational need and ability to provide financial means, the Council further recommends that such Federal funds be allocated among the States upon an objective formula that takes account of need and financial ability, and recommends legal provision to allow the apportionment of funds within States according to plans made by the States themselves.

The Council further urges the Federal Government to provide post-high-school scholarships, through the U. S. Office of Education and the State education authorities, to be awarded according to principles that will assure recognition of individual merit and the equalization of educational opportunity.

2. Reorganizing Office of Education

The Council reaffirms its conviction that the U. S. Office of Education should be made a separate agency of the Federal Government, under the general direction of a policy-determining board of laymen; that the membership of this board should be chosen on the basis of fitness and without consideration of political party; and that the board should have powers of policy making and appraisal, with authority to appoint the U. S. Commissioner of Education under conditions of employment which will permit selection from among the ablest educational leadership of the Nation; such Commissioner to serve as the principal administrative officer of the board and of the U. S. Office of Education.

The Council further declares its sense of the great importance of competent leadership at the head of the U. S. Office of Education and expresses the belief that such capacity is best demonstrated and tested through public educational experience.

3. Federal Educational Activities

The Council believes that the duties and responsibilities of the U. S. Office of Education should be expanded to embrace the conduct or coordination of the educational activities of the Federal Government.

4. Vocational Rehabilitation

Inasmuch as vocational rehabilitation is primarily education in the character of the service it performs, the Council affirms its conviction that its governmental setting should be within the educational branch of government, and that the national Office of Vocational Rehabilitation should be returned to the U. S. Office of Education.

The Council further recommends that in every State government the chief State school officer should be designated by law to be the principal executive officer of the agency of vocational rehabilitation.

5. Life Adjustment Education

The Council advocates and endorses the principle of universal secondary education as it is expressed in the program of Life Adjustment Education for Youth, and commends the work of the National Commission for its efforts to implement the program; and the Council calls upon its membership to encourage this movement by means of educational programs suited to the distinctive conditions and necessities of the several States, Territories, and possessions.

6. Pupils on Federal Lands

The Council recommends that the Federal Government provide financial support for the education of children who reside on Federal property exempt from taxation for school support.

The Council also recorded "its sense of admiration and respect to John W. Studebaker for the wise and courageous leadership he gave to education during his many years as United States Commissioner of Education."

The newly elected board of directors consists of Ralph B. Jones, Arkansas commissioner of education; Rex Putnam, Oregon superintendent of education; Wayne Reed, Nebraska State superintendent; Roy E. Simpson, California superintendent of public instruction, and J. M. Tubb, Mississippi State superintendent.

Resolutions are available from National Council of Chief State School Officers, 1201 Sixteenth St. NW., Washington 6, D. C.

New Books and Pamphlets

Claremont College Reading Conference. Thirteenth Yearbook 1948. Sponsored by the Claremont Graduate School and Alpha Iota Chapter of Pi Lambda Theta. Claremont, Calif., Claremont College Curriculum Laboratory, 1948. 157 p. (Conference Theme: Implementing the Process of Reading Oneself, Other People and Things Which Affect Human Behavior). $2.50.

The Educational Clinic. By L. D. Haskew for the Council on Cooperation in Teacher Education. Washington, D. C., American Council on Education, 1949. 51 p. $1.

Group Work With American Youth. A Guide to the Practice of Leadership. By Grace Longwell Coyle. New York, Harper and Brothers, 1948. 270 p. $3.50.

Health Teaching in Schools: For Teachers in Elementary and Secondary Schools. By Ruth E. Grout. Philadelphia, W. B. Saunders Company, 1948. 320 p. Illus. $4.

Home Study Blue Book and Directory of Private Home Study Schools and Courses. A Handbook of Vocational Information for the Use of Counselors and Vocational Guidance Instructors. Approved by the National Home Study Council. Compiled by J. S. Noffsinger. 12th Ed. Washington, D. C., National Home Study Council, 1948. 31 p. Illus.

Let's Visit Unesco House. Written by Leonard S. Kenworthy of the Unesco Secretariat. Paris, United Nations Educational, Scientific, and Cultural Organization, 1948. 35 p. Illus. (Unesco Publication 181.)

Nursing for the Future. A Report Prepared for the National Nursing Council. By Esther Lucile Brown. New York, Russell Sage Foundation, 1948. 198 p. $2.

Other Young Americans; Latin America's Young People. By Delia Goetz. New York, William Morrow and Co., 1948. 255 p. Illus. $3.50.

The Public Library Plans for the Teen Age. Prepared by The Committee on Post-War Planning of the American Library Association Division of Libraries for Children and Young People and Its Section, The Young People's Reading Round Table. Chicago, American Library Association, 1948. 86 p. (Planning for Libraries, Number 7) $1.75.

—Compiled by Susan O. Futterer, Head, Reference and Bibliographical Services, Federal Security Agency Library.

Selected Theses in Education

Ability of Elementary School Children to Interpret Certain Types of Science Experiments. A Critical Analysis of Children's Ability To Interpret Science Experiments in Grades 3–6, Inclusive, in the Cities of Paterson and Clifton, New Jersey. By Tusin Baker. Doctor's, 1944. New York University. 117 p. ms.

Uses as subjects 201 children in one elementary school of each of the cities. Concludes that children in grades 3–6 can interpret the types of experiments demonstrated, and that their ability increases at each grade level.

A Concept of School Public Relations and Some Suggestions Concerning its Applications. By Ruth B. Crone. Master's, 1945. George Washington University. 62 p. ms.

Indicates the need for presenting the value of the school to the public. Sets up criteria for the development and efficient functioning of an educational public relations program.

The Construction and Evaluation of a Systematic Review of Vocabulary in Beginning Reading. By Ruth A. Sullivan. Master's, 1946. Boston University. 148 p. ms.

Constructs and evaluates a quick perception method for the systematic review of the pre-primer and primer vocabulary of the Alice and Jerry reading series.

The Construction of a Test of Scientific Thinking for Grades 5 and 6. By Leslie S. Clark. Master's, 1946. Boston University. 54 p. ms.

Describes the construction of a pencil and paper test to measure fifth and sixth grade children's ability and skill in the use of elements of the scientific method.

The Education of Teachers in the Middle States: An Historical Study of Public School Teachers as a State Function. By Otto W. Snarr. Doctor's, 1945. Chicago University. 408 p.

Attempts to determine the social factors that have conditioned the education of teachers, to determine the nature of the agencies that have supplied teachers to the public schools and their programs, and to determine the trend in teacher education that is manifesting itself in current practices.

An Educational Experiment to Discover the Extent to Which the Results of Teacher Examinations Are Indices of Teaching Efficiency in Grades 4 to 6, the Growth of Pupils in Reading and Arithmetic as Determined by Standardized Tests. By Marguerite Tully. Doctor's, 1946. Boston University. 180 p. ms.

Describes an experiment conducted with 37 teachers in grades 4 to 6 of the Providence, R. I., clementary schools, all of whom had been required to take the teacher examinations. Indicates that the teacher-examination scores had no predictive value for the type of teaching measured in this experiment.

An Experimental Evaluation of Showing a Film Before vs. After a Reading Unit. By Maryclare Hayes. Master's, 1947. Boston University. 118 p. ms.

Discusses a series of experiments conducted with children in three fifth grades in two different school systems. Indicates a slight but statistically insignificant difference in preference for showing the film after studying the unit.

—Compiled by Ruth G. Strawbridge, Federal Security Agency Library Bibliographer.

U. S. GOVERNMENT PRINTING OFFICE: 1949

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Commerce

Bureau of the Census, Fact Finder for the Nation.

Washington, U. S. Government Printing Office, 1948. 50 p. Single copies free from the Bureau of the Census.

Statistical Abstract of the United States, 1948. Prepared by Bureau of the Census.

Washington, U. S. Government Printing Office, 1948. 1054 p. $2.75.

Federal Security Agency

Federal Grants-in-Aid in Health—Education—Social Security. Selected References 1938–1948. Prepared by Federal Security Agency Library.

Washington, Federal Security Agency Library, December 1948. 19 p. Mimcographed. Free.

History of the United States Public Health Service, 1798–1948.

Washington, Public Health Service, 1948. 13 p. Processed. Free.

Publications of the Children's Bureau. Prepared by the Children's Bureau.

Washington, U. S. Government Printing Office, 1948. 37 p. Free.

Hoover Commission

Hoover Commission Reports on Organization of the Executive Branch of the Government.

Washington, U. S. Government Printing Office, 1949. Advance subscriptions accepted at tentative price, $10.

Library of Congress

Atomic Energy: Significant References. Prepared by Legislative Reference Service.

Washington, Library of Congress, 1949. Monthly. Processed. $1.50 per year. For sale through the Card Division, Library of Congress.

The Constitution of the United States together with An Account of its Travels since September 17, 1787.

Washington, U. S. Government Printing Office, 1948. 44 p. 15 cents.

Copyright Law of the United States of America. Prepared by the Copyright Office.

Washington, U. S. Government Printing Office, 1948. 40 p. (Bulletin 14, 1948 edition.) 15 cents.

The United States Quarterly Book List. Prepared by the Library of Congress and published by Rutgers University Press, New Brunswick, N. J. (30 College Avenue). $3.50 per year.

National Archives

List of National Archives Facsimiles.

Washington, National Archives, 1948. 2 p. Processed. Free.

The National Archives—What it is and What it does.

Washington, National Archives, 1947. 6 p. Processed. (Publication No. 47–7.) Free.

President's Committee on Civil Rights

To Secure These Rights.

Washington, U. S. Government Printing Office, 1947. 178 p. $1.

Superintendent of Documents

Foods and Cooking. Home Economics.

Washington, U. S. Government Printing Office. (Price List 11—41st Edition, November 1948.) Free.

National Museum. Smithsonian Institution. Indians.

Washington, U. S. Government Printing Office. (Price List 55—29th Edition, November 1948.) Free.

Office of Education

Printed Publications

Summaries of Studies in Agricultural Education. (Vocational Division Bulletin No. 237.) 30 cents.

Processed Materials

(Free—Limited Supply)

Education of Exceptional Children and Youth. General References. Elementary Education Division Selected References No. 5–1, November 1948.

Education of Exceptional Children and Youth. Gifted Children. Elementary Education Division Selected References No. 5–111, October 1948.

Education of Exceptional Children and Youth. Delicate Children. Elementary Education Division Selected References No. 5–IX, April 1947, rerun January 1949.

Professional Literature for Teachers of Elementary Science. Elementary Education Division Selected References No. 3, April 1947, rerun January 1949.

Recommendations for a Building to be Used in Teaching Vocational Agriculture in High Schools. Division of Vocational Education, Agricultural Education Service, 1948.

Science Experiment Books for Children. Elementary Education Division Selected References No. 14, May 1948, rerun January 1949.

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Pi Lambda Theta Awards

PI LAMBDA THETA, National Association for Women in Education, again announces the granting of two awards of $400 each for significant research studies on "Professional Problems of Women." For further information write to Alice H. Hayden, Chairman, Committee on Studies and Awards, Education Hall, University of Washington, Seattle, Wash.

In recent Issues of

SCHOOL LIFE

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Volume 31
MARCH 1949

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Supplement to
School Life

Atomic Energy Here to Stay

IN THIS ISSUE

MEDICAL RESEARCH

FEDERAL SECURITY AGENCY—Office of Education
in cooperation with the
UNITED STATES ATOMIC ENERGY COMMISSION

The Road Ahead

THE existence of the atomic bomb is both a physical and a political fact. Physically it has posed a whole new set of problems. Politically it has made crucial an age-old problem, namely, how to organize mankind for the outlawry of war; how to achieve an ordered peace with justice.

The schools and colleges of the United States do not operate in a social and political vacuum. Education must take account of new forces, whether they be physical, economic, social, or political, that affect mankind. The central implications of atomic energy are as much ethical as they are physical, as certainly political as they are economic. It remains for educators to realize those implications and to make them clear to the youth of America.

In order to assist the schools to find the information, and to know what other school systems are doing, the Office of Education formed in 1948 an Office-wide committee with the special mission of considering the implications of the development of atomic energy for the schools and colleges of this country. The committee felt that it was desirable to attempt to move "beyond the threshold of vagueness, into the area of creative planning and constructive action" in the interest of making atomic energy work for the benefit of mankind.

The present publication is one result of the work of the committee. In its preparation the committee has been aided by the consultants listed on this page. On behalf of the Office, I express appreciation to all those persons and the hope that this special issue of SCHOOL LIFE will serve in some small measure to chart the road that lies ahead.

Rall I. Grigsby

Acting U. S. Commissioner of Education.

CONTENTS

SCHOOL LIFE *is published each month from October through June by the Federal Security Agency, Office of Education, Washington 25, D. C.*

OSCAR R. EWING
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U. S. GOVERNMENT PRINTING OFFICE 1949

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. . . "the release of atomic energy on a large scale is practical . . . It is reasonable to anticipate . . . that this new source of energy will cause profound changes in our present way of life."

ATOMIC ENERGY ACT OF 1946 (PUBLIC LAW 585, 79TH CONGRESS)

Education's Responsibilities

by David E. Lilienthal, Chairman, U. S. Atomic Energy Commission

• No undertaking is more critically important nor more urgently needed than the education of American youth in the basic facts and essential meanings of atomic energy.

The plain fact is that unless America's young people become informed about this new science, so that they can chart their own destiny in the years to come, then democracy in its very essentials will be gravely imperiled, not by the action of a foreign foe, but by default by those who benefit most from it.

This is a truth that becomes increasingly important with each passing day. Even at this early stage in the new age we are beginning to see that many important decisions must follow upon the technical advances in atomic energy. The whole fabric of international relations has already been profoundly affected. The nature of warfare, and therefore the way in which wars are begun or are prevented, has been changed as perhaps never before in history. The political and social sciences, industry, agriculture, and medicine will all be influenced increasingly as time passes. The list of areas in which atomic energy leads to change—and therefore to decisions that must be made—could be extended almost without limit.

The lives and happiness of the American people are at stake in these decisions.

Continued on page 2

The Teacher and the Atom

by Mabel Studebaker, President, National Education Association

• America's teachers today face a heavy assignment. No matter what subject they teach, or what grade, they cannot escape the mighty questions raised by the dust of Hiroshima. Those questions make clear the menacing gap that exists between man's control of his physical environment and his control of his emotional reactions and the social framework in which he lives. Education is the only instrument we have for closing that gap.

If we continue to make atomic bombs before we gain a thoroughgoing knowledge of human relations, then at least our heavy assignment is well defined. We must attack, and attack again, the vast wilderness of ignorance in the field of human relationships.

Science must have a heart as well as a head. Science must be understood for what it is—an instrument, and only that, which the mind of man has conceived for quarrying into the unknown. But it is not a deity. No civilization has ever endured in which science had no objectives but its own deification. No civilization has ever endured in which scientific progress was without a moral equivalent.

Tomorrow our youngsters may be expected—on the basis of what they are now learning—to continue to make triumphant advancements in science. America's teachers must see to it that youngsters make comparable progress in the art of human relations.

A Task for Administrators

by Willard E. Goslin, President, American Association of School Administrators

• The world recognizes atomic energy as a force—a force of such magnitude that because we hold it in our hands we stand at a fork in the road, one prong of which leads only to destruction, the other prong taking us over the threshold to better living for more people everywhere. What the peoples of the world do not fully recognize is that they have at their disposal an even greater force, a force strong enough to mold the direction of our destiny, the force of education. Education has enough power, if wisely and vigorously used, to lead us to the right choice and to the use of atomic energy for the welfare of mankind.

The superintendents of schools in America do not control education, but they do influence it more than any other group in American life. There never has been a time when we were more in need of clear thinking and courageous action which would keep education close enough to the growing edge of American life so it is steadily in a position to exercise the constructive influence demanded by our times. This clear thinking and courageous action must take place community by community, all over America.

We must have a generation who understand atomic energy and its implications for a free people. If we get such a generation, the schools of America will have to make a major contribution to their growth and development. This places a new load of responsibility on the leaders in American education. It gives them one of the great opportunities of our times. Are the leaders in American education equal to the task? Are we able to so work with teachers, citizens, students, and scientists that we will emerge as a people with enough social intelligence to control and direct atomic energy for the benefit of all people everywhere? If we prove to believe deeply enough in education and have enough respect for the decisions of the common man when he is adequately informed, we will succeed.

Time will tell if we have been equal to the task.

EDUCATION'S RESPONSIBILITIES

Continued from page 1

Will the people be in on these decisions? If the answer to this question is "No"—if these decisions are to be made by small numbers of "experts" because of a lack of knowledge and basic understanding on the part of the people as a whole—then we will have lost the essentials of democracy. and our basic liberties will be in very great danger.

This task of education is a grave responsibility, and a very considerable undertaking. It cannot be done overnight. But I believe that it *can* be done if there are applied to it the skills that your profession has developed and can be expected to adapt to this need.

You who are teachers and educators must assume a role of leadership in this matter, and I do not mean only teachers in the natural sciences. This problem touches and concerns all the social sciences, English, the humanities in general, and indeed the whole range and scope of teaching. The consequences of atomic energy are as broad as the spectrum of human activities, and therefore as broad as teaching itself.

Today there is a need—a desperate need—for the raw materials of atomic energy education. This need can be met. The basic information is neither secret nor difficult to secure. The men and women capable of using this information to prepare teaching tools must step forward from the body of American educators. The lag before complete materials are ready and widely distributed need not be a total loss. Indeed, you, more than any others, can see to it that this interim period is a fruitful one.

It is well to remember that this democracy of ours is founded upon a faith in the judgment of the people themselves. It is founded upon a belief that when the people are informed—honestly and clearly informed—their conscience and their common sense can be relied upon to carry us safely through any crisis. This is not only a faith, it is the way American society has lived throughout our 172 years of history. No segment of the population has greater responsibility than you who are teachers and educators to insure that we shall continue to live by these democratic principles in the atomic age.

IS MY SCHOOL MEETING THE CHALLENGE?

(Check List for Administrators)

1. Has atomic energy education been officially recognized (by the Board of Education and the Administration) as an integral part of our school program?
2. Have systematic efforts been made to help principals, supervisors, and teachers become aware of the meaning of atomic energy developments?
3. Are teachers presenting atomic energy information in basic courses, especially in science, social studies, and English?
4. Is there an all-school program of general information about atomic energy—carried on through such school activities as assemblies, clubs, film forums, corridor exhibits, student publications, etc.?
5. Do the all-school and classroom atomic energy programs complement each other?
6. Has such a program in the schools been projected into the community to increase the public's knowledge of atomic energy?
7. Is there a systematic program of evaluation (testing attitudes and general knowledge) as a basis for determining the effectiveness of instruction about atomic energy?

"BABY PLAY WITH NICE BALL?"

—from Canada Wide Feature Service, Ltd.

ABOUT THIS SUPPLEMENT

Atomic Energy Here to Stay is a supplement to SCHOOL LIFE. The March 1949 issue contains additional information on atomic energy education.

You may subscribe to SCHOOL LIFE by sending one dollar to the Superintendent of Documents, Washington 25, D. C. Additional copies of this supplement also may be obtained from the Superintendent of Documents for 10 cents each.

MEASURING THE RESULTS

Efforts to evaluate the atomic energy education program must include measures of the total program as well as of specific school events (assemblies, etc.) and of classroom instruction. An information and attitude test administered to the entire school at the beginning and end of the year might be one desirable means to employ. Observer panels, including both students and faculty, can be assigned to collect evidence and draw conclusions as to the effectiveness of particular all-school activities, such as corridor displays or assemblies. Student-faculty committees can conduct surveys of student reaction to specific events in the program. Classroom instruction, in this as in other critical areas, should be evaluated in terms of attitude changes and development of skills and understandings, as well as factual learning.

NEW INFORMATION AVAILABLE

As this supplement goes to press, the U. S. Atomic Energy Commission has released to Congress its Fifth Semiannual Report (available from Superintendent of Documents, Washington 25, D. C., for 45 cents each). It describes the dimensions of the national atomic energy program, and developments in organization research and production. The Commission states that the report is part of a program for public release of information which can be issued without harm to national defense and security.

ON THE COVER

The patient holds a glass containing a radioisotopic substance in solution. Hospitals and laboratories increasingly are using radioisotopes to confirm diagnoses made by traditional methods and to diagnose conditions with an accuracy in some cases not previously attainable. The U. S. Atomic Energy Commission makes constant shipments of radioisotopes to approved institutions here and abroad for a nominal fee.

Photograph by International News Photos.

The ancients knew few of the 96 elements that are known today. Carbon, copper, gold, iron, lead, mercury, and a few others were known before the time of Christ. Just about half of the 96 were discovered during the nineteenth century. In 1869. when Mendelyeev arranged the elements in the periodic table, 75 elements were known.

The Ladder of Atomic Science

> ***". . . The rapid Progress true Science now makes, occasions my regretting sometimes that I was born so soon. It is impossible to imagine the Height to which may be carried, in a thousand years, the Power of Man over Matter . . . O that moral Science were in as fair a way of Improvement . . ."***
>
> Benjamin Franklin, in a letter to Joseph Priestley, 1780.

RUNG by rung, century after century, men have striven to reach higher levels of understanding about the nature of the physical world. From the time of the ancient Greeks, the efforts have been as imaginative as they have been persistent.

In any listing of developments in atomic science, it is impossible to name all persons who have contributed to our greater knowledge. Some, like Democritus, the Greek (4th century B. C.), helped to lay a foundation. Others carried out experiments demonstrating that certain ideas were incorrect.

We must never forget that seemingly unrelated or isolated research findings, made by one or three or five anonymous scientists, may be stored for future use. Einstein's famous formula, E equals mc^2 lay in a stockpile for years before it was experimentally verified.

A listing of the developments in atomic science reveals two rather striking facts: (1) *Discoveries in atomic science have been made by men and women of many nations,* (2) *scientific advances, based one upon another, have come with increasing speed* especially during the past half century.

Some of the major developments are:

1808—Dalton (England) first used the term "atom," meaning "indivisible, that which cannot be cut in two." He stated that each element consisted of irreducible and infinitesimal particles.

1869—Mendelyeev (Russia) arranged the 75 elements then known in a (periodic) table based on their characteristics. By the use of this table, the existence of certain unknown elements could be predicted and later confirmed by experiments.

1895—Roentgen (Germany) discovered radiations which he called X-rays.

1896—Becquerel (France) found that pitchblende (a mineral containing uranium) gave off rays. This property is known as radioactivity.

1897—Thomson (England) identified the electron (the negatively charged particle that moves around the atom's nucleus).

1898—Marie and Pierre Curie (France) announced that they had isolated the element radium from pitchblende.

1905—Einstein (Germany) showed on theoretical grounds that energy and matter (mass) are equivalent; that is, they are different forms of the same thing. This suggested that atoms might be unlocked to produce unbelievably large amounts of

THE GIRL HANDLES RADIOISOTOPES WITH CARE
—by courtesy of INP

energy, and that energy might be used to produce different, perhaps new atoms.

1911—Rutherford (England) visualized the atom not as a solid piece of matter but as a tiny solar system. In 1912, Bohr (Denmark) added his imaginative picture of the atom. The combined Rutherford-Bohr atom set the stage for the changing of one element into another by bombardment.

1919—Rutherford (England) discovered the proton (the heavy and positively charged particle in the nucleus of the atom). In 1919 he also bombarded nitrogen with helium nuclei (alpha particles) and obtained oxygen. *This was the first transmutation of one element into another.*

1931—Lawrence (United States) developed the cyclotron, a machine for speeding up protons to the high velocity necessary for the effective bombardment of atoms.

1932—Cockcroft and Walton (England) verified Einstein's theory that mass and energy were equivalent. They bombarded lithium with high-energy protons (hydrogen nuclei) and produced helium and energy.

1932—Chadwick (England) verified the existence of an uncharged subatomic particle (now called the neutron).

1932—Urey, Brickwedde, and Murphy (United States) discovered a heavy form of hydrogen (an isotope of hydrogen, now called deuterium).

1934—Curie and Joliot (France) reported that certain light elements (e. g. magnesium) could be made radioactive by bombarding them with high velocity helium nuclei (alpha particles). This report stimulated Fermi (Italy) to use neutrons in bombarding uranium. By this method he created a new element from uranium.

1936—Anderson and Neddemeyer (United States) discovered the mesotron (shortened to meson).

1938—Bethe (United States) advanced an explanation for the energy-producing power of the sun and other stars.

1939—Hahn and Strassman (Germany) announced that after bombarding uranium with slow neutrons, they found barium present. On the basis of their findings, Frisch and Meitner (German exiles in Denmark) theorized that by splitting the nuclei of atoms enormous amounts of energy could be released. This process is called fission.

1940—McMillan (United States) identified elements 93 and 94, neptunium and plutonium. Seaborg (United States) shortly afterward identified elements 95 and 96, americum and curium.

1942—Fermi, Zinn, and Anderson (United States) operated the first controlled, self-sustaining nuclear chain reaction (atomic pile). under Stagg Field Stadium, University of Chicago.

1944—Veksler (U. S. S. R.) proposed the idea of the synchroton, a modified type of particle accelerator from the cyclotron.

1948—Gardner (United States) and Lattes (Brazil) working with the cyclotron at the University of California, produced mesons artificially. This development provided a means to study subnuclear forces.

And what of the future? We can only say that *there is no reason to believe that we are near the top rung of the ladder.*

New Facts—New Choices

Having arrived where we have, having so vastly expanded our knowledge of physical matters, is a great accomplishment. But now we must live with the new facts.

The Chairman of the United States Atomic Energy Commission set forth some of the choices—how we mesh the facts into our existing social order—that face us. The statements below are excerpts from Mr. Lilienthal's address in Crawfordsville, Ind., September 22, 1947.

. . . Atomic energy and scientific discoveries have not and need not change the fundamental principles of democracy, which rest upon faith in the ultimate wisdom of the people, when they have been truthfully and clearly informed of the essential facts. This principle and this faith form the basis of the law establishing the civilian Atomic Energy Commission. If the people of this country want that principle and that policy to be made effective—the policy that it is *they* who decide their future and their fate—that is the policy that will prevail. . . .

No one . . . underestimates the importance of atomic energy as a weapon, as a weapon that has shaken previous military and diplomatic concepts to their foundations . . .

. . . But what we have here actually is not simply a weapon. Here is newly acquired knowledge of great and universal forces comparable to the forces of gravity and the forces of electric charges and of magnetism. . . .

The forces . . . within the atom are not new. Far from it. Without the atomic energy released by the sun, this country would be a lifeless crater.

What *is* new is this: that in our day, our generation, knowledge has so increased, that we are now actually on the long road to understanding atomic energy and making it serve men's needs.

These atomic forces are still not well understood by even the most learned scientists. But here are two towering facts of greatest importance to every living human being the world over:

First: Mankind has probably learned more in the past thirty years about atomic forces than in all the preceding centuries.

Second: Within the next few years—a decade perhaps—we should be in a position to unlock new knowledge about life and matter so great that wholly new concepts of human life will follow in the wake of this new knowledge. . . .

Such new knowledge inevitably brings changes. . . . Some of these changes are in process at this moment. Thus the atomic weapon has changed the relations between nations. . . .

. . . No one can predict just what changes will come of knowledge that goes to the root of all things physical. . . . What is important to understand is not just what the precise effect of knowledge of these basic forces will be—which is necessarily speculative—but rather that important changes will come—which is as certain as anything in this world can be. . . .

What we should be concerned about, and what we should make sure of is that the changes shall be fitted into the American way of doing things, that those changes shall not be so imposed upon us that individual freedom is impaired. We must make sure that the American people will have a say-so, and a decisive say-so, in the adjustments these discoveries will bring in community life, in our agricultural, educational, industrial and military institutions. You must make dead sure that your public servants in all branches of your Government, civil and military, legislative and executive, all understand clearly that atomic energy *is* your business. . . .

It comes down to this, the whole problem of atomic energy, and of all the great scientific discoveries it is bound to bring—it comes down to this:

First: We must persist until we find ways whereby mankind will not make use of these discoveries for destructive and evil ends;

Second (and closely related to the first): We must find ways of encouraging and stimulating the application of these discoveries and new ones to come, to things that are beneficial and helpful to mankind and to the best of human aspirations. . . .

Nothing could weaken the security of our country in the atomic field more quickly, nor more surely slow up research in cancer control, say, than to permit science and scientists to be kicked around by the organized forces of ignorance and demagoguery, and petty politics. You don't have to have scientific training to sense that this would be bad, bad for you . . . bad for the country. This sort of thing is a real danger to our scientific progress. . . .

There are many other broad issues where your judgment will be essential, and your interest vital. These might include such matters as:

- **the proposals for international control of atomic weapons
- **the conditions under which the present Government monopoly in this field can safely be changed to private competitive production
- **the share of the national budget that should be devoted to scientific research
- **the adequacy of protection against health hazards from radioactive materials in the air and on the ground
- **the proper relation of civilian direction to the military, in this field.
- **what kind and size of navy, army, and air force we need in the light of developments in scientific warfare
- **what sense the proposals make that we go underground.
- **the workability of decentralization of cities as a defense measure
- **how rapidly atomic fuel may supplement coal, oil, and water power as a source of electricity
- **the wisdom and workability of censorship of the press and radio as a means of maintaining secrecy in this field, under peacetime conditions

Such a list of policy issues could be extended almost indefinitely. . . .

It is important that the facts and analysis of policies should come to you from a variety of sources, not from only one, and above all that they should *not* come solely from official sources. This variety gives you a chance to check one version against another, and draw your own conclusions. . . .

The Atomic Energy Program of the People of the United States

"The United States has today under a rather considerable head of steam what is, as a whole enterprise, the largest, most complex and most extensive scientific, educational, industrial, technical and weaponeering undertaking . . . in the history of the world."

—David E. Lilienthal (interview with Archibald MacLeish), *Life*, September 27, 1948.

by Morse Salisbury, Director, Public and Technical Information Service, United States Atomic Energy Commission

THE PEOPLE of the United States, in their national atomic energy development program, own and operate a large industrial and scientific enterprise. The total operation, carried on for the people by a Commission established by the Atomic Energy Act of 1946, is large from any physical viewpoint.

This enterprise of the people of the United States begins with the mining of uranium ores in the Belgian Congo and Canada and on the Colorado Plateau in the United States. Uranium is the raw material of the enterprise, and it has become one of the most precious materials in the world. The Atomic Energy Commission is offering stable prices and bonuses for new discoveries in order to expand uranium production in the United States. Intensive prospecting is likewise going on in many other parts of the globe. The American program at present depends heavily upon the ores mined in the Belgian Congo and Canada.

After mining, the next step in the process of making, out of uranium, fissionable materials—the basis of the atomic energy industry—involves many complex processes carried on at scores of plants in the United States under contract with the Commission. At the end of this chain of operations the uranium comes out either in the form of a gas, uranium hexafluoride, to be used at the plant at Oak Ridge, Tenn., or in the form of highly pure natural uranium metal to be put into the great reactors at Hanford, Wash.

The plant at Oak Ridge—probably the largest industrial plant under one roof—is in the shape of a large **U** about a half mile long on each upright and almost that long on the bottom crosspiece. It is six stories high and wider than a football field is long. In its maze of pipes and pumps, an automatic process based on the tiny difference in weight between the fissionable part of uranium (U–235) separates this form of uranium from the much more abundant U–238.

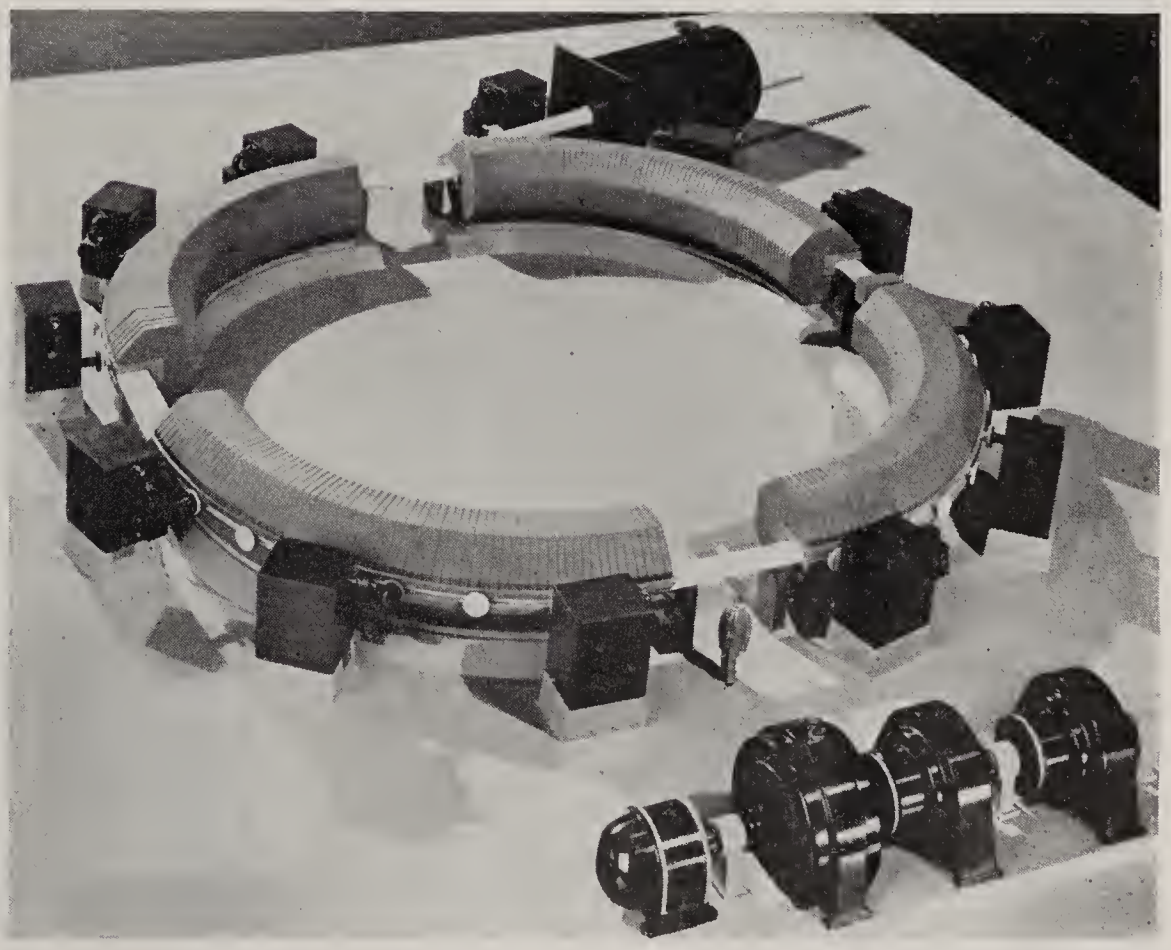
The second plant for making fissionable material—at Hanford in the State of Washington—is even more unusual and more costly than the Oak Ridge installation. Here, pure uranium metal is processed through giant reactors—the fundamental machines of the atomic age. In the process, the alchemy of neutron bombardment from the U–235 in the metal makes a new element, plutonium, out of the U–238. This new element, like U–235, is fissionable.

From Oak Ridge and Hanford, the U–235 and plutonium may go either to the weapons laboratory of the national atomic energy program or into various research and developmental projects for the advance of peacetime uses of atomic energy.

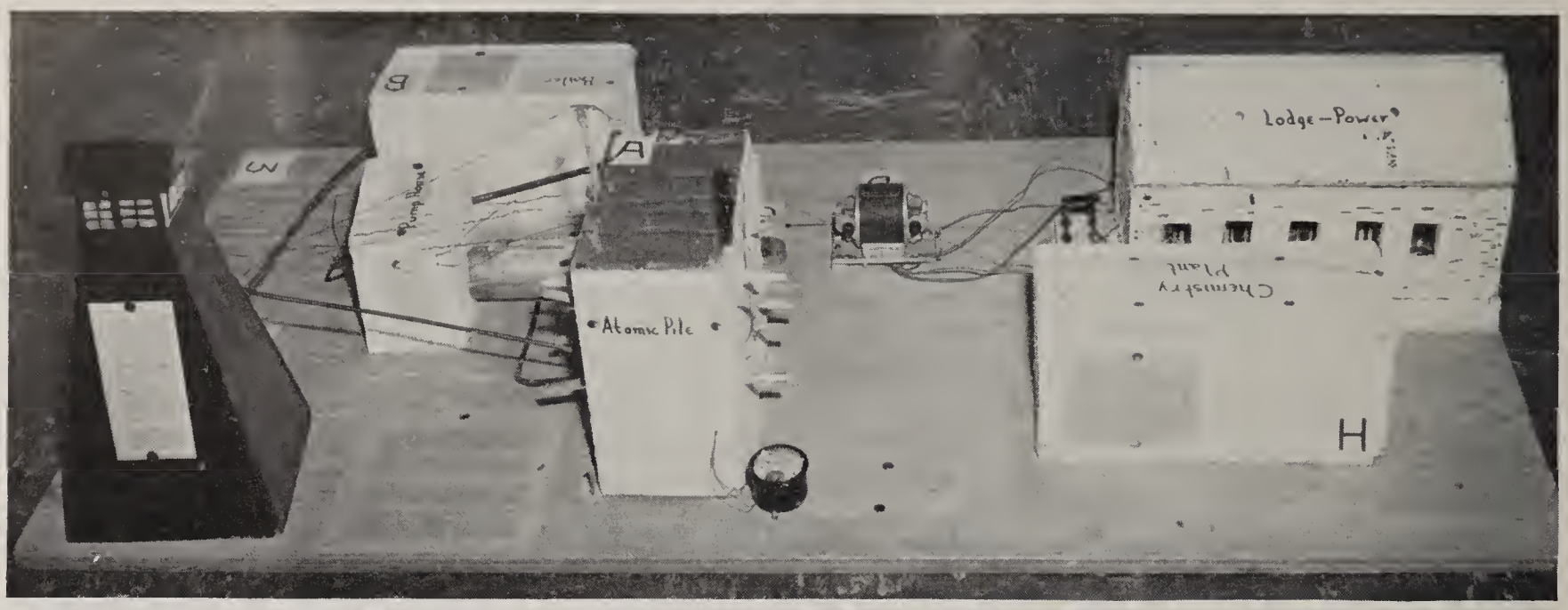
That which goes to the Los Alamos laboratory is handled in another great center of the atomic energy program—the weapons fabrication and research establishment. This is operated under contract by the University of California. As new weapon designs are developed, they must be tested and the Commission maintains a proving ground for weapons 5,000 miles from the western coast of the United States at Eniwetok, an atoll in the Marshall Islands of the Pacific.

Besides this chain of production of fissionable materials and the use of part of

Continued on page 13



MODEL OF ACCELERATOR OF TYPE USED FOR BASIC RESEARCH. NOTE RELATIVE SIZE OF MAN IN FOREGROUND



IN 1 WEEK'S TIME MOUNT BAKER (DEMING, WASH.) HIGH SCHOOL STUDENTS BUILT MODEL SHOWING THEIR IDEA OF PLUTONIUM PRODUCTION PLANT

RADIATION AFFECT RATE OF GENE MUTATION

Make and Show

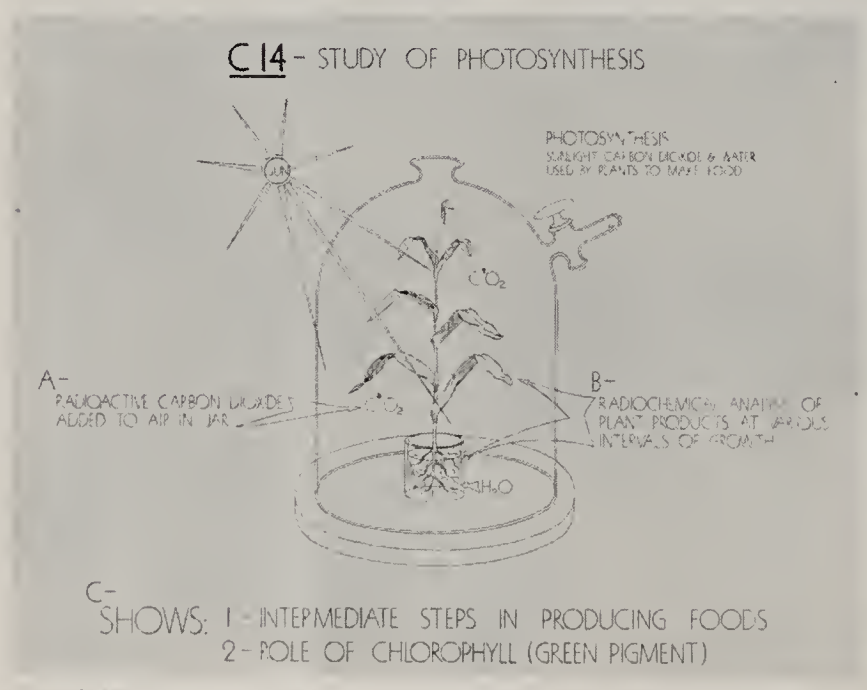
ATOMIC energy is a "natural" for exhibit work. In fact, many of the relations, processes, and developments can be understood by students only through exhibits.

Science students at the Mount Baker High School, Deming, Wash., under the guidance of Teacher Dorothy Massie, produced a number of exhibits, two of which are shown here. Another example, at the White Plains (N. Y.) High School is shown on page 8.

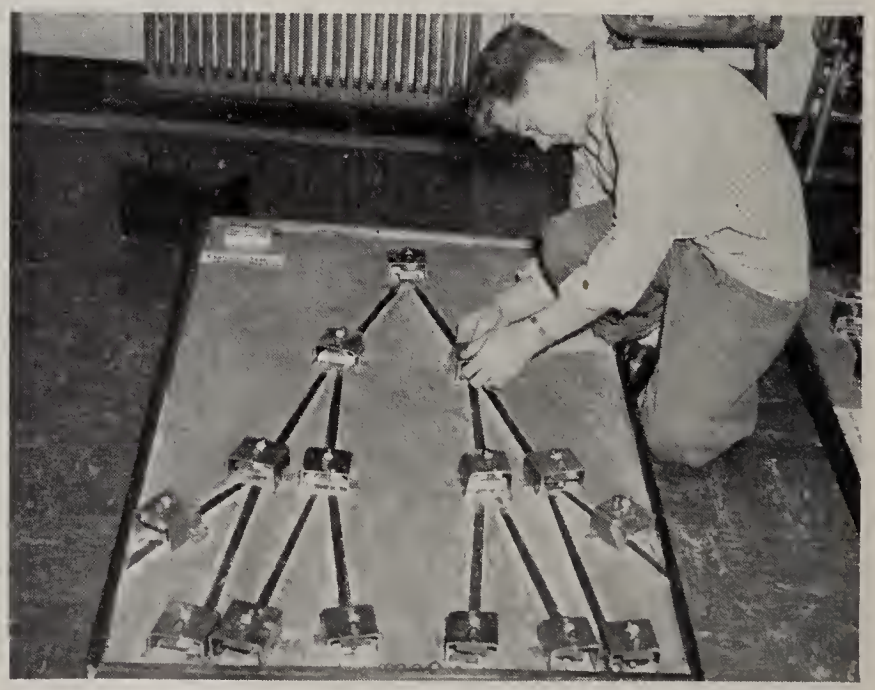
Many exhibits about atomic energy were on display at New York City's Golden Jubilee Exposition last year, one example of which also is shown here. Although they look more professional, such exhibits may be as easily prepared by students; the chief difference is in the amount of research rather than in the techniques of presentation required.

Because atomic energy is so much in the realm of theory, some aspects can be demonstrated best by charts, an example of which is shown here. Structures of atoms and the operation of the Geiger counter have been pictured in this way.

A few professional exhibits have been prepared and used in schools but for the most part they are either expensive or difficult to obtain. For this reason and because new facts are constantly being announced, teachers must rely largely on their own resources in developing exhibits. Some of the references listed in this issue provide examples and suggestions from which exhibits can be developed.



CARBON ISOTOPE, C-14, IS USED TO STUDY LIVING PLANT PROCESSES



STUDENT WORKS ON MODEL HE HELPED BUILD TO SHOW CHAIN REACTION PROCESS

Where the School Takes Hold

By Dorothy McClure and Philip G. Johnson, Office of Education [1]

"(Man) will have to effect a radical transformation in his approach to and philosophy of education . . . One of the liabilities of modern education is that it has contributed to a dangerous compartmentalization both of knowledge and of progress . . . the Whole Man requires whole education . . ."

NORMAN COUSINS, MODERN MAN IS OBSOLETE, *Saturday Review of Literature*, August 18, 1945

AMERICAN students are making atomic energy their business in high schools all over the country—from White Plains, N. Y., to Kelso, Wash. They are studying it in science and social-studies classes, through assembly programs and hall exhibits, by reading the school newspaper and examining the art class's mural. Electron, proton, neutron, chain reaction, and radioisotope are becoming part of the common vocabulary of high-school students. Teachers and students are learning together in many cases. "It gets to be a matter of self-respect to understand what the students are talking about when they begin on atomic energy," said one instructor.

What things are important to know about atomic energy? How can boys and girls learn about it efficiently? These are questions in the minds of many teachers. The preceding articles help to answer the first; this article the second.

The Incidental Approach

New scientific and social developments ordinarily get into the school curriculum by a casual process. This is usually the course of least resistance and, at best, is slow and unsystematic. It has been responsible for the educational lag so often noted—that is, the gaps which exist between the needs of society and the program offered by the school.

Through this process the basic principles of atomic energy and their implications for society will be treated in American classrooms—eventually. The basic concepts related to the use of atomic energy might shake down to appropriate places in the school program, tending to pervade the entire curriculum as society moves further into the atomic age. But do we have the time? Perhaps a half century would be required for this casual approach to achieve an adequate atomic energy education. It is doubtful that the resulting compartmentalized instruction would be effective.

The Subject-Unit Approach

Comprehensive units on atomic energy offer more promising results. They can be introduced at once, within the existing educational framework. They can be so planned as to help students understand both scientific and social aspects of atomic energy developments. Such units should provide for consideration of basic scientific facts; they should discuss the problems of domestic and international control; and they should make clear both the destructive capacity and the hopeful potential of atomic energy.

Effective teaching by the subject unit approach will require cooperation among the faculty. Whoever takes responsibility for this job should recognize the unusual breadth of this particular subject matter. Science teachers must not ignore social and political problems; neither can social studies teachers feel that their students have gained understanding of atomic energy issues without learning basic scientific facts. Thus the Herkimer (N. Y.) High School social-studies class considered many of the same topics as did the Erie (Pa.) High School chemistry class in its study of atomic energy. Incidentally, pioneer work in developing units on atomic energy has been done by English teachers, as in the programs at Oak Ridge, Tenn., and the Simon Gratz High School, Philadelphia.

Wherever the comprehensive unit is studied, it should have a minimum of 3 weeks' time. It should not stand as the only treatment of atomic energy. The study of a limited phase of atomic energy in some courses should supplement the comprehensive unit; in others the study should provide for planned repetition of atomic energy concepts. Specific phases of the subject can properly be studied in several courses where comprehensive units might seem inappropriate—English, industrial arts, and health, for example. If each such limited treatment is part of an integrated plan, the total effect of the comprehensive units plus all of the specific references will go far in helping students understand atomic energy problems.

Some suggestions for the placement of atomic energy information—both in comprehensive units and through limited treatments—in the secondary school follow.

Atomic Energy Information in the Science Program

Comprehensive units may be taught in general science, biology, chemistry, or physics. They can be built around such questions as:

General Science.—What is atomic energy? What can atomic energy do for me? What are the raw materials for atomic energy? How can the release of atomic energy be controlled? How can atomic energy aid man in solving problems of health?

Biology.—How is the use of atomic energy related to living things? How do high energy radiations affect health and heredity? How can radioactive materials aid in studying life processes and in the diagnosis and treatment of illnesses? How do discoveries about atomic energy affect man's behavior? What is the relation between solar and atomic energy?

Chemistry.—What is the chemistry of atomic energy? What is the structure of atoms? How were additional elements discovered? What parts of atoms are involved in ordinary chemical changes? What are nuclear changes and how do scientists account for the high energy of nuclear reactions? What are isotopes? How are they produced and used?

Physics.—What have physicists contributed to atomic energy developments? How does atomic structure help to explain properties of matter? How can high energy radiations be produced? How can high energy radiations be used in product development and testing? How can physical properties be used in separating isotopes?

Specific topics concerned with atomic energy development may be included in the following courses which are often a part of the science program:

Elementary School Science.—Units on fire, fuels, machines, electricity, magnetism, plant growth, animal and human health, water, minerals, the sun and stars, and biographies of scientists.

General Science.—Units on energy, power, transportation, health, astronomy, conservation, food, heating and lighting, rocks and soils, plants and

[1] Specialists for social sciences and science respectively.

animals, human behavior, control of diseases, and scientists.

Biology.—Units on the microscope, nutrition, reproduction and heredity, biological controls, adaptations of living things, conservation practices, physiology of living things, and biologists.

Physics.—Units on the nature of matter, potential and kinetic energy, mechanics, heat, light, magnetism, electricity, radiations, and physicists.

Chemistry.—Units on the nature and structure of matter, methods of purifying substances, chemical changes, metals and metallurgy, carbon chemistry, drugs and medicinals, and chemists.

Related Science Courses.—Units on processing of materials, analyses and testing of materials, use of materials, inventions, occupational guidance, and occupational hazards.

Advanced Science Courses.—Topics such as electronics, nucleonics, industrial processes, product testing, health services, research, laboratory technics, occupations, photography, earth science, consumer education, and applied science.

(Among the learning experiences suggested at the end of this article, the following are especially applicable in science classes: Nos. 1–9, 11–23, 25–27, 29–30.)

Atomic Energy Information in the Social Studies Program

Comprehensive units on atomic energy development, emphasizing the social, economic, and political implications, may be organized for social studies courses around such questions as:

Social Problems or Civics, Senior High School.—How can we control and use atomic energy for the best welfare of all? What scientific principles must be taken into account in any control scheme? What is the present status of domestic control and plans for development? What plans for international control have been offered? What are the implications of atomic weapons for international relations, and specifically for American foreign policy? What are the potential applications of atomic energy in industry, conservation, medicine, power production, agriculture, etc.? What can our class do to help meet the problems connected with atomic energy today?

American History, Senior High School.—How does the "atomic revolution" affect American foreign policy? Using this unit as either an introductory or a summarizing unit in the year's work, American history classes would need to consider the same questions suggested immediately above, with emphasis on international control and atomic warfare. In addition, the machinery through which our foreign policy is made, policies followed since World War I, current relations with other major powers, and the part of the United States in the development of the UN, may be examined in relation to atomic energy developments. Why did this development center in the United States?

World History, Senior High School.—How is the "atomic revolution" affecting world history? In the Superior, Wis., High School, the unit is called, "Atomic Power and its Effects on Peace." Under either title a unit on atomic energy will be a stimulating beginning or ending for the year's work. Emphasis will be on the total world scene, as distinguished from that of the Nation. Many of the same questions suggested for the social problems course, however, would apply.

Limited phases of atomic energy development may be treated in the following topics which are now commonly a part of the social studies program:

United States History, Junior or Senior High School.—*Cultural advances, or standard of living*—consider medical uses of atomic energy, potential benefits in heating houses, applications in transportation; *conservation of natural resources*—consider potential substitution of atomic energy for coal and oil; *industrial progress*—consider potential uses of atomic energy and radioactive byproducts in factories, transportation, etc., new industries and jobs which may be created; *agricultural developments*—consider uses of isotopes in agri-

WHITE PLAINS (N. Y.) STUDENTS PLAN MURAL

cultural research, effects on farm life of potential applications of atomic energy in fields of power, medicine, etc.

World History, Junior or Senior High School.—*Ancient world*—Greek speculations on nature of matter (Democritus); *industrial revolution*—include atomic energy applications; *growth of scientific knowledge*—include story of research in atomic energy, biographies of atomic scientists, research applications of radioactivity; *World War II*—first atomic bomb, comparisons with other types of warfare; *postwar problems*—meaning of atomic warfare in world relations and in United States foreign relations; *natural resources*—in studying distribution pattern and uses of each in modern industry and warfare, pitchblende and carnotite should be included; in comparing resources of major powers include atomic energy raw materials.

Community Civics, Junior High School.—Study of public opinion might be centered on current views about atomic energy—surveys may be made in community to ascertain popular level of knowledge and opinion on various atomic energy problems.

Geography, Intermediate Grades, Junior and Senior High School.—*World resources*—industrial potential of various regions—consider meaning of atomic energy resources and of potential application of power, etc., derived from them; *agricultural production and potential of various regions*—consider meaning of agricultural research through use of isotopes.

(Among the learning experiences suggested at the end of this article, the following are especially applicable in social studies classes: No. 1–7, 9–19, 21–30.)

Atomic Energy Information in Other Courses

While it may not be desirable to introduce a comprehensive unit in other school courses, there are many "pegs" which can be used—without violating the objectives of the course—to broaden student understanding of atomic energy.

English.—Problems arising from atomic energy development provide excellent topics for round tables, research papers, and oral reports. The small, but growing collection of popular books on atomic energy and atomic scientists can be included on reading lists. For example, the Quincy, Mass., High School, and many others now include John Hersey's *Hiroshima* in the English reading program. Units such as those on "Magazines in American Life," "Propaganda Analysis and Public Opinion," "Biographies," "Essays," can include materials on atomic energy. (Among the learning experiences suggested at the end of this article, the following are especially applicable for English classes: Nos. 1–2, 4–5, 7, 9, 11–18, 21–25, 27–30.)

Mathematics.—Teachers of mathematics can draw on atomic energy materials for study of exponents, geometric progressions, conversion units, symbols, formulas, equations, space models, and problem solving.

Art.—Students of art may find many striking subjects rising from the problems of atomic energy development. Art classes can arrange displays, murals, and bulletin boards on atomic energy for classrooms, school corridors, and special exhibits in the school or community.

Industrial Arts.—Industrial arts classes can study the potential influence of atomic energy developments on job opportunities and of their effects on metallurgy and electronics. Pupils can make models of atomic piles, arrange devices to demonstrate chain reaction, and prepare other exhibits to aid the student body in understanding atomic energy.

Health.—Classes in health can study the use of radioactive substances in medical research and treatment, the effects of radioactive materials on the human body, and the measures which have been developed for protection against overexposure to them.

The Interdepartmental Unit Approach

This approach to atomic energy education is perhaps the ideal one in terms of "learning by wholes" and for avoiding com-

partmentalized thinking. Teachers of science, social studies, English, art, and other subjects can more nearly assure availability of needed resources if they work as a group rather than individuals. Whether employed in cooperative units, in a temporarily designed core situation, or in a core course, the interdepartmental approach probably provides the most effective opportunities for use of audio-visual materials, student participation techniques, democratic planning, and action projects. A teacher might attempt the whole job within the confines of a single course, but the magnitude of the task suggests that it is more likely that the job will be well done if it is undertaken on an interdepartmental level.

The School Activities Approach

The school activities approach calls for a flexible, coordinated plan. It involves using assembly programs, corridor displays, homeroom discussions, club periods, and other activities to develop understanding of atomic energy problems. It does not compete with classroom study; effective utilization of this approach requires that its efforts be integrated with those carried on in classrooms.

Such a plan may grow out of student council activities, the work of a social studies or science class, the faculty orientation program, or a special committee appointed by the school administrator. No matter where it originates, it seems desirable that students and teachers cooperate in the planning. The wider the participation, the wider the interest.

The planning committee might begin by surveying all-school activities and facilities to see which ones are suitable for use in the atomic energy program, and by finding out from the principal what funds and other school facilities can be made available.

As potential channels for reaching the student body are spotted, committee members can examine each one as follows:

Assemblies.—Can assembly programs on various phases of atomic energy be arranged? If necessary, can extra assembly time be scheduled? (This may be essential; if regularly planned features are sacrificed for atomic energy, students may have negative reactions.) Can effective speakers be located for some of these programs? Can films be shown at one or two of the assemblies? Can the dramatics class (or club) present a skit? Can panel discussions or demonstrations developed in science, social studies, or English classes be used for programs?

School Publications.—Can a reporter be assigned to cover the atomic energy programs in assemblies, clubs, class work, and hall displays? The White Plains, N. Y., High School did this. Will the student editors be willing to print occasional editorials on atomic energy problems? Will the editors publish reviews of available books and articles? Will the editors publish essays, poems, or stories dealing with atomic energy?

Corridor Displays.—What can various departments contribute from class projects to displays for the corridors? (In Tulare, Calif., the science classes prepared charts and models for such exhibits. In Herkimer, N. Y., the social studies class kept a hall bulletin board up to date with posters and clippings. In White Plains, N. Y., the journalism class maintained a corridor display of news items, ending the project with an analysis of the items.) What exhibit and bulletin board space is available? How can exhibits be placed to attract the most attention from passers-by? What special lighting would be useful? Can exhibits coincide with events that bring adults into the school buildings—e. g., PTA meetings or school plays? What out-of-school sources of exhibit materials should be investigated?

Library.—Can a special reference shelf be provided for atomic energy materials (books, pamphlets, and magazines)? Is space available for posters, book jacket displays, and other exhibits? Can student book reviews be made available on bulletin boards or in booklet form?

Clubs.—Can the science club prepare displays for the school corridors and for other clubs? The Lower Merion (Pa.) H. S. physics club made a mouse trap device to illustrate chain reaction. Can the science club furnish school and community groups with speakers on atomic energy? Can the photography club assist by preparing photographs, enlargements, and slides? Can the audio-visual service club present films, slides, and recordings? What contributions can clubs such as the following make: Four-H; Current Events; Dramatics; Art; and Handicraft.

The earlier the planning committee can schedule its events, the better. The entire program must be planned as a developing one, with each event building on the previous assemblies, displays, and so on. The committee should guard against the attitude that any one effort can do the job.

Orientation for School Staff

Many well-informed adults realize their lack of information about atomic energy developments. Teachers are no exception.

School staff members can work together to gain the understanding they need to plan a program of atomic energy education. Different teachers can serve as discussion leaders at staff meetings or present information to the rest of the faculty. In Kalamazoo, Mich., for example, three faculty meetings were devoted to atomic energy. In the White Plains, N. Y., High School, a science instructor presented two lectures on the scientific principles of atomic energy. A third session, led by a social studies teacher, was devoted to the social implications of atomic energy developments. Following these discussions, materials for individual reading were distributed to all members of the staff. Somewhat later, but still early in the school year, staff members previewed audio-visual materials on atomic energy, thus broadening their own understanding and at the same time selecting materials for student use.

Another plan is to invite guest speakers and discussion leaders who are qualified to talk about various phases of atomic energy developments. Such a series of meetings is currently being held in New York City for science and social studies teachers. Colleges and universities can usually furnish speakers. Such speakers must, however, be sensitive to the scientific limitations of their audience.

Still another plan is for a teacher delegate or delegates to attend an "atomic energy workshop" or institute, several of which are scheduled by universities, State departments of education, or other educational agencies in various parts of the country. The University of Nebraska, for

Continued on page 13

CARTOON PICTURE BOOK TELLS STORY OF ATOMIC ENERGY DEVELOPMENT IN UNDERSTANDABLE WAY

Learning Experiences in Atomic Energy Education

WHATEVER the approach to be used, maximum value can be gained by using vital and varied learning experiences. Some of the suggestions that follow have been tried in pioneer programs of atomic energy education. Others have been adapted from learning experiences which have proven effective in studying other social issues.

1. Read the current issue of two monthly magazines and newspapers and news magazines for one week to locate every item concerning atomic energy. Prepare a vocabulary of terms needed for understanding these items. List new facts learned from the articles. Present these, with explanations, to the rest of the class.

2. Select six terms which you consider basic for understanding atomic energy problems. Prepare "picture definitions" of them, in the manner of the picture dictionaries which are published for young children. Post these "picture definitions" on the bulletin board for others to study.

3. Prepare drawings (charts or diagrams) to illustrate a speech on the topic, "How Atomic Energy is Released," or to be used as a corridor display. Present the illustrated talk or the display to your class.

4. "Science Knows No Nationality." Prepare a bulletin board display to illustrate this statement, drawing on facts about atomic energy research. Find pictures and clippings or draw cartoons about the major steps which have been achieved, labeling each by the country where it occurred.

5. Study the Army Signal Corps film, *Tale of Two Cities*, to get information about the destructive effects of atomic warfare. Follow your study of the film by writing a paper to describe what would have been the effect on your town if the "Two Cities" had been the two largest ones in your State.

6. Make a map of the world, showing where deposits exist of the raw materials which yield atomic energy. If the map is done on a large scale, post it on the bulletin board. Explain to the class the significance of the facts presented.

7. Working with other members of your class, present a "radio broadcast" based on the script, "Atomic Energy Is Your Business." Obtain the script by writing to the Educational Radio Script and Transcription Exchange, Office of Education, Federal Security Agency, Washington 25, D. C. Arrange to present it at an all-school assembly, or for one of the adult groups of your community.

8. Prepare an exhibit to demonstrate the principle of chain reaction. One class, in Ardmore, Pa., used mousetraps for this purpose.

9. Appoint a class committee to keep a section of the bulletin board up-to-date with items concerning problems of atomic energy.

10. In current events discussions, give attention each week to developments in efforts at international control of atomic energy and to new information about peacetime applications.

11. Appoint one member of the class to check radio programs and announce to other students the time and station for any significant broadcast about atomic energy.

12. Appoint a committee to make a systematic check of magazines in the school library and to report to the class on useful articles about current developments in atomic energy.

13. Prepare an oral or written report on one of the following topics:

The Necessity of International Control of Atomic Armament.

Discussions of International Control of Atomic Energy in the UN Assembly.

Prospects for Using Atomic Power for Transportation.

Using Radioactive Isotopes to Increase Agricultural Production.

The Use of Radioactive Isotopes in Industrial Research.

The Use of Radioactive Isotopes in Medical Research.

The Work of the United Nations Atomic Energy Commission.

How Atomic Energy Workers Are Protected from Radioactive Elements.

The Story of the Manhattan Project.

Power from Atomic Energy.

Labor Relations in the Atomic Energy Industry.

Use at least two or, if possible, three sources of information. Check the *Reader's Guide* to find the most recent periodical articles available on your subject.

14. Plan and administer an "information survey" on atomic energy. Use 6 or 8 brief questions about basic facts of atomic energy. Plan your interviews to include persons of various ages, occupational groups, etc. As a first step, interview selected students to get an idea of how much information high school students have about atomic energy and to be certain your questions are clearly phrased. Submit your poll results to the local newspaper for publication.

15. Prepare brief biographies of "Men of Manhattan"—Fermi, Urey, Bohr, Oppenheimer, Compton, Lawrence, Wigner, etc. Present them to the class as a floor talk, or prepare a booklet fot the library collection on atomic energy.

16. Prepare a list of words and phrases needed to understand atomic energy developments. Use them for a "definition spell down."

17. Prepare a test on basic facts about atomic energy and arrange with the English department to have it given to all students. Use multiple choice or true false items. Publish the results and the correct answers in the school newspaper, or post them on the bulletin board. (A class in Kelso, Wash., gave such a test.)

18. Follow the school-wide test with an assembly program designed to teach the student body important facts about atomic energy, including those they missed on the test.

19. Investigate museums, libraries, colleges, and universities near your school to discover how they could help your class in its study of atomic energy. Look especially for: Exhibits, pamphlets, and books not in your school library, speakers who might address your class or an all-school assembly. (White Plains, N. Y., had speakers from Columbia University and Brookhaven Laboratories; Mount Pleasant, Mich., had a speaker from the University of Michigan.)

20. Build models to illustrate basic information about atomic energy: Structure of atoms, pile reactors, radiation detection devices, protecting shields, remote control mechanisms, shipping containers.

21. Read *Must Destruction Be Our Destiny* (Harrison Brown) or *Modern Man is Obsolete* (Norman Cousins). Select sections to read to the class. Lead a discussion on the significance of the sections you have read.

22. Write an article for the school newspaper, discussing one of the potential peacetime uses of atomic energy.

23. Write an editorial on one issue connected with atomic energy development and submit it to the editor of your school paper, or of your local paper.

24. Prepare news articles for the local paper, reporting on work done by school classes on atomic energy, and high-lighting any exhibits students have on display in the school.

25. Arrange to present panel discussions on some of the topics suggested above for adult groups in the community or on the radio. Groups which might be interested in such programs include: PTA, League of Women Voters, Kiwanis, Rotary, Lions, church study groups, and veterans' organizations.

26. Prepare displays on atomic energy (posters, demonstration devices, cartoon collections, comic strip explanations of basic facts) and arrange to put them on exhibition in a public lobby, as: the public library, the movie theater, the city office building, the county office building, the railroad station, the post office. Or arrange with various merchants to place such displays in store windows.

27. Write and submit to your local radio station (or school radio system) announcements for use between programs; in each announcement present some fact which you think is important for the general public to know about atomic energy.

28. Arrange with the librarian of the public library to display a collection of readable books on atomic energy, and to have an annotated bibliography available for distribution in mimeographed form.

29. Arrange film forums, inviting the general public or presenting them for particular groups such as the PTA, League of Women Voters, etc. Select the films from the list on the inside back cover of this publication. Prepare members of your class to present the film, telling the audience some main points to look for; lead discussion after the film has been shown; perhaps give a brief test (prepared in advance by the class) to be used as a basis for discussion.

30. Arrange an "atomic energy institute" in your school; plan a program of films, speakers, panels, forums, and discussions. Invite civic groups in the community. (In Springfield, Mo., the senior high school sponsored a 3-day program of this kind.)

How the School Reaches Out

by George L. Glasheen, U. S. Atomic Energy Commission, and John Lund, Office of Education

"This is an atomic age, and the only way I can keep in tune with the times is to go back to school."

LOUIS RICH, retired businessman of South Orange, N. J., 85 years old. *Washington Daily News*, October 21, 1948.

STAMFORD, CONN., is one of many communities that has become atomic energy conscious. The adults of Burlington, Iowa, have also begun to learn about the atom. Many citizens of Portland, Oreg., are no longer stumped when their teen age children ask what an isotope is. The whole State of Nebraska is feeling the impact of atomic education: The State university and State organizations work closely with the schools. Supervisors from the State department of education take kits of atomic energy information with them when they visit the schools, and actively promote atomic education.

In many communities and States the schools have abandoned their traditional isolationism from the main stream of life. They have recognized that atomic education is a must—not just for the next generation—but, now, for the adult citizen. They have seen that our citizens seek a way to learn the simple facts of atomic energy and its social and economic implications. They have assumed a responsibility for helping meet this need.

The need for developing a community-wide action program on atomic energy education now challenges every school in America. Time is short. We cannot leave such education to a "next generation"—as we could leave the development of electricity, say, or the perfection of the airplane.

So here is your job. It will make demands upon your vision and your energy. Skills will have to be developed. The urgency of the task demands, however, that effort shall not wait upon the perfection of skills. Rather, these will come with the doing.

Fortunately, working with the community is not a one-way proposition. You generally get back more than you put forth. Even if you are not situated so as to be able to get frequent assistance from nearby colleges, there are probably science-minded persons in your area who will help teachers and students in working out programs. They may address teacher groups or student assemblies; they may obtain films for you, or help in any number of ways. This type of relationship reduces the load on teachers, vitalizes the school program, and strengthens the school-community bonds. Working with the community pays dividends.

Here, then, are a few programs of action—programs already used by school systems—for helping the people of the community to learn about atomic energy:

1. Organize an atomic energy planning council, community-wide, and representative of all groups within your town that have an interest in public education—Parent-Teacher Association; League of Women Voters; veterans' organizations; service clubs; churches and schools and libraries; labor groups; farm groups; and local merchants and industrial leaders.

2. Establish under the council a community committee on atomic information. It should not be difficult to obtain some donated library or office space and some volunteer assistance. Encourage the committee to become a working group—an integral and important factor in the educational life of your town.

3. Stimulate the council and its committees to *act* as a clearinghouse for literature and other materials and services on atomic energy. Develop a collection of helpful books. Obtain and keep in stock reprints and pamphlets for distribution. Arrange for films, filmstrips, and records. Furnish exhibits. Know *where* materials, speakers, and other services may be obtained.

4. Encourage libraries to assist in arranging recommended reading lists and to feature books and informational exhibits on atomic energy.

5. Enlist local radio stations and daily press to give greater coverage to popular presentation of atomic energy subjects.

6. Ask motion picture theaters to show atomic energy films as they become available.

7. Obtain speakers for meetings and discussions on atomic energy. Nearby colleges and universities, as well as local scientific and professional associations, are usually good sources for finding appropriate lecturers.

8. Sponsor quiz contests for adults, and provide prizes for winners, donated, perhaps, by local tradesmen.

STATE EDUCATION OFFICIAL IN NEBRASKA DISCUSSES ATOMIC ENERGY WITH STUDENT AND FACULTY

9. Conduct an "information" survey to determine your town's atomic literacy.

10. Mobilize community-wide participation through the organization of an "Atomic Energy Week."

For greatest service to the community, atomic education has to be a continuing project—not the facade for one big community event only. The schools can play a part—an important part—in building a community understanding of atomic energy. It will take time; it will take effort; but it will help to bring sorely needed understanding to the people of America, the people who make the decisions.

For Further Study

The list of references contains only a few of the available materials on atomic energy. You may find additional books and pamphlets by using the bibliographies included in this list.

Books and Pamphlets

BROWN, HARRISON. *Must Destruction Be Our Destiny?* New York. Simon & Schuster. Inc., 1946. 159 p. $2.

A readable discussion by a scientist, emphasizing what it will mean if efforts to provide for international control of the atomic bomb should fail. Useful in senior high school classes to establish the urgency of control problems.

BURNETT, R. WILL. *Atomic Energy—Double Edged Sword of Science.* Columbus. Ohio, Charles E. Merrill, Inc., 1949. 32 p. 40 cents (10 copies or more, 30 cents each).

Prepared for the Committee on Experimental Units, North Central Association of Colleges and Secondary Schools. Treats scientific facts and social implications of atomic energy. May be used as text material for a unit on atomic energy in either science or social studies classes. Written for high school students.

CAMPBELL, JOHN W. *The Atomic Story.* New York. Henry Holt & Co., Inc., 1947. 297 p. $3.

An account of atomic energy research, with a simple explanation of the basic principles of nuclear physics. Useful for special reports.

EVANS, HUBERT M.; CRARY, RYLAND W.; *and* HASS, C. GLENN. *Operation Atomic Vision.* National Association of Secondary School Principals, 1201 Sixteenth Street NW., Washington 6, D. C. 1948. 60 cents.

Basic text material for science, social studies, or other classes, stressing the community participation approach. Bibliographies and suggestions for activities.

FOX, WILLIAM T. R. *The Struggle for Atomic Control.* New York, Public Affairs Committee, 1947. 32 p. 20 cents. (Public Affairs Pamphlet No. 129.)

Proposed plans for international control, presented in terse, but readable style.

HECHT, SELIG. *Explaining the Atom.* New York, Viking Press, 1947. 205 p. $2.75.

The story of atomic research and an explanation of basic facts of atomic energy. Effectively illustrated with diagrams.

HIGINBOTHAM, W. A. *and* LINDLEY, ERNEST K. *Atomic Challenge.* New York, Foreign Policy Association, 1947. 63 p. 35 cents. (FPA Headline Series, No. 63.)

Brief, nontechnical presentation of information about atomic energy, proposals for international control, and efforts for international agreement (to late 1946).

JOHNSEN, JULIA E., *comp. The Atomic Bomb.* New York, H. W. Wilson Co., 1946. 335 p. $1.25. (The Reference Shelf, Vol. 19, No. 2.)

Articles from magazines, newspapers, conferences, etc., on history of the bomb, implications of atomic energy, control problems and peacetime benefits. Authors include Meitner, Cousins, Acheson, Einstein, Baruch, and others.

LANG, DANIEL. *Early Tales of the Atomic Age.* New York, Doubleday & Co., Inc., 1948. 223 p. $2.75.

Human interest stories connected with the development of the bomb, reprinted from *The New Yorker* magazine.

MASTERS, DEXTER, *and* WAY, KATHERINE, *eds. One World or None.* New York, McGraw-Hill Book Co., Inc., 1946. $1.

A series of readable articles discussing the implications of atomic energy developments, by persons who have participated in atomic research and applications.

NEWMAN, JAMES R. *and* MILLER, BYRON S. *The Control of Atomic Energy: A Study of its Social, Economic, and Political Implications.* New York, Whittlesey House, 1948. 434 p. $5.

An analysis of the Atomic Energy Act of 1946. Implications for industrial uses, patents, and inventions, control of information, military applications, and international agreements are discussed. Bibliography. Useful as source of information for special reports.

POTTER, R. D. *Young People's Book of Atomic Energy.* New York, Robert M. McBride & Co., 1946. $2.50.

A simple discussion of the basic facts of atomic energy.

STOKLEY, JAMES. *Electrons in Action.* New York, McGraw-Hill Book Co., Inc., 1946. $3.

Presents basic facts involved in atomic energy use, and its applications in various areas.

UNITED STATES ATOMIC ENERGY COMMISSION. *Fourth Semiannual Report.* Washington, U. S. Government Printing Office, 1948. 192 p. 35 cents.

Basic information on uses being made of radioisotopes in medical, agricultural, and other research.

Further Leads for Teachers

CRARY, R. W.; EVANS, H. M.; GOTLIEB, A.; *and* LIGHT, I. *The Challenge of Atomic Energy.* New York, Bureau of Publications, Teachers College, Columbia University, 1948. 92 p. 90 cents.

A resource unit and guide for teachers and group leaders. Adaptable for science or social studies classes at the senior high school level. Learning experiences and bibliography.

LIGHT, ISRAEL. *Annotated Bibliography on Atomic Energy.* New York, Bureau of Publications, Teachers College, Columbia University, 1947. 29 p. 35 cents.

About 257 references, organized by type of publication, with cross-references by topics. Useful for teachers and students in locating materials on special topics.

Audio-Visual Materials

Sound Films

The films now available tend, for the most part, to approach problems of atomic energy from the "fear" angle. In using such materials teachers may want to point out the other, more hopeful side of atomic energy developments. Plans are being initiated for the development of a series of films which will present more balanced coverage of atomic energy problems. New films may be available by fall, 1949, and together with those now available should present a better rounded group of materials.

Atomic Energy. 11 min. 16 mm. sd. 1947. Encyclopaedia Britannica Films, Inc. $50 with 10 percent discount to schools.

An introduction to principles of atomic energy. No reference to political problems involved in control. Useful for either science or social studies classes where a comprehensive unit is being studied.

Atomic Power. 19 min. 16 mm. sd. 1946. March of Time. $55.

Traces research in atomic energy from Einstein's work in 1905 through the development of the bomb and its use in World War II.

One World or None. 9 min. 16 mm. sd. 1946. Film Publishers. Rental $2.

Through animated drawings and live-action shots, film presents five concepts: There is no secret so far as basic principles are concerned; modern bombs would do far more damage than was done

at Hiroshima; any nation today is vulnerable to atomic weapons; there is no effective defense; atomic weapons reach a new high in destructiveness. Filmstrip also available.

Operation Crossroads. 27 min. 16 mm. sd. U. S. Navy. Free loan, on application to public information office in all naval districts, or to Motion Picture Section, Division of Public Information, Navy Department, Washington, D. C.

Shots of the Bikini test (1946).

A Tale of Two Cities. 20 min. 16 mm. sd. U. S. Signal Corps. Free loan, on application to the Signal Officer in local army area.

Shots of the bombings of Hiroshima and Nagasaki.

Church in the Atomic Age. 20 min. 16-mm. sd. Distributed by Film Program Services, 1173 Avenue of the Americas, New York, N. Y.

Reviews bombing of Hiroshima and Nagasaki; raises question of moral justification of its use; propounds question whether war today can be justified.

Filmstrips

Atomic Energy and the United Nations: Problems of International Control. 88 frames. United Nations, Department of Public Information, Lake Success, N. Y. 15 min. Free.

Proposals for international control currently before the United Nations. Accompanying commentary.

How to Live With the Atom. 63 frames. Film Publishers, Inc., 25 Broad Street, New York 4, N. Y. 15 min. With speech notes, $3. 16″ transc., narration and music, $5.

Points out through cartoons that basic principles are not secret, there is no defense against the bomb, nations must develop controls to "live with the atom."

Records and Transcriptions

Deadline for Living. 14 min. transcription. National Education Association, 1201 Sixteenth Street NW., Washington, D. C. $10.

What warfare can mean, and what the average citizen can do to avert it before we reach the "deadline."

Peacetime Uses of Atomic Energy. 20 min. Two 12″ (78 r. p. m.) records. Lewellen's Productions, 8 South Michigan Avenue, Chicago 5, Ill. $12.50.

Produced for classroom use, with technical advice by Dr. Glenn Seaborg and narration by Neil Hamilton. Set includes teacher's guide and 50 copies student guide. A comparison set is entitled *The Atomic Bomb.*

ATOMIC ENERGY PROGRAM

Continued from page 5

these materials for making weapons, there is a parallel chain of research operations to discover new fundamental knowledge and to apply it for many purposes. This side of the atomic energy program is financed by funds appropriated to the Commission, but carried on again in the main by privately operated agencies—universities, colleges, research institutes, industrial laboratories. There are 5 great centers of the program. These are Brookhaven National Laboratory, Long Island, operated by 9 of the leading universities of the northeastern United States; Oak Ridge National Laboratory, operated by Carbon & Carbide Chemicals Corp., with membership of 19 southern and southwestern universities in the affiliated Oak Ridge Institute for Nuclear Studies; the Argonne National Laboratory, near Chicago, operated by the University of Chicago with 30 midwestern universities represented on its Board of Governors; the Radiation Laboratory at the University of California, Berkeley; and the Ames Laboratory at Iowa State College, Ames, Iowa. The great facilities at these places—the largest cyclotrons and other particle accelerators in the world, the only research reactors in the United States, and associated special laboratory facilities—are available to all universities, colleges, and industrial concerns meeting certain qualifications.

Besides these national laboratories, the Commission finances facilities and operations at nearly 100 other points under direct contract to carry on specified fundamental and applied research.

Additionally, the Commission is trying to increase the number of people trained in the nuclear and associated sciences through a system of fellowships running at the rate of 3 million dollars a year, through the operations of medical and biological training centers at four points, and through isotope users' schools at Oak Ridge.

Of great importance, the Commission is the sole source of the radioactive isotopes—made in the nuclear reactor pile at Oak Ridge—which have worked a large advance in dozens of lines of research. These are claimed to be the most important new research tools since the invention of the microscope. They are in use by more than 1,000 individual universities and industrial and agricultural laboratories. The number of shipments is doubling each 6 months.

New research work is projected or under way for the most costly and most useful—if it succeeds—project of all. This is the development of reactors which will turn the heat and energy from nuclear reaction into electrical energy for powering our factories, lighting our homes, and driving ships and airplanes of the future. Reactors for experiments in the production of central station electricity are in the late planning stages at Schenectady, N. Y., where the General Electric Co. operates the Knolls Atomic Power Laboratory. The middle stages of design on reactors for propelling naval vessels are being undertaken by the Westinghouse Electric Corp.

In brief, the atomic energy enterprise of the people of the United States, girdling half the globe, reaching into nearly every State and thousands of industrial plants and academic and industrial laboratories, is proceeding with a program to develop atomic energy. The purposes are to protect the common defense and security and to apply atomic energy for making usable power to lift the burden of drudgery from men's days, for research to advance the arts of healing and the arts of production of food and of industrial goods, and for the addition of new knowledge to the store available to man.

SCHOOL TAKES HOLD

Continued from page 9

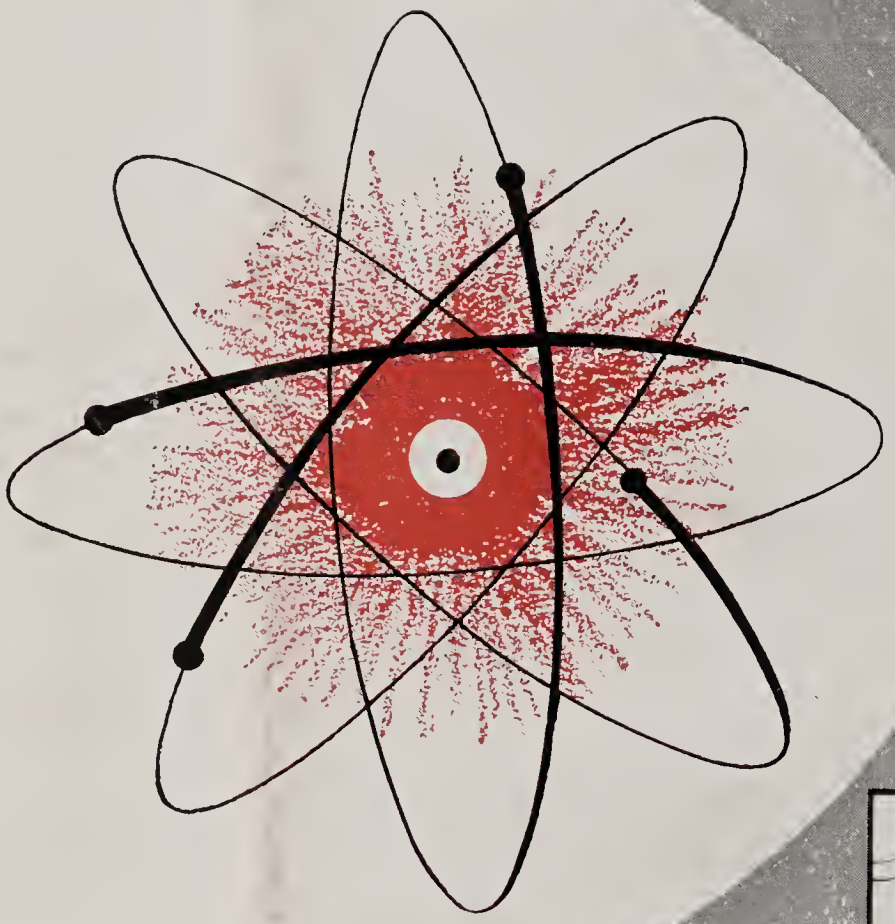
example, in cooperation with the State Department of Education, is sponsoring such a workshop next summer. A number of such workshops will be going on in New England at the same time. Specific information about those can be obtained from the New England Atomic Energy Workshop Committee, Harvard University Graduate School of Education. Teachers who participate in such workshops can lead in planning for the school's program of atomic energy education. (See Feb. 1, 1949, issue of HIGHER EDUCATION, published by the Office of Education, and later issues of SCHOOL LIFE, for further announcements.)

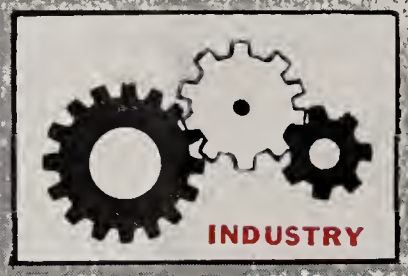
A faculty reading shelf is a good idea. If a faculty committee can spend perhaps $30 for books and magazines, materials can be circulated among the staff, with committee recommendations for reading.

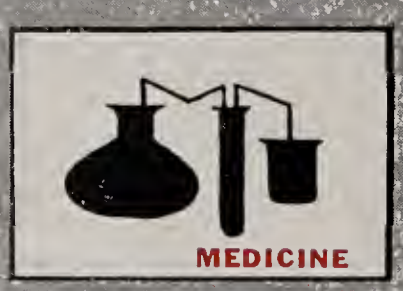
Another type of project was followed by the faculty of Highland Park, (Mich.) High School, which prepared a manual on atmoic energy education, including lists of learning materials and suitable activities.

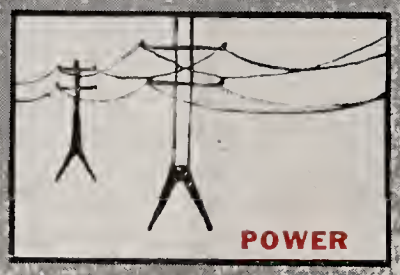
Once a beginning has been made, student interest in most schools will cause atomic education to snowball.

Atomic Energy is Here to Stay









How we use it is the Business of every Citizen

Volume 31 Number 7
APRIL 1949

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for April 1949

Volume 31 Number 7

Caver photograph: The four high-school students, whose presentations in secand annual Voice af Democracy contest were selected as natianal winners from a total of 250,000 presentatians entered, are shown at the Capital. See p. 2.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

"That is one of the greatest words in the history of the English language, and it should stand for just exactly what we mean . . ."_____ p. 1

★ ★ ★

". . . democracy is on trial for its life." p. 2

★ ★ ★

"The occupational field covers too much territory for anyone to get a comprehensive view in a short time."_____ p. 5

★ ★ ★

"Health . . . cannot be attained through the efforts of medicine and public health alone."_____ p. 6

★ ★ ★

"Most children of school age in hospitals of the United States are having no organized education . . ."_____ p. 13

★ ★ ★

"A just balance between privileges and obligations form the rock-like core that can and will keep our America truly great in this uncertain world."_____ p. 16

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To order SCHOOL LIFE send your check, money order, or a dollar bill (no stamps) with your subscription request to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. SCHOOL LIFE service comes to you at a school-year subscriptian price of $1.00. Yearly fee to countries in which the frank of the U. S. Gavernment is not recognized is $1.50. A discount of 25 percent is allowed an arders for 100 capies or more sent to one address within the United States. Printing of SCHOOL LIFE has been approved by the Director of the Bureau of the Budget.

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THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

President Truman receiving a Doctor of Humanities degree at Rollins College, and accepting congratulations from Dr. Hamilton Holt, President of the College.

★ ★ ★

SCHOOL LIFE is pleased to present this complete text of an address delivered by President Truman at Rollins College, Winter Park, Fla., on March 8, 1949, when he received a degree of Doctor of Humanities. The address follows:

☆ ☆ ☆

"Education is our first line of defense"

"Governor Warren, President Holt, distinguished educators, and all the friends of this great school:

This is for me a very happy and a very solemn occasion. The Governor's address was a masterpiece. It covers the situation with which we are faced. It brings to realization a hope that I have long entertained. I am deeply sensitive of the honor which this college has bestowed upon me.

"Rollins College has served the State of Florida and the Nation faithfully and well through more than threescore years. I shall always treasure the memory of this day and the parchment which admits me into the noble society of Rollins alumni. The men and women which this institution has given the world now for sixty-odd years have upheld the ideals of democracy wherever they have found their life work.

"It gives me special pleasure by my presence here today to bear witness to the debt which we owe to the man who has guided the destinies of Rollins College for almost a quarter of a century—Doctor Holt. Since he assumed the presidency of this institution he has made it a focal point in our effort to educate American youth in the principles of freedom under true democracy.

That Word "Democracy"

"You know, there is not a word in the English language that has been so severely abused during the last 10 years as that word DEMOCRACY. Some people make a travesty of that word. That is one of the greatest words in the history of the English language, and it should stand for just exactly what we mean when we say democracy, and not for a counterfeit.

"Dr. Holt has brought to his work distinguished leadership with a background of accomplishment in many fields. Although he will soon retire from active academic work, he will continue his labors for peace and international good will.

"Never before has this country needed as it does today the leadership of thoroughly trained men and women. We must have leaders inspired from their earliest years with the ideals of true democracy.

Hope of the World

"Education is our first line of defense. In the conflict of principle and policy which divides the world today, America's hope, our hope, the hope of the world, is in education. Through education alone can we combat the tenets of communism. The unfettered soul of free man offers a spiritual defense unconquered and unconquerable.

"We may not know what is behind the Iron Curtain, but we do know that the intelligence of the people in the embattled democracies of Europe, who live in front of the Iron Curtain, is the world's best hope for peace today.

"Education is the most important task before us. The Congress should enact legislation authorizing Federal grants to the States to assist in meeting the operating expenses of elementary and secondary schools. There is general agreement that such aid can be given without interference with State responsibility for the scope and content of the teaching.

"If our country is to retain its freedom in a world of conflicting political philosophies, we must take steps to assure that every American youth shall receive the highest level of training by which he can profit. A soundly conceived Federal scholarship program in our colleges and universities is a necessary step in attaining this goal.

"Education has been defined as a bulwark against the acids of fascism and communism. Neither of these totalitarian forms of government can survive examination by educated men and women — men and women free to search for the truth and imbued with the principles of liberty set forth in the preamble of the Constitution of the United States, the greatest document of government, in my opinion, that has ever been written by the hand of man. That Constitution gives us the ability to live together in peace. It gives us the ability to see that justice comes to every man, be he big or be he small, be he rich or be he poor.

Not Afraid

"If this great institution will continue to turn out leaders, I am not at all afraid of what the next generation in the world will bring forth.

"We are working for peace. We want peace. We pray for peace all the time in the world. And to attain that peace, we must all learn how to live together peaceably, and do to our neighbors as we would have our neighbors do to us. Then we will have a happy world, and that's what we want."

The Winners! At the White House. Left to right: George Morgan, Jr., Hutchinson, Kans.; Kerron Johnson, St. Paul, Minn.; President Truman; Charles Kuralt, Charlotte, N. C.; and Richard Caves, Everett, Ohio.

☆ ☆ ☆

Winning With the American Way

Quarter Million High School Students Speak for Democracy

Many of the Nation's highest executives in government, industry, radio, and journalism, who attained their positions the democratic way, took time out in Washington, D. C., recently to acclaim four high-school students from Ohio, Minnesota, North Carolina, and Kansas—the national winners in the second annual Voice of Democracy contest.

On that occasion the four winning presentations on "I Speak for Democracy," selected by outstanding judges from those prepared and broadcast by 250,000 high-school students across the Nation, brought $500 college scholarship awards to Richard Caves, Bath High School, Everett, Ohio; Kerron Johnson, Wilson High School, St. Paul, Minn.; Charles Kuralt, Central High School, Charlotte, N. C.; and George Morgan, Jr., Hutchinson High School, Hutchinson, Kans.

Attorney General of the United States, Tom C. Clark, made the awards in behalf of the national judges and the contest-sponsoring organizations, the National Association of Broadcasters, the Radio Manufacturers Association, and the United States Junior Chamber of Commerce. Officially representing the Office of Education at the presentation luncheon was Rall I. Grigsby, Acting Commissioner of Education. *SCHOOL LIFE* offers to its readers the four winning presentations.

Richard Caves, Bath High School, Everett, Ohio

THE DEMOCRACY of America has trod a difficult path. Through strife it came into its own and several times since 1775 blood has been spilled in its name. Democracy has stood its trial by fire but now it faces a new test—its trial by jury. Yes; democracy is on trial for its life. The courtroom is crowded, for interest in the case is high. In the box the jury listens intently. Chinese, French, Italians, Brazilians, Greeks, Indonesians, Americans, who will decide upon the fate of democracy.

The prosecutor is summing up his case now. The jurors hang upon his every word. He says that democracy is superficially fine and idealistically perfect, but a certain human factor condemns it, for survival of the fittest, rather

than cooperation, is still man's deepest instinct. To build the modern, mechanized, mass-production superstate, there must be cooperation, and force must maintain it at all times.

Cooperation, not America's strikes and bickering. He goes on to say that the common people are incapable of governing. Rather there must be one ruler who can see the complexities of a modern civilization. So, he says, democracy is outmoded as a form of government. He concludes—how can man help rule a million others when he cannot rule his own home?

Now, the spotlight switches to you—for you are the attorney for the defense. You are pleading for democracy—on trial for its life. You begin your case by saying that civilization is still a little more than cold steel and columns of figures. You call that little more "humanity." That is, there is something about man which entitles him to happiness and glory more personal than that of nations. Democracy is thus founded on man, the individual, rather than man, the machine.

Man, the individual, who lives where he wants to, does what he wants to, reads what he wants to. Man, the individual, who argues in the corner barber shop against his own government and wakes up in his own bed the next morning. Man, the individual, who through his chosen representatives, makes the laws he lives by. Perhaps man is not the perfect ruler of his nation's destiny, since man himself is not perfect

It is folly to expect it. He is sometimes lazy in governing, sometimes lax, but his chosen representatives can, through the years, come up with the right answers quite regularly. For in a democracy one man's defects are cancelled by another man's virtues, while totalitarianism magnifies one man's faults a million times over.

You've given the jury the facts on democracy, but there is still something they don't know about it—something you yourself cannot classify. Perhaps it's something in men's eyes—democracy buoys up a man's soul, democracy heals over old scars, covers up old wounds. It has moulded the dregs of bitter Europe into a new pattern of righteousness and faith in a flaming ideal.

Somehow, your case for the defense still lacks. You are facing an opponent who is a realist, who puts different values on human life and human enterprise. So you put things real and tangible upon exhibit—great auto factories in Detroit, steel mills in Pittsburgh, rubber plants in Akron, planes in the sky, ships on the sea, coal mines, skyscrapers, the greatest in the world—monuments to democracy.

And though it is naught to take pride in, democracy has won two great wars. There is the realism and the idealism—the case now goes to the jury. If the jury listened carefully, you know the battle is won for democracy.

Kerron Johnson, Wilson High School, St. Paul, Minn.

I Speak for Democracy, and so I speak for all men everywhere. Not famous or lionized, but the creators of wealth, the masses that are the power and the essential glory of the world. The people are the wealth of a country, the unacknowledged masters of kingdoms, empires, and governments. They are those to whom all leaders are accountable, no matter the divine right of kings or the mailed fists of dictators.

If oppressed, they will rise. No army shall hold them, for they are unconquerable. Yet the people do not cry for war, for they do not glory in it. They rather cry for peace—to live and love as is their birthright. Some may have money, some power, and some great minds. But they, as well as an unknown laborer, will fall even as flowers in a field—for the grim reaper does for all men the same.

It is only under democracy, however, that men can find their hopes fulfilled whether it be that he would speak and criticize without fear, or own a piece of land. Only in a democracy can men go to a church or stay away with their own censor that of their own beliefs. Only in a democracy do the lights of justice, freedom of religion, freedom of speech, and freedom from fear, stand side by side. In her lamp, the Statue of Liberty holds all these and more. The greatest possession a man can have is his liberty. Here he may have liberty if he will but abide by the Golden Rule—"Do unto others as you would have them do unto you."

What is democracy, you ask? There is no cut and dried answer to that question. Democracy is many things. Democracy, if properly developed, could grow to mean all things to all men. Democracy allied with faith in God and man could be the great living symbol needed to encourage every man to freedom.

It means that you have a right to trial by jury, or that you can travel wherever you will over this land, and give no one any reason, nor ask any permit. It means that you are free to work or pray or play without being so ordered by the state or by any individual. You can take a ride in the country or see a ball game. You can be an engineer or a ditch digger.

Your fate is in your hands. With ability, talent, and opportunity, there is no limit to your rise in a democratic country. But let it not be supposed that all this is to be had merely for the asking. There is a price for everything, but the price of freedom is exceedingly low for such a great possession—it is responsibility.

Your responsibility is that of voting, of knowing about public affairs, in seeing that justice is done, as much as is in your power to do so. Your rights lie in taking jury duty, in doing your best to abolish racial and religious prejudice. It is the duty and privilege of every man to serve his country by upholding her laws, her creed, and her ideals.

In a true democracy, it should be a well-taken privilege to pay taxes, knowing that they are not diverted into the pockets of a favored few, but are used for the benefit of all. It is one of the best points of democracy that every man can serve his country in some civil or political office. Thus will he obtain a greater understanding and insight into the affairs of his country and his fellow man. He will learn as he could by no other course the ways of democracy. These are some of the ways in which democracy can be served.

The benefits of democracy are many and varied. Its gifts will contribute to the building of a better world, in which freedom, justice, mercy, and tolerance will be the tenets of civilization. Now, again, in these trying days, the good way of life is being threatened as it has been so often in the past.

(Continued on page 12)

Recordings of the 1949 winning presentations in the "Voice of Democracy" contest are available on loan from the Radio Script and Transcription Exchange, Office of Education, for a 2-week period without expense except for return postage. They will lend valuable stimulation for student participation in the third annual contest now being planned for 1950.

Two panels from the exhibit on display in Germany. Below, another portion of the Japanese exhibit.

Exhibits on American Education for Germany, Korea, and Japan

THE STORY of American education will be told to the peoples of Germany, Japan, and Korea through pictorial exhibits planned and prepared by the Civil Affairs Division, Department of the Army, with the cooperation and advice of educational leaders, including representatives of the Office of Education. Already being shown, the German exhibit focuses upon types of schools in the United States, and educational programs at the preschool, kindergarten, elementary, secondary, and college levels, as well as upon teacher education for democracy. Recently shipped, the Japanese display also highlights the same important aspects of the American educational program emphasized in the German exhibit. A similar display is ready for shipment to Korea.

Supervising construction of these exhibits which interpret American education to peoples of other lands, is Earl G. Millison, Acting Chief, Graphics and Special Services Branch, Division of Central Services, Department of State. Exhibit panels are 4 feet by 8 feet, although a permanent exhibit in smaller size has been made of the

(*Continued on page 11*)

Many Japanese will learn for the first time about American education through the Department of the Army exhibit shown in part above.

Counseling About Occupations

By Walter J. Greenleaf, Specialist, Educational Occupational Information

"Braider-machine operator; what's that?" The counselor asked the question of a teen-age girl who was leaving school to enter employment in the local rubber company's plant. Briefly, she explained that she braided the fabric that covers a good grade of garden hose.

For his own information, the counselor reached for the Dictionary of Occupational Titles and read "Braiding-machine operator. 6–19.986 (code number). Braids threads by machine into a tubular cord or a narrow band to be used for such wares as shoe laces; passes threads through guides and into opening of braiding-machine; starts machine and watches braiding process, stopping machine and rethreading it when thread breaks or supply is exhausted. Usually tends several braiding machines." By the code number, the counselor knew that this was a semiskilled occupation.

Later when the girl was on the job, the counselor visited her at the rubber plant to see just what a braiding-machine operator does. She was tending three huge 10-foot high machines in a large noisy factory where heavy machines were turning out long tubes of garden hose. Each machine held about a dozen nylon bobbins. Like braiding a Maypole, threads from these bobbins automatically wove themselves in and out onto a rubber hose, which seemed to ooze snakelike from the top of the machine. The job was to tie any broken threads and keep the bobbins filled. In case a thread broke or a bobbin was used up, the machine stopped. The efficiency of the operator depended upon keeping the machine constantly in operation. The counselor tried to talk with the girl as she worked, but he could not hear above the noise of the machine. On his way out, the counselor met the personnel manager. Here he learned that the turn-over of braider-machine operators had been large in the past, but that workers were now selected partly on the basis of psychological tests. The psychologist employed by the firm had found that persons with a high IQ soon wearied of the job because it did not challenge their abilities. On the other hand, persons with an IQ of 80–90 were more satisfied with the work, did not mind the routine, and stayed with the job for a longer period, even if the outlook was not too bright.

The counselor returned to his duties. Mentally he figured, "If the 1949 edition of the Dictionary of Occupational Titles provides some information on 22,028 occupations that are known by more than 40,000 job titles in the United States, what chance has a guidance officer of more than flicking the surface of occupational information?"

Occupational Information Through Tests

Both parents and students ask, "Where can I find a test that will show what occupation I am best fitted for?" There is no such test or battery of tests that will reveal the one occupation one is best fitted for.

The braider operator mentioned above was a girl with an 80 IQ. She could do many jobs in a different factory besides operating a machine. However, certain tests were given her to predict whether or not she could operate *one* machine—one job. For that particular job, the tests were fairly reliable. Tests can be devised for any single job. For single jobs we could produce 22,000 tests, each of which would be good predictors. But this would not be feasible. Therefore, occupational tests are usually based on large fields of work that include thousands of occupations. Even with such tests, a skillful person might easily show aptitudes and abilities in several different areas, as, for example, professional, clerical, and skilled work.

No guidance service is able to point out the ONE vocation that a person is best adapted for because almost any individual would be equally successful in a number of vocations. As a supplement to other evidence, however, tests of aptitudes, interests, trade knowledge, achievement, and intelligence save the time of both applicant and counselor. They are valuable in selecting a particular man for a particular job.

Occupational Information in General

Teachers and large numbers of counselors have had very little instruction about the world of work. They often are at a loss to know where to find information about unfamiliar occupations. The occupational field covers too much territory for anyone to get a comprehensive view in a short time. Not long ago little information about occupations could be found in print. In the past decade, however, floods of occupational literature have swept the country, until it is almost impossible to appraise what is written or to keep up with opportunities.

By far the most important means of a counselor's finding out about occupations is through visits to industry. This method, however, is too slow a process. A counselor may observe only a very few local occupations that his students plan to enter. To cover many jobs he must resort to literature and to visual aids.

The 1949 *Dictionary of Occupational Titles* should be on every counselor's desk. This important aid is a quick reference to thousands of jobs. It is also a means of classifying and identifying any job in one of the seven major occupational groups.

Government monographs are published by the Government Printing Office, Washington, D. C., concerning 285 occupations. (For a free list, write to the Office of Education and ask for Misc. 3296, *Government Monographs on Occupations.*) These pamphlets furnish authentic information at very low cost.

A number of publishers print from 10 to 100 occupational pamphlets in series. They will furnish a list of their occupational monographs upon request:

Bellman Publishing Company, 83 Newbury Street, Boston 16, Mass.

Bios, A Journal of Biology, Mount Vernon, Iowa (Bios Vocational Series).

Charm, The Magazine for the Business Girl, 122 East 42d St., New York 17, N. Y.

Commonwealth Book Company, Inc., 80 East Jackson Blvd., Chicago 4, Ill.

Glamour, The Conde Nast Publications, Inc., 420 Lexington Ave., New York 17, N. Y.

Ladies Home Journal, Philadelphia, Pa.

Morgan-Dillon & Co., 5154 North Clark St., Chicago 40, Ill.

Occupational Index, Inc., New York University, New York 3, N. Y.

The Quarrie Corporation, 35 East Wacker Drive, Chicago 1, Ill.

Rochester Institute of Technology, Rochester 8, N. Y.

Science Research Associates, 228 South Wabash Ave., Chicago 4, Ill.

Visual aids—motion pictures, film strips, and other pictures—help the counselor not only to understand occupations better himself, but to put the information across to students. Occupational films for use in

(*Continued on page 14*)

Trends in Health Education in Secondary Schools

By H. F. Kilander, Assistant Specialist for Health

"HEALTH is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." This is the definition for health of the World Health Organization of the United Nations and the one commonly accepted by health educators of our country when considering the school program.

A school health program is usually organized into three parts—the school health service, healthful school living, and health instruction. This article deals primarily with health instruction, or health education, which is here thought of as "teaching us how to live healthfully." This means opportunities for learning to make wise choices; to form health habits and health attitudes based on scientific knowledge of health and disease; and to assume increasing responsibility for one's personal health.

Various trends in secondary school health education may be classified under five main headings.

Guiding People To Do for Themselves What Is Desirable for their Own Health

Health, as defined above, cannot be attained through the efforts of medicine and public health alone. It is recognized that medicine and public health do things *for* people, whereas the task of education is to guide people to do for themselves that which is good for their own health and that of others in this and future generations.[1]

Historically, health education has of necessity been centered upon those areas of health needs which could be approached collectively, that is, through community action. The measures taken to meet these needs have dealt mainly with the control of communicable diseases—diseases caused by germs. Included in such public health programs have been water purification, sewage disposal, health inspection of food handlers, quarantine, vaccination, extermination of vermin, and pasteurization of milk. These measures alone have contributed greatly to the improvement of health as is evidenced by the great reduction in the incidence of many communicable diseases, such as typhoid fever, malaria, diphtheria, and dysentery.

The measures of the community-action type have affected the well-being of all the people even though many have had but a slight awareness of what was being accomplished. The only health education involved has been that needed to obtain the support of a sufficient number of individuals in the community or in the State to make possible the adoption of the necessary health legislation and the appropriation of the needed funds. For the majority of people, their part in accomplishing these health measures has been a passive one. At the most, the individual has been called upon to conform and not to understand or initiate.

However, the greatest menaces to longevity and happiness now are for the most part noncommunicable diseases which cannot be controlled without individual understanding of the problems involved and without personal assumption of responsibility for preventing and correcting them. Today's main causes of death and illness are arthritis, cancer, hardening of the arteries, tuberculosis, nephritis, and disorders of the human brain. These, along with accidents, are the seven chief disablers in the United States. Tuberculosis is the only one which is a communicable disease. Improving health, consequently, is more a problem of education and less a matter of legislation and sanitary engineering. The great needs are to inform and to motivate people so that they will do for themselves those things which are desirable for their own health and the health of others.

Enlarging the Scope of Health Instruction

The changed needs as already outlined are reflected in the secondary schools through health instruction curricula, courses of study and textbooks, and through the recommendations of national groups.

Whereas formerly the practice was to give somewhat equal emphasis to sanitation and personal health problems, the present trend is to expand several of the subtopics usually included under personal health, into sizable teaching units.

Although the terminology and arrangement of content may differ considerably among schools, the tendency is to include the following ten major areas of health instruction on the secondary school level: Personal living, community living, sanitation, nutrition, physical activity, safety education, first aid, emotional and social health, education for family living, and occupational or industrial health.

Among the subtopics which are often included in one or more of the basic areas, depending upon grade levels, are: Cleanliness, grooming; care of the eyes, ears, and teeth; fatigue, rest, sleep, and exercise; alcohol and tobacco; emotions; recreation, hobbies; communicable and noncommunicable diseases; lighting, heating, and ventilation; periodic health examination, selecting a doctor; health advertising; home nursing; human reproduction, marriage; world health problems; and anatomy and physiology as related to these topics.

Health educators are of the opinion that the pupil, as he matures, needs a thorough understanding of the facts underlying desirable health behavior. Consequently, in the secondary school, especially the senior high school, there is considerable emphasis upon scientific background in the health teaching.

Recommendations made by the Third National Conference on Health in Colleges for health instruction on the college level follow the trends as outlined for the high school. A basic required course in "Personal and Community Health" is strongly recommended. It "should include the following units of health instruction: Nutrition, motor activity, education for family living, hygiene, mental hygiene, sense organs, effects of external factors on the body, control of communicable diseases, other major health hazards, community organization in the field of health, evaluation of community health services, and significance of the periodic health examination." [2]

The fact that the majority of high school students will not go to college and therefore will not receive the additional training indicated above, is added reason for making

[1] *Health Education in the United States.* A memorandum for transmittal to the World Organization of the Teaching Profession by the American Association for Health, Physical Education and Recreation. Arthur H Steinhaus, Editor. 1948.

[2] *A Health Program for Colleges.* A report of the Third National Conference on Health in Colleges. New York, The National Tuberculosis Association, 1948. p. 44.

sure that the health instruction in the high school is of an effective character.

Special Health Courses in Secondary Schools

Two methods of providing health instruction in the secondary schools in this country are in current use, namely, through integration and through separate courses.

The integration of health education.—The value of integration in health education varies somewhat, depending upon the objectives sought. Desirable habits, behavior, and conduct in any field can be strengthened by continuous application and, consequently, should be encouraged in all situations. Health attitudes are strengthened by being encouraged from a variety of viewpoints and approaches.

Health facts and skills, however, need more than a casual or incidental consideration. The amount of factual information which each individual needs today is too extensive to warrant its distribution among a number of other subjects. Where a considerable amount of factual matter, such as comprises the science of nutrition, needs to be learned, or where a number of skills, such as in first aid, needs to be acquired, depending upon integration alone may result in neglect and in a dilution to the point which fails to improve the understanding and skills of students.

All phases of the school program can potentially contribute in some way to learning experiences in health. The natural sciences, physical education, home economics, and social sciences afford the greatest opportunity for the inclusion of health instruction. Service activities, such as the school lunch and medical examination, and recreation can also contribute to health education.

Unfortunately, few schools have had a well-integrated program in health education. Furthermore, where one does occur, the integrated health program usually is not uniformly available to all students. This latter point is considered a serious one by many educational leaders who believe that the schools have a responsibility to all students in health education. Consequently, educators are turning to the more formal teaching of health through specific courses.[3]

The special health course.—The current trend is to consolidate the hours commonly given to health and safety instruction, where it has been offered during health and physical education time, into one or two semesters in the junior and the senior high schools. The recommendations of several national organizations and conferences have been that there be at least one full semester (preferably two, including safety) of daily instruction on both the junior and senior high school levels. A less satisfactory plan is that of two or three hours of instruction weekly for one full year on each level.

The teaching of health through special courses has certain advantages. It enables all students to take the course; it gives the subject greater importance and so gains more respect from students as well as teachers; it permits normal-sized classes; and it facilitates the granting of credit.

Health educators maintain that the need for integration still continues even though there is a special course. They stress that the contributions of other subjects and activities to health education should be in addition to, rather than in place of, the specific health course.

Credit.—Where health instruction has been a part of some other course, credit has usually been included in the total grade for that course. Where the instruction is in a special course, separate credit is usually given. A number of high schools are including this credit in the conventional 16 units required for graduation.

Better Teacher Preparation for Health Instruction

Since the war there has been increased recognition of the importance of preparing teachers in health education. Consideration is being given to: (1) The specialist in health education; (2) the multiple-subject teacher who includes health education as one field along with others, such as physical education, science, and home economics; and (3) teachers who are not preparing to teach health but who need certain basic health education.

The recommendations of the National Conference on Undergraduate Professional Preparation in Physical Education, Health Education and Recreation,[4] held in May 1948, should serve as an excellent guide to teacher education institutions.

The Third National Conference on Health in Colleges, held in May 1947, considered the entire health program including health services, healthful living, and health instruction. Thought was also given to the preparation of teachers for health instruction in schools and colleges.

It is estimated that in 1948 nearly 300 workshops and conferences were held which dealt with school health programs. This number indicates widespread efforts to meet the need for in-service education in the field of health.

During the past three summers representatives from 16 States participated in three regional workshops directed and sponsored by the Office of Education. The combined report of the first two is given in a publication entitled "Teacher Education for the Improvement of School Health Programs." [5]

Undergraduate specialization in health education.—Up to 1948, there probably were not more than a dozen teachers colleges which had already graduated students with a full major in health education. Since the war, additional institutions have organized such programs, and others are seriously considering doing so.

The tendency has been to offer health specialization in departments of health and physical education, either as a combined major with physical education, or as a separate major. Leaders in physical education are recognizing the point of view that the teaching of health requires certain special preparation which is in addition to that needed for teaching physical activities.

The few colleges which have set up programs in health education independent of physical education are drawing their health education majors from several sources in addition to physical education, such as science with emphasis on biology, home economics, nursing, and social science.

Few teacher-education institutions require health education courses within the biology major although a number make it available through electives. This situation is in contrast to that in the secondary schools where biology courses and biology textbooks frequently give considerable emphasis to health.

Although many home economics teachers are now teaching general health courses in high schools, in addition to the health areas

(*Continued on page 14*)

[3] Kilander, H. F. The Concentrated Health Course. *The Journal of Health and Physical Education*, January 1947. p. 2.

[4] *The National Conference on Undergraduate Professional Preparation in Physical Education, Health Education and Recreation.* Chicago, The Athletic Institute, 1948. 40 p.

[5] Stafford, Frank S., and Kilander, H. F. *Teacher Education for the Improvement of School Health Programs.* Washington, Superintendent of Documents, U. S. Government Printing Office, 1948. 38 p. 15 cents. (Office of Education Bulletin 1948, No. 16.)

How to obtain U. S. Government

THE following chart was originally prepared for and published in *Educational*

U. S. Government Agency	Kind of Films	How to Borrow or Rent Films[1]	How to Purchase Films	For Further Information Write to
■ Department of Agriculture (including the U. S. Forest Service and the Soil Conservation Service)	178 information and training films on agriculture, conservation, forestry, gardening, home economics, and the natural sciences.	Borrow from State Extension Services, Regional Offices of the U. S. Forest Service and Soil Conservation Service, and other official USDA film depositories. Rent from some educational film libraries.	From Castle Films, Division of United World Films, Inc., 1445 Park Ave., New York 29, N. Y.	Motion Picture Service, Office of Information, U. S. Department of Agriculture, Washington 25, D. C.
■ Department of the Air Force	23 information and public relations films; 24 training films on aviation subjects.	Borrow public relations films from Air Materiel Area Hqrs. of Air Force. Rent training films from some educational film libraries.	Purchase training films and 13 of the public relations films from Castle Films. Other films not for sale.	Directorate of Public Relations, Department of the Air Force, Washington 25, D. C.
■ Department of the Army	79 training and information films on World War II.	Borrow from Army Area Headquarters. Rent from some educational film libraries.	From Castle Films.	Army Pictorial Service Division, Office of the Chief Signal Officer, Department of the Army Washington 25, D. C.
■ Civil Aeronautics Administration (Department of Commerce)	100 Navy films on aeronautics and related subjects for aviation education.	Borrow from Regional Offices of the CAA.	Not for sale.	Aviation Education Division, Civil Aeronautics Administration, U. S. Department of Commerce, Washington 25, D. C.
■ Coast Guard (Treasury Department)	16 information films on Coast Guard activities; 13 training films on seamanship.	Borrow information films from Coast Guard District Headquarters. Rent training films from some educational film libraries.	Purchase training films from Castle Films. Information films not for sale.	U. S. Coast Guard, Treasury Department, Washington 25, D. C.
■ Office of Education (Federal Security Agency)	457 vocational and industrial training films.	Not for loan. Rent from some educational film libraries.	From Castle Films.	Visual Aids Section, Office of Education, Federal Security Agency, Washington 25, D. C.
■ Fish and Wildlife Service (Department of the Interior)	12 educational and training films on fishery.	Borrow from Fish and Wildlife Service, Washington 25, D. C., or from Regional Offices.	Purchase 4 films from Castle Films; other films from original producer.	Branch of Commercial Fisheries, Fish and Wildlife Service, U. S. Department of the Interior, Washington 25, D. C.
■ Forest Service (Department of Agriculture)	29 information and training films on forestry and fire prevention.	Borrow from Regional Offices of Forest Service. Rent from some educational film libraries.	From Castle Films.	Forest Service, U. S. Department of Agriculture, Washington 25, D. C.
■ Indian Service (Department of the Interior)	9 information and educational films on Indian life.	Borrow from Visual Aids Service, Haskell Institute, Lawrence, Kans.	From Educational Film Laboratory, U. S. Indian School, Santa Fe, N. Mex.	Bureau of Indian Affairs, U. S. Department of the Interior, Washington 25 D. C.
■ Institute of Inter-American Affairs	19 information films on health and agricultural subjects.	Not for loan.	From Institute of Inter-American Affairs.	Institute of Inter-American Affairs, 499 Pennsylvania Ave., Washington 25, D. C.

[1] Various regional offices, depositories, and other distributors are listed in "A Partial List of 16 mm Film Libraries," compiled and published by the U. S. Office of Education.

compiled by Seerley Reid, Assistant Chief, Visual Aids to Education

Motion Pictures

. It has been revised slightly and brought up to date (as of February 15, 1949).

U. S. Government Agency	Kind of Films	How to Borrow or Rent Films	How to Purchase Films	For Further Information Write to
Marine Corps (Navy Department)	16 public information and recruiting films.	Borrow from Marine Corps District Headquarters Recruiting Stations.	Not for sale.	Director of Public Information, U. S. Marine Corps, Navy Department, Washington 25, D. C.
Bureau of Mines (Department of the Interior)	80 information films on mining and metallurgical industries.	Borrow from Bureau of Mines, Experiment Station, 4800 Forbes St., Pittsburgh 13, Pa., or from official depositories.	Not for sale.	Office of Minerals Reports, Bureau of Mines, U. S. Department of the Interior, Washington 25, D. C.
Navy Department	19 information and public relations films; 436 training films on aviation, radio, science, shop work, medicine, and other subjects.	Borrow public relations films from Navy Dept. Wash. 25, D. C., or from Naval District Hqrs. Rent training films from some film libraries.	Purchase training films from Castle Films. Public relations films not for sale.	Office of Public Relations, Navy Department, Washington 25, D. C.
Pan American Union	4 information films on Latin America.	Not for loan.	From Pan American Union.	Visual Education Section, Pan American Union, Washington 6, D. C.
Public Health Service (Federal Security Agency)	19 information films on health, sanitation, and medicine; 38 professional films on communicable diseases.	Borrow information films from State or local health departments; professional films from Communicable Disease Center, U. S. Public Health Service, Atlanta 3, Ga.	Obtain authorization from Public Health Service.	Public Inquiries Section, Public Health Service, Federal Security Agency, Washington 25, D. C., *and* Production Division, Communicable Disease Center, Public Health Service, Atlanta 3, Ga.
Bureau of Reclamation (Department of the Interior)	7 information films on reclamation in the West.	Borrow from Bureau of Reclamation, Washington 25, D. C.	Obtain authorization from Bureau of Reclamation.	Bureau of Reclamation, U. S. Dept. of the Interior, Washington 25, D. C.
Soil Conservation Service (Department of Agriculture)	24 information films on soil and water conservation.	Borrow from Regional Offices of the Soil Conservation Service. Rent from some educational film libraries.	From Castle Films.	Education Section, Soil Conservation Service, U. S. Department of Agriculture, Washington 25, D. C.
Dept. of State (including Office of Inter-American Affairs and Overseas Branch, Office of War Information)	18 information films on Latin America (OIAA); 10 information films on the United States (OWI)	Not for loan. Rent from some educational film libraries.	From Castle Films.	International Motion Picture Division, Department of State, Washington 25, D. C.
Tennessee Valley Authority	17 information films on activities of the TVA.	Borrow from Film Services, TVA, Knoxville, Tenn.	Not for sale.	Film Services, Tennessee Valley Authority, Knoxville, Tenn.
Veterans' Administration	12 films on veterans' activities and programs.	Borrow from the Visual Aids Division, Veterans' Administration, Washington 25, D. C., or from the Regional Offices of the VA.	Not for sale.	Visual Aids Division, Veterans' Administration, Washington 25, D. C.

Zeal for Democracy—Latin-American Style

by Cameron D. Ebaugh, American Republics Section, Division of International Educational Relations

CURRENTLY paralleling the Zeal for American Democracy Program in the United States is a similar movement to strengthen democracy through education in the Republic of Ecuador.

The Latin American country's program emphasizes teaching of national history and the national Constitution, particularly in light of present-day conditions and events. Both curricula and instructional methods are being made more practical and realistic.

In both Ecuador and the United States the ultimate aim is the development of loyal, effective citizens with a broad knowledge, understanding, and appreciation of the democratic way of life. This account of what Ecuador is doing toward this end may offer suggestions to administrators and teachers in our own Nation's schools.

For years citizenship training has been included in the curricula of Ecuador's schools. Its implementation, however, has been so inadequate that its influence on the national life has been practically negligible. The National Council of Education conducted a study to find out what could be done to make this aspect of education more effective, and in its report the Council listed the following reasons for the ineffective social-civic instruction in the country's schools:

1. Lack of appropriate bibliographic materials.
2. The erroneous concept of social and civic education as an isolated and independent discipline.
3. The idea that teachers of other materials have nothing to do with instruction in social education.
4. The custom of limiting instruction in social and civic education to a definitely scheduled class period.
5. The fact that morality and civics have always been considered as purely theoretical disciplines and, so, have been relegated to memory work.
6. The fact that hygiene and etiquette were not included formerly in the secondary school program.
7. The fact that approximately 30 percent of the students who enter secondary school withdraw during the first two years.

The Council granted that the elementary school was primarily responsible for the teaching of the fundamentals, including the inculcation of habits of honesty, cleanliness, order, respect for others, doing one's duty, fulfilling one's obligations, and of social cooperation in general. It pointed out, however, that the secondary school should provide for continued practice of these early social habits during the years of adolescence and at the same time that it should develop additional civic habits, amplifying and consolidating both kinds through the study of their history, action, and significance in contemporary life.

Bringing all its findings and recommendations together, the Council has developed two minimum social-civic programs for Ecuador's secondary schools. One is a 2-year program geared to the interests, needs, and capacities of first- and second-year secondary-school students, about one-third of whom do not continue their formal studies. The other is designed for the students of the sixth or last year of secondary education, who will soon either enroll in the professional schools of the university or take employment in business, industry, or government.

These programs have been worked out in great detail. They comprise a series of problems and situations of interest to the adolescent in such a way as to stimulate the desire to face them and test their solutions in everyday life. Suggestions for practical instructional procedures are provided in each of the three sections—social, moral, and civic—to the end that even without the desirable bibliographical materials that are listed in the appendices, the teachers will be able to lead their students to an understanding of, and a fair degree of determination to use, the learnings involved for their own and their country's good.

First and Second Years

Principal topics and subtopics included in Ecuador's lower course, first year:

MORALITY.—Four months, 3 class periods each, in love and respect, truth, self-education and self-control, responsibility, independence, discipline and obedience, justice and honor, and courtesy.

ETIQUETTE AND HYGIENE.—Four months in general standards of conduct, 2 classes; cleanliness, 3; dealings with others, 4; conversation, 3; in the home, 3; at the table, 3; in games and sports, 3; other norms of conduct, 3.

The second year provides for one month in each of these topics:

Symbols of the Fatherland and concepts of sovereignty and government
Nationality, citizenship, and suffrage
The Legislature and the legislative function
The executive function; ministers of State; National Economic Council
The judicial function; officials; governmental subdivisions; public works; forces of law and order
Fundamental precepts in the National Constitution
General and individual guarantees in the National Constitution
Special guarantees for Ecuadorians in the National Constitution

Sixth Year

The program for students who continue their studies through the sixth and final year of secondary school reviews the work of the second year during the first 3 months and then takes up the study of economic problems. This program includes the following three divisions:

SOCIOLOGICAL AND NATIONAL PROBLEMS, 5 weeks.—General principles of sociology and social equality and justice; family, economic, religious, esthetic, and educational interests; national and local interests and institutions, their history and development, their stimulation, their importance; ethnic unity, equality, moral elevation through sports, art, music, and literature; means of increasing the population for the benefit of the country.

POLITICAL-CONSTITUTIONAL PROBLEMS, 12 weeks.—Nature of the State; the Constitution; forms of government; obligations and rights of citizenship; the Legislature; Executive agencies of government; the Judiciary; national, provincial and municipal agencies of government and their respective jurisdictions and problems; the

National Treasury; Counеil of State; Ministers of State; Army; Navy; Poliee; basie general and individual guarantees in the National Constitution; general outline of all national government ageneies, their subdivisions, and functions.

Economic Problems, 3 months.—Capital; labor; production and distributicn of wealth; natural resourees and their exploitation with foreign capital and foreign technologists; commerce; transportation; money; eredit; banks; national budget; exports and imports; taxes and eustoms; international ageneies.

Methodological Suggestions

Teachers are exhorted to do everything in their power to stimulate active partieipation of their students in the learning proeesses involved in the various aspeets of social, civic, and moral edueation. Variations in instructional procedure are suggested, according to differenees among students, in the environment, and in the available reference materials. The teachers are directed to take full advantage of every possible situation in which the knowledge, attitudes, skills, and interests of the students may be marshalled for most effeetive learning purposes. All teachers, regardless of their subjeet fields, are urged to eooperate with social and eivic education teaehers, so that students may eome to realize the importance and wide application of the prineiples, facts, attitudes, and skills involved in their social and eivie development.

Habits of careful observation, analysis, and subsequent reflection on experience are to be developed through everyday praetieal situations and problems in which the students may be actively engaged. The inductive method is favored above any other, but it is to be supplemented by analogies, eomparisons, and eontracts whenever nccessary to clarify concepts, to increase understanding of the reasons for and the importance and purposes of intelligent social and civic behavior.

Supplementing and complementing the systematic instruetion outlined in the new social-civie edueation programs, numerous clubs and other student organizations are to be formed in each secondary sehool, with interests ranging from sueh loeal school matters as art, history, and musie to eity-wide sanitation studies, Boy Scouts and Red Cross aetivities, and even national reforestation and international peace.

The National Council of Edueation in Eeuador has behind it the authority and support of the National Ministry of Education. These new programs of social and eivic edueation, therefore, attaeking the problem of educating for intelligent demoeraey and active partieipation in it, offer the promise of real progress.

School ★ Life QUIZ

IF YOU answer 9 or 10 questions correctly, you are extremely well informed on current enrollments and other educational statistics of interest. You rate Excellent if you answer 7 or 8 questions right, and Good to Very Good for 4 to 6 in the correct column. See School Life Quiz answers on inside back cover.

I. What percentage of the total number of children 5 to 19 years of age in the United States are not in school (kindergarten through the junior college)?
1. ☐ 9%; 2. ☐ 21%; 3. ☐ 33%; 4. ☐ 45%.

II. There are 2,766,000 children of kindergarten age (5 years old) in the United States. How many of these youngsters are enrolled in kindergarten?
1. ☐ 2,225;000; 2. ☐ 1,250,000; 3. ☐ 700,000; 4. ☐ 350,000.

III. Enrolled in our Nation's high schools are 2,928,000 youth of 16 and 17 years of age. Not enrolled are?
1. ☐ 2,700,000; 2. ☐ 2,125,000; 3. ☐ 1,800,000; 4. ☐ 1,400,000.

IV. This year's college and university enrollment of 2,408,249 is a new all-time high.
1. ☐ True; 2. ☐ False.

V. The number of first-time students in institutions of higher education stands at 568,768 this year. How much of a drop is this from last year's first-time student enrollment?
1. ☐ 4%; 2. ☐ 8%; 3. ☐ 19%; 4. ☐ 27%.

VI. Only one type of higher educational institution reported an increase in number of veterans enrolled this fall over last fall. Which type was it?
1. ☐ University; 2. ☐ Technical School; 3. ☐ Theologieal Seminary; 4. ☐ Liberal Arts College; 5. ☐ Teachers College; 6. ☐ Junior College.

VII. We are not so much concerned about how much light we have in the classroom; the real problem is how well pupils can see.
1. ☐ True; 2. ☐ False.

VIII. The number of persons not having access to public libraries in the United States is:
1. ☐ 10.000.000; 2. ☐ 21,000,000; 3. ☐ 35,000,000; 4. ☐ 42,000,000.

IX. During 1947–48 the number of degrees conferred by institutions of higher education exceeded by 100,000 the previously high number conferred in 1939–40. How many degrees were conferred during 1947–48?
1. ☐ 169.000; 2. ☐ 223,000; 3. ☐ 314,000; 4. ☐ 431,000.

X. Funds for regular school purposes—land-grant colleges, agricultural experiment stations, agricultural extension service, vocational education and vocational rehabilitation—provided by the Federal Government to the States and Territories during 1947–48 totaled:
1. ☐ $22,000,000; 2. ☐ $56,000,000; 3. ☐ $84,000,000; 4. ☐ $101,000,000.

EXHIBITS

(*Continued from page 4*)

German exhibit for showing in Army Information Centers around the world. It is the plan to cireulate the main exhibits among the schools and teacher-training colleges in most of the large cities of the countries receiving them, and on a staggered schedule to make them available for showing to the publie. Bulletins explaining the exhibits in German and Japanese accompany the displays.

Few Bother

". . . the Library of Congress says it is receiving more Russian books, magazines, newspapers, and technical bulletins than ever before. Only a few scholars and officials bother to read them."—Michael Paca, in *School Shop*, December 1948.

AMERICAN WAY

(*Continued from page 3*)

But, the common man, who is, after all, the last judge before God, has made up his mind. He knows that democracy in its finest form can be the only path to world union and the ending of wars.

Let us hope that with the grace of God, he will win through to make on earth a true brotherhood of man—democracy.

Charles Kuralt, Central High School, Charlotte, North Carolina

We, the people of the United States, the Constitution talking, the United States Constitution, bulwark of the greatest democracy on earth. We, the people, ruling ourselves, running the government. We the people, 48 States, one Nation. We the people, thousand upon thousand of common men. We made this Nation—a land where anyone, anything, any idea can grow, unchained and free.

Great things have been said and written about this thing called democracy, but democracy is more than a written word or a spoken phrase. It is men created equal. Democracy is very evident. It is written in the faces of immigrants, the people who gave up hopes in the old country to try out something new and wonderful. It is written in the very hills and plains that have produced men like Abraham Lincoln. It is written in our lives—our brothers and ourselves, growing up with a chance.

We hold these truths to be self-evident, that all men are created equal. That they are endowed by their creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness—and freedom of thought and speech and from want and fear. Inalienable rights guaranteed in this democracy.

Inalienable right number one is life—something men have cherished from the beginnings of the earth, a free life, unfettered by government interference. It's what Americans fought for at Lexington and Bunker Hill and New Guinea and the Solomons. But they were fighting for something more.

Something that we will call inalienable right number two—liberty. That's a big word in the American language—it's the first cousin of another big word—freedom. Liberty is guaranteed in America. It flourishes here as in no other country in the world. The unknown little man mounting to his soap box to speak his piece about how the country ought to be run. The editor of a small-town daily writing as he pleases, condemning or commending the administration freely. This little group of Mormons or Quakers or Jews worshipping God in their own way. The scientist free to search for truth, and the educator, free to teach it.

Liberty and freedom and democracy—big words in the language of a people. We take them for granted; they are ours. They build the third inalienable right championed by Thomas Jefferson—the pursuit of happiness. People living everywhere, looking for a good life. People in little towns with funny names, people in the metropolis living beside the water or the highway, looking for a good life.

One people—all races, all stocks. Simple people, but easy to rile up if you talk about taking away their freedom. We know what freedom is in America, and democracy—don't tread on us. It's produced great men—this democratic government, this youngest of the earth's powers—great names like George Washington and Thomas Jefferson and F. D. R. and Babe Ruth. And in song and in prose, the men it has produced have expressed their views of the Nation's politics. James Russell Lowell called a democracy a place where every citizen has a chance and knows he has it.

Woodrow Wilson said he believed in democracy because it releases every one of man's powers, and James Pike, putting it into the words of the Louisiana Negroes, said the same thing, in a different way.

"Freedom," he said, "is a patient word, a prayerful word, a good tasting word, a sparkling word, as full of the Fourth of July as skyrockets and roman candles. Freedom is a word, a real showboat word, eight dollars long and four dollars wide."

And so that is my case—I give you democracy—not a word, not essentially a type of government. It is warm rain on Georgia, sun shining on Key West. It's wind blowing over a Texas prairie, snow-capped Massachusetts' hills, the sound coming up from the streets of Manhattan, waves roaring in on California's coast, industry in Chicago, and hot steel in Pittsburgh. The names of Michigan and Maryland, of Virginia and Rhode Island and North Carolina. Covered wagons rolled West, with democracy for a dream.

Democracy is a way of life, a living thing, a human thing comprised of muscles and heart and soul. I speak for democracy, and men who are free and men who yearn to be free speak with me.

George Morgan, Jr., Hutchinson High School, Hutchinson, Kansas

I speak for democracy. In order to understand more fully the meaning of democracy, I asked my father for a definition, and he said it was a system of government where the people elected representatives to govern them and these representatives derived their just power from the consent of the governed. Why did I believe my father could give me a good definition?

Let me tell you. One morning, February 16, 1943, to be exact, I heard him go out of the house, possibly never to be seen again by the ones he loved. He left a job, a wife, and three children that loved him dearly. He left all of this to defend the very thing I'm talking about—democracy.

Through his letters, I saw a man quite different from the man I had known. I saw a man packed with other men, growing further and further away from the things he held dear. I saw a man trudging through snow, learning to fight, learning to defend democracy.

Later I saw him standing on a spray-swept deck of a tossing ship, sailing through the black water with an unfriendly sky overhead. He had a pair of binoculars in one hand, a rifle over his shoulder. He stood alone—a silhouette against a warring world. He stood, and still stands, for democracy.

Another time I saw him unloading other men into that bloody battle for Okinawa. I saw tracers throwing their tell-tale trails behind them feeling out his ship. Feeling, seeking, trying to snuff out his very life. I saw him bending over a box or table in his small compartment, far below the water line, writing home. I saw him look up as a matter of routine at the P. A. loudspeaker, to hear that heart-gladdening shout—THE WAR IS OVER. Then, a happy, almost incredulous look spread across his tired, weary face. To a far-away sailor, America, democracy, home, loved ones, all beckoned. That is what democracy meant to not only one man but to thousands.

But what does democracy mean to American youth—the American youth—who are they? They were the little children of yesterday. Today they are the young men and women who are asking for the family car, running out of their allowances. They

(*Continued on page 16*)

Planning Educational Facilities for Children in Hospitals

IN AUGUST 1946, the Congress passed Public Law 725, the Hospital Survey and Construction Act. This act sets aside for each State survey a sum of money proportionate to the number of people in the State. The States also receive money for construction based upon the population and the average annual per capita income of the State. The Federal Government bears one-third of the cost of survey and construction, and the State or local group, two-thirds.

With the advent of the most extensive hospital program in our history, a real opportunity is offered to plan early for the education of hospitalized children. Because of this, the following statement has been prepared by the Office of Education with the cooperation of the Division of Hospital Facilities, Public Health Service, Federal Security Agency.

AS NEW hospitals are planned and built, the importance of including educational facilities in the total building plan should be kept in mind. Most children of school age in hospitals of the United States are having no organized education, even though the physical condition of many of them warrants some school activity. Unless building plans are made now to allow for the education of patients, the situation will be difficult to rectify in the years ahead. Such plans do not need to be elaborate or expensive.

These are the essential facts of the matter:

1. The majority of boys and girls who spend a long period of time in the hospital could have some form of educational service. The very conditions which necessitate a long stay in the hospital make also desirable an educational, diversional, and mental health program such as a modern school should provide. Many physicians prescribe schooling as a part of the total program of care.

2. The public schools are the official agency designated to provide education for all children. If the child cannot go to the school, then the school must come to him wherever he is—in the convalescent home or in the hospital, as well as in the residential school or even in his own home.

3. The physical plant of the modern hospital should, therefore, include space favorable to a school program: A classroom; enough space in wards for group work; supply closets; and storage facilities. The classroom should be conveniently located in relation to the wards. It should be large enough to accommodate a group of children in beds, wheel chairs, or carts. It should be well lighted, attractively arranged, and equipped with blackboard and other schoolroom necessities. The school supply closet and storage space should be located near the classroom and the ward.

4. In a small general hospital, in which long-term child patients are "few and far between," the classroom space might be used for other purposes. For example, adult patients could have its use upon occasion, nurses' classes could be held there; and, in some cases, staff or other conferences. The important thing is that the space be *available for children when they need it.*

5. The best way to plan educational facilities for children in hospitals is through teamwork of the interested parties. Those who are to be responsible for the *education* of the children should have suggestions to make to hospital authorities and architects. The combined judgment of all these, in the light of projected hospital population and service, will bring most satisfactory results.

Statement prepared December 1, 1948, by Office of Education representatives:

Romaine P. Mackie

Specialist, Schools for Physically Handicapped

Elise H. Martens

Chief, Education of Exceptional Children and Youth

C. H. Maxwell

Chief, Administration of School and College Health Service

Publications Available

A pamphlet, The Hospital Act and Your Community, is available upon request from the Federal Security Agency, Public Health Service, Division of Hospital Facilities, Washington 25, D. C. Three other related pamphlets which you may request from the Public Health Service are: Hospital Quiz (24 questions and answers), Hospital Survey and Construction Program (Laws and Regulations), and Why We Need More Hospitals. The Office of Education announces the forthcoming bulletin, School in the Hospital, entirely devoted to the education of hospitalized children. Office of Education Bulletin 1948, No. 5, Crippled Children in School, also gives some attention to needs of hospitalized children. Order the latter from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., price 15 cents.

COUNSELING

(*Continued from page 5*)

guidance programs are few in number. One series is produced by Vocational Guidance Films, Inc., Des Moines, Iowa.

The Occupational Outlook Handbook, 1949

The Bureau of Labor Statistics of the Department of Labor has recently released an outstanding volume on the occupational outlook. It is designed for use in schools, colleges, Veterans' Administration regional offices and guidance centers, employment service offices, community organizations, and other agencies engaged in the vocational guidance of young people.

When the Veterans' Administration first launched its large counseling program after the War, the counselors immediately needed information on the employment outlook in a large number of occupations. Several Governmental departments cooperated and in August 1946, the Veterans' Administration published for its own use VA Manual 7–1, *Occupational Outlook Information.* Upon request of the National Vocational Guidance Association this information is now available to the public through purchase from the Government Printing Office, Washington 25, D. C. at $1.75 per copy. Ask for *Occupational Outlook Handbook,* Employment Information on Major Occupations for Use in Guidance, U. S. Department of Labor, Bureau of Labor Statistics, Bulletin No. 940, 1949.

With this handbook, counselors, teachers, and parents can now find out for themselves information about occupations to aid young people in making a choice. The handbook is in no sense a textbook on occupations. It is a reference book that supplements any occupational program.

The Handbook covers 288 occupations including professional, white-collar, farming, and industrial work in which young people will find employment. It is intended as a practical guidebook to "the bewildering array of occupations in the United States."

Oscar Wilde once quipped: "There is nothing permanent except change." In the occupational world, ever since the Industrial Revolution when occupations were taken from the home and carried on in factories, jobs continue to molt. Occupational changes not only mean loss of jobs for some, but learning new work and adjusting to new conditions. Experienced workers are, therefore, more affected than youngsters. Young people want to know: What are the new fields? Which are least overcrowded? What are the opportunities in plastics, television, jet propulsion, and atomic energy? How can I get in on the ground floor?

The handbook emphasizes changes and trends in occupations. Such trends are not easy for the individual to discover. The changing nature of occupational and industrial life is not easy to observe without delving in the past. The handbook brings such trends up to mid-1948 and helps the counselor and the counselee in long-range educational and career planning. A cue to the use of the handbook is found in the table of contents under such headings as: How the information was obtained; economic and occupational trends; occupational outlook reports on the professions including the teaching field, medical-service occupations, engineering and other technical fields. Clerical, sales, and service occupations detail jobs connected with hotels, restaurants, protective service, and others. Trades and industrial occupations include the construction trades, mehanics and repairmen, occupations in the machine shop, foundry, forge shop, printing, furniture manufacturing, fur manufacturing, and railroad. Agricultural occupations are taken up by regions such as Northeast States, Corn Belt States, etc. An extensive alphabetical index covers pages 447–455.

An example of the break-down into occupational reports: The teaching field covers college and university teachers, high school teachers, kindergarten and elementary school teachers, and physical education instructors. The hotel occupations include: Front-office clerks (hotels), bellman and baggage porters, bell captains and head baggage porters, superintendents of service, hotel housekeepers and assistants, and hotel managers and assistants. The agricultural occupations in the Northeast States cover the following types of farms: Dairy, fruit and berry, poultry, tobacco, vegetable, resort, and part-time.

The various occupational descriptions are all written on an outline similar to the following: Outlook summary; duties—nature of work; training and qualifications; how to enter; outlook; earnings and hours of work; where to go for more information.

As an example of the contents of the handbook, I have chosen Photographers, because of the large numbers of requests particularly from veterans in the past 2 or 3 years. The handbook contains, on page 101, a 700-word discussion of photography, which is summarized below and is typical of other occupational descriptions: *Outlook summary*: "Limited number of openings for highly qualified persons in next few years; keen competition among new entrants. Long-run trend in employment slowly upward." *Nature of work:* Shows that photographers usually specialize in portrait, commercial, news, or aerial work. *Where employed:* Studios, newspaper and magazine publishers, advertising agencies, manufacturing plants, and government offices, in all parts of the country. *How to enter:* Training on the job for 2 or 3 years, or by attending a school of photography, but this cannot substitute for training on the job. *Outlook:* "Openings will not be numerous in the next few years." *Earnings and working conditions:* "Typical salaries for experienced portrait photographers ranged from about $50 to $100 per week in some large cities in early 1947." *Where to go for more information:* The Photographers' Association of America, 520 Caxton Building, Cleveland 15, Ohio.

The handbook will prove an unusual aid to all counselors. The experienced counselor will welcome its addition to the literature because it is of recent date and is coordinated with the *Dictionary of Occupational Titles,* and each occupation covered carries the appropriate code number. Inexperienced counselors will find authentic information between the two covers of the handbook that cannot be found in any other single source.

HEALTH

(*Continued from page 7*)

ordinarily included in home economics, their undergraduate education also tends to be weak in the broad area of health.

One college, the New Jersey State Teachers College at Jersey City, through its 5-year program, prepares individuals for the dual role of school nursing and school health education.

Health education for all teachers.—Leaders in health education hold that other secondary school teachers, in addition to health teachers, should have at least minimum preparation in this field. Yet not all teachers colleges require a course in health education. One national conference has stated:

It is essential that all teachers have certain competencies in this area which include: (1)

Understanding the importance of health in the education of the child; (2) skill in organizing appropriate learning experiences in health education; (3) skill in health guidance and counseling; (4) skill in detecting deviations from normal appearance and behavior; (5) skill in the use of appropriate screening procedures; and (6) understanding of referral procedures which utilize effectively all available community health services.[6]

In regard to the professional preparation of teachers, several national organizations are concerned not only with the formal training in course work, but also in having the students live on a campus where the health environment is satisfactory and where the college health services are adequate.

A problem in teacher placement.—Although there is a growing awareness of a need for more health instruction in the schools, and although a number of colleges are preparing teachers for this purpose, the young graduates in health education frequently find it difficult to obtain positions in their major field. Often they have to fall back on their minor fields for employment, hoping eventually to secure a teaching position which includes at least some health teaching. On the other hand, there is considerable demand for experienced persons in school health education, especially those with graduate degrees in this field.

Greater Cooperation by National, State, and Local Groups in the School Health Program

Various professional and lay groups are showing considerable interest in the school health program. There is also a growing awareness by these groups that school health education and community health education are essential parts of a well-balanced program—that neither can function with full effectiveness without the other. The more important relationships of such groups to school health education are here presented.

Professional educational organizations.—The educational organizations most active in school health education include: (1) The American Association for Health, Physical Education and Recreation—a Department of the National Education Association—through its Division of Health Education; (2) the American School Health Association; (3) the American Public Health Association through its School Health Section; (4) the American College Health Association; (5) the National Association of Biology Teachers; and (6) the American Home Economics Association.

The increased interest of these organizations in health education is evidenced by the appointment of committees to consider various problems in the field and by the publication of materials for school use.

Professional health organizations.—The American Medical Association is giving increased attention to school health programs. County medical societies are often represented on school and community health councils and committees. Through the Joint Committee on Health Problems of the National Education Association and the American Medical Association, education and medicine are cooperating at the national level in dealing with the problem of school health.

The American Dental Association and many of its local societies are also cooperating in school health programs.

Voluntary health agencies.—A wholesome trend is evident in the relationships of voluntary health agencies to the schools. These organizations are realizing more and more that they need to be interested in furthering over-all, adequate school health programs including health instruction, health service, and healthful environment. In this way the special interest of each, whether it be tuberculosis, cancer, safety, nutrition, or what not, will, if it has merit, have a permanent place in the school program. Several of these agencies have made funds available for scholarships and fellowships in health education and for operating health education workshops.

The National Conference for Cooperation in Health Education consists of 45 nationally organized public and private health associations and agencies interested in the advancement of health through education.

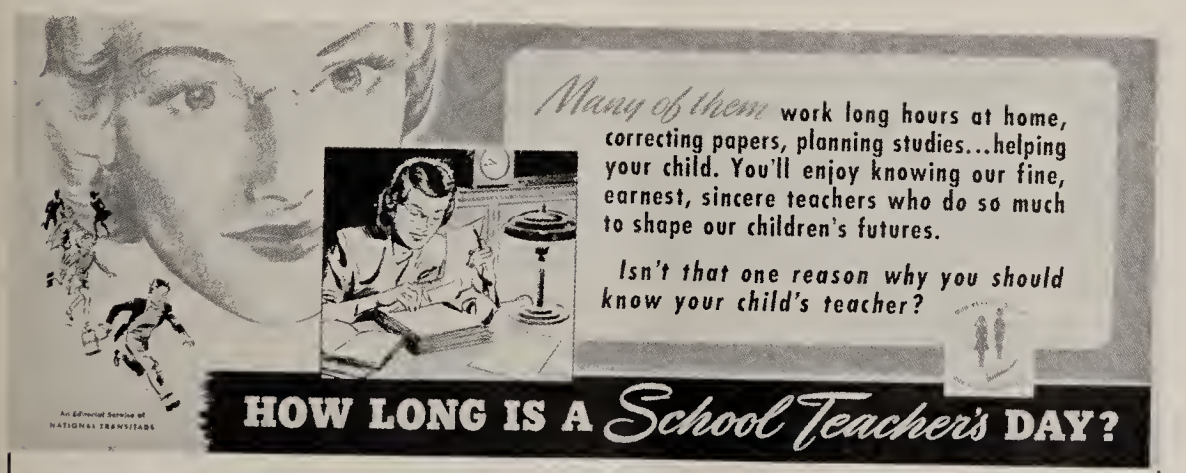
Other organizations.—Many organizations whose primary concern is general education are showing increased interest in school health education. The National Congress of Parents and Teachers and its State and local affiliates illustrate this point. Many organizations, such as the American Association of Colleges for Teacher Education, cooperated in the national conferences mentioned earlier in this report.

School health councils.—For a number of years leaders in health education have recommended that school health committees or councils, which included representatives from the school and community groups, assist with the over-all planning of the school health program. In the past, however, too many have been in existence in name only. More recently there has been a renewed interest in such committees and councils. They are being found to be of real value when organized democratically and when given encouragement by the local school administration.

Summary

Mortality and morbidity statistics today show a downward trend for communicable diseases and an upward trend for the noncommunicable. The reduction of the former disease rates has largely been the result of public health activities. In contrast, to reduce and control the noncommunicable diseases calls for greater individual understanding of these problems and for the personal assumption of greater responsibility for correcting them. The major trends in health education programs of schools and colleges reflect this change in the types of health problems which are of greatest concern in our country.

[6] *The National Conference on Undergraduate Professional Preparation in Physical Education, Health Education and Recreation.* Chicago, The Athletic Institute, 1948. p. 17.



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New Books and Pamphlets

Career Plays for Young People. Non-Royalty Vocational Guidance Plays. By Samuel S. Richmond. Boston, Plays, Inc., 1949. 342 p. $3.50.

Character Education: A Survey of Practice in the Public Schools of the United States. By Henry Lester Smith. Published by The Palmer Foundation, Texarkana, Arkansas-Texas, in cooperation with the Hugh Birch-Horace Mann Fund of the National Education Association of the United States, 1949. 32 p. 50 cents. (Order from the National Education Association, 1201 Sixteenth Street NW., Washington 6, D. C.)

The Classroom Teacher Helps the Handicapped Child. Augusta, Maine, State Department of Education, 1948. 36 p.

Guiding Homeroom and Club Activities. By Ruth Fedder. 1st Edition. New York, N. Y., McGraw-Hill Company, Inc., 1949. 467 p. Illus. (McGraw-Hill Series in Education.) $4.50.

Hearing is Believing. By Marie Hays Heiner. Cleveland, Ohio, The World Publishing Company, 1949. 126 p. $2.

Radio Listening in America. The People Look at Radio Again. Report of a Survey Conducted by the National Opinion Research Center of the University of Chicago; Analyzed and Interpreted by Paul F. Lazarsfeld and Patricia L. Kendall. New York, Prentice-Hall, Inc., 1948. 178 p. $2.50.

Recreation Administration in New Mexico. By Dorothy I. Cline and K. Peterson Rose. Albuquerque, N. Mex., University of New Mexico, Department of Government, Division of Research, 1948. 39 p.

Student Personnel Services in General Education. By Paul J. Brouwer. Washington, D. C., American Council on Education, 1949. 317 p. (Publication of the Cooperative Study in General Education.) $3.50.

—Compiled by Susan O. Futterer, Head, Reference and Bibliographical Services, Federal Security Agency Library.

Selected Theses

Classroom Photography for Teachers. By Gilbert H. Corbett. Master's, 1947. University of Cincinnati. 132 p. ms.

Presents a handbook covering the basic steps in taking classroom pictures with limited equipment.

The Home Economics Teacher and Juvenile Delinquency. (An Activity Program in Home Economics as a Preventive of Juvenile Delinquency). By Sara A. Jordan. Master's, 1944. Hampton Institute. 37 p. ms.

Analyzes data on juvenile delinquency from 30 schools and replies on 75 information sheets filled out by home economics teachers on the behavior problems they had encountered.

The Integration and Correlation of Industrial Arts With Academic Subjects. By Eber K. Smith. Master's, 1946. Wayne University. 28 p. ms.

Shows the relation between expression, reading, arithmetic, art, health and safety, and industrial arts.

Social and Economic Forces Influencing Secondary Education. By H. Earl Wright. Master's, 1946. Wayne University. 38 p. ms.

Describes trends in secondary education in Detroit, Michigan. Shows the need for training in drafting, woodwork, bench metal work, machine shop, and the fundamentals of electrical work.

State-Aided Industrial Vocational Education in Massachusetts. By Walter D. Reid. Master's, 1946. Boston University. 97 p. ms.

Explains the background, laws, policies, organization, and administration of federally aided, State aided, all day, boys' industrial vocational schools in Massachusetts, and discusses Federal and State laws under which the schools operate.

—Compiled by Ruth G. Strawbridge, Federal Security Agency Library Bibliographer.

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AMERICAN WAY

(*Continued from page 12*)

are the young people we all know. They will be the America of tomorrow, the democracy of tomorrow—yes, the world of tomorrow. They are YOU—Mr. and Mrs. America, in miniature.

Now, another question. What does America mean to us and what is democracy doing for us—the young people of today? A current author has said that America means a way of life. That is really what democracy is doing for us—establishing a way of life. None of us would like to think of living without it. How can we maintain this American way of life? By upholding the standards of our forefathers—we alone can keep democracy what it is.

But are we satisfied to maintain it merely as it is? Of course not. But how can we improve it? By deeper appreciation of our privileges and a more complete fulfillment of our obligations. The things I have presented are important issues concerning this matter of democracy. Our obligation is to forward these ideals in our American way of life and add more to them. A just balance between privileges and obligations form the rock-like core that can and will keep our America truly great in this uncertain world.

This philosophy of life which maintains that each of us must love our neighbors as ourselves, give our lives for our country if need be, not only enjoy our privileges, but also shoulder our obligations, shall inevitably further our cause. Our wonderful American democratic heritage has been handed down to us from past generations.

Let all present-day Americans dedicate themselves to forwarding our cause around the world. A people thus united in this common cause shall forever preserve a way of life that will stand the test of all time.

I plead for democracy.

U. S. GOVERNMENT PRINTING OFFICE: 1949

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

Forests and National Prosperity: A Reappraisal of the Forest Situation in the United States. Prepared by the Forest Service.

Washington, U. S. Government Printing Office, 1948. 99 p. (Miscellaneous Publication No. 668.) 40 cents.

Helping Families Plan Food Budgets. Prepared by Bureau of Human Nutrition and Home Economics.

Washington, U. S. Government Printing Office, 1948. 16 p. (Miscellaneous Publication 662.) 15 cents.

School Lunch Recipes Using Fish. Prepared by Bureau of Human Nutrition and Home Economics and Production and Marketing Administration in cooperation with Fish and Wildlife Service, Department of the Interior.

Washington, U. S. Government Printing Office, 1949. 8 p. (Program Aid 66.) Free.

Department of Commerce

Sources of Free and Low Cost Materials. Revised. Prepared by Aviation Education Division, Office of Aviation Training.

Washington, Civil Aeronautics Administration, 1948. 17 p. Processed. Free.

Federal Security Agency

Your Child from 6 to 12. Prepared by the Children's Bureau.

Washington, U. S. Government Printing Office, 1949. 141 p. (Children's Bureau Publication 324.) 20 cents.

Superintendent of Documents

Interstate Commerce.

Washington, U. S. Government Printing Office, 1949. 13 p. (Price List 59, 33d Edition.) Free.

Office of Education

Printed Publications

Attracting New Teachers; How Some Communities Are Doing It *and* Appreciating Good Teachers. Reprint from SCHOOL LIFE, October and December 1948.

Processed Materials

(Free—Limited Supply)

Adult Education References. Secondary Education Division. 1948.

No. 1. Bibliography of Bibliographies on Adult Education.
No. 2. Methods of Instruction for Illiterates.
No. 3. Materials for Adult Illiterates.
No. 4. Adaptations of Classics and Famous Fiction.
No. 5. Adult Education Councils.

Duties, Standards and Qualifications of Counselors. Misc. 3314–1, February 1949. Vocational Education Division.

Education of Exceptional Children and Youth. Crippled Children. Selected References No. 5–VII, December 1948. Elementary Education Division.

Education of Exceptional Children and Youth. Mentally Retarded Pupils at the Secondary Level. Selected References No. 5–II, A, November 1948. Elementary Education Division.

Education of Exceptional Children and Youth. Mentally Retarded Children. Selected References No. 5–II, B, November 1948. Elementary Education Division.

Educational Services to Organized Groups. Adult Education Ideas No. 3, February 1949. Secondary Education Division.

Expenditure Per Pupil in City Schools, 1946–47. Statistical Circular No. 245, September 1948. Research and Statistical Service, Division of Central Services.

Evaluating Guidance Procedures: A Review of the Literature. Misc. No. 3310, January 1949. Vocational Education Division.

For a Good Start in School. Education Briefs No. 15, December 1948. Elementary Education Division.

Institutions Offering Professional Education in Health Education, Physical Education, Recreation. January 1949. Secondary Education Division.

Playground Equipment That Helps Children Grow. Education Briefs No. 16, October 1948. Elementary Education Division.

Proceedings of the Fourteenth National Convention of the New Farmers of America, August 15–18, 1948. Misc. 3309, Vocational Education Division.

References in Food and Nutrition. December 1948. Secondary Education Division.

The Seriousness of the Public School Situation. Circular No. 249, January 1949. Research and Statistical Service.

Social Hygiene Education Bibliographies. Secondary Education Division.

No. 1. For Small and Preadolescent Children.
No. 2. Methods and Materials in Schools.
No. 3. For Teen-Age Youth.
No. 4. Free and Inexpensive Material for Children and Youth.
No. 5. Methods and Materials for Parents.

Supplement to Price List No. 31 (Office of Education Publications 1942–1948). Information and Publications Section, 1949.

Answers to *SCHOOL LIFE* Quiz

(See page 11)

I. 2. 21%. Source: *Children Not in School*, 2 p. mimeograph, Office of Education Research and Statistics.
II. 3. 700,000. Same source.
III. 4. 1,400,000. Same source.
IV. 1. True. Source: Office of Education Circular No. 248.
V. 1. 4%. Source: Same source as IV.
VI. 3. Theological Seminary. Same source as IV.
VII. 1. True. Source: *Lighting Schoolrooms*, Office of Education Pamphlet No. 104, price 10 cents from Superintendent of Documents, Washington 25, D. C.
VIII. 3. 35,000,000. Source: Office of Education background information for press conference on opening of schools, August 13, 1948.
IX. 3. 314,000. Source: *Higher Education*, Dec. 1, 1948, issue, article: Earned Degrees Conferred by Institutions of Higher Education, 1947–48, by Robert C. Story, price 5 cents a single copy, subscription price 75 cents from Superintendent of Documents, Washington 25, D. C.
X. 3. $84,000,000. Source: Office of Education Leaflet No. 79, *Federal Government Funds for Education, 1946–47 and 1947–48*, price 15 cents from Superintendent of Documents, Washington 25, D. C.

PUBLICATIONS of the Office of Education TO PROMOTE INTER-AMERICAN EDUCATION

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Education in Cuba	*1943*	*No. 1*	*20¢*
Education in Chile	*1945*	*No. 10*	*25¢*
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Education in Haiti, Bulletin 1948 No. 1 (25 cents), Education in Panama, Bulletin 1948 No. 12 (25 cents), and Education in Venezuela, Bulletin 1948 No. 14 (30 cents), are the latest publications in this series, prepared by the Office of Education under the auspices of the Department of State.

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Volume 31 Number 8
MAY 1949

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School ★ Life — Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for May 1949

Volume 31 Number 8

Cover photograph is of Earl James McGrath, the Commissioner of Education, who took office March 18. See page 1. This and other photographs of Commissioner McGrath appearing in May SCHOOL LIFE were taken by Archie L. Hardy, Federal Security Agency.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

"I feel it my duty to warn the people of the United States of America that, bad as the crisis is today, it will be many times as bad in 5 years unless the Nation acts vigorously." . . . . . p. 2

★ ★ ★

"Educators and school superintendents can be a potent force in helping to organize such community projects on a State-wide basis." . . . . . p. 6

★ ★ ★

"Citizenship studies should not be taught in a vacuum through the mere learning of textbook material." . . . . . p. 9

★ ★ ★

"School communities can no longer be content with a unit course in woodwork or mechanical drawing inherited from the 'manual training' era in their attempt to achieve the functions of industrial arts." . . . . . p. 12

★ ★ ★

Published each month of the school year, October through June.

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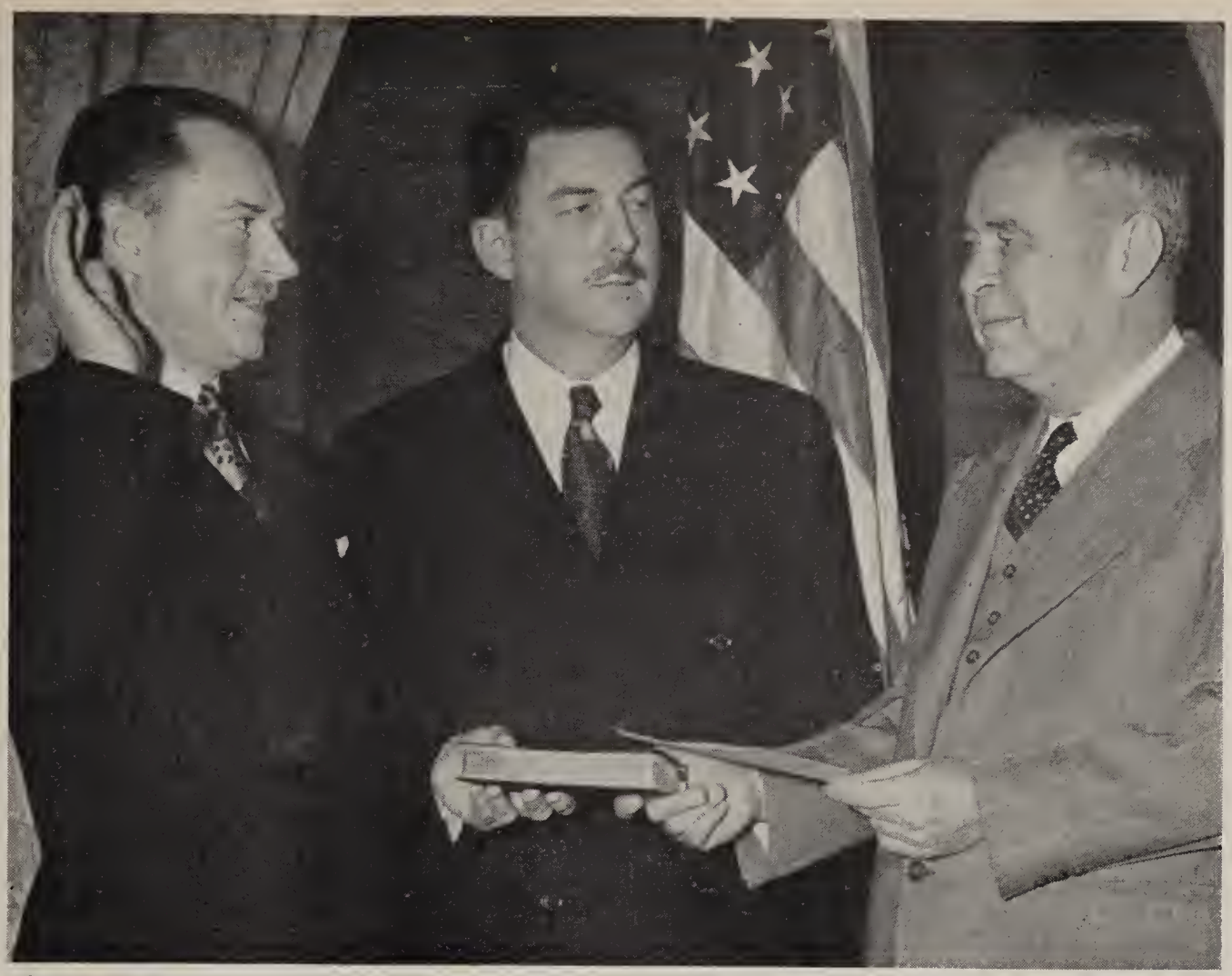
Address all SCHOOL LIFE inquiries to the Chief, Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."



The new Commissioner of Education takes oath of office. Left to right: Earl James McGrath, Commissioner of Education; J. Donald Kingsley, Assistant Federal Security Administrator, and Associate Judge of the Supreme Court Wiley Rutledge.

Earl James McGrath —11th Commissioner of Education

EARL JAMES McGRATH was inducted as Commissioner of Education, Federal Security Agency, at noon on March 18. The oath was administered by Associate Justice of the Supreme Court Wiley Rutledge, before Office of Education staff members and representatives of Government, labor, agriculture, civic, business, and women's organizations, and agencies. It was a busy first day for the new Commissioner—press conference, photographs for the press, the oath-taking ceremony presided over by Assistant Federal Security Administrator J. Donald Kingsley, receiving congratulations of dignitaries present, broadcasting, and television. SCHOOL LIFE presents Dr. McGrath's first statement as United States Commissioner of Education and gives some of the flavor of this historic event in American education.

IN ASSUMING the office of Commissioner of Education I am deeply conscious of the heavy responsibilities and the exacting duties which this appointment involves. I am no less aware of the great opportunities which it offers for constructive leadership in education at all levels. This is especially true at this point in American history when the Federal Government is being called upon to play a much larger role in education than it has hitherto. From the beginning, this Nation has been one of opportunity for those who came from other shores, and for the succeeding generations born in this land. It has been the view of the large majority of Americans that all children regardless of their origins or social status should have the chance to develop their abilities to the fullest. To do so, however, they must have equal opportunity for education.

But the ideal of equal educational opportunity has not been realized. Differences in the various communities of the Nation in the ability to produce wealth, and differences in family status and income, close the doors of the schoolhouse to many children before they have the chance to develop their minds, their bodies, and their spirits to the level of their natural endowments. If it ever could do so, this great democratic Nation can no longer afford the evil consequences of widespread educational privation.

I am thinking here not only of the personal injustice involved when a boy fails to realize his ambitions in life because his parents cannot afford the necessary education. This is, to be sure, an unhappy and unjust state of affairs for the individual. But I am equally concerned about the serious social waste involved. A democratic nation needs to develop its human resources no less than its natural resources. This is

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Former Commissioner of Education, George F. Zook, congratulates Commissioner McGrath. Left to right: Dr. Zook, Dr. Kingsley, and Dr. McGrath.

Dr. Paul Good, Secretary of the Committee on Education, Chamber of Commerce of the United States, with Dr. Kingsley and the Commissioner.

Dr. William G. Carr, Secretary of the Educational Policies Commission, and Dr. Charles A. Thomson, Director, UNESCO Relations Staff, Department of State, talk with Commissioner McGrath and Dr. Kingsley.

The new Commissioner is greeted by Dr. Willard E. Givens, Executive Secretary, National Education Association.

chiefly the task of the schools. But if they are to discharge their responsibilities fully the States must be helped financially by the Federal Government. The President of the United States, recognizing this need for Federal aid to education, said in his recent budget report to the Congress that . . .

Although the Federal Government is engaged in this broad range of educational activities, we are not yet assuring all the children of our Nation the opportunity of receiving the basic education which is essential to a strong democracy. . . . Many States are finding it difficult, even with high tax rates, to pay adequate salaries or to take other corrective measures. It is therefore urgent that the Congress enact legislation to provide grants to the States in support of a basic minimum program of elementary and secondary education for all our children and for all youth.

"We in America have something unique. I don't mean wealth or power, or any material thing. I mean the part of our democracy that is still largely a dream—but a very, very real one. I mean the ideal of equal opportunity.

"We all know that it hasn't been achieved. Millions of children have the cards stacked against them merely because their parents happen to be poor, or because they happen to be born in the wrong part of the country. Millions more are denied equality of opportunity for purely arbitrary reasons—race or color or religion.

"But for all this, we *do* cling to the ideal. We firmly believe that every individual should be encouraged to win the highest reward he can, on merit alone. And regardless of all our shortcomings, this *is* our standard. It is our greatest asset, and one that no other great nation has ever had.

"By the same token, our most important piece of unfinished business is to measure up to that standard—to achieve our ideal. And the indispensable key to final success is the assurance to every American child of adequate educational opportunity. Give him that, and he will do the rest.

"That is the goal Dr. McGrath will strive toward as United States Commissioner of Education. And he will have every ounce of encouragement and support that I can give him."

—Message from Oscar R. Ewing, Federal Security Administrator

It has become the fashion to speak of the crisis in education. So many of us use the phrase that I am afraid it is losing its meaning. Nevertheless, I cannot let this opportunity pass without referring to it again. I feel it my duty to warn the people of the United States of America that bad as the crisis is today, it will be many times as bad in 5 years unless the Nation acts vigorously. We are now in a position in the United States where we cannot even maintain our present educational advantages. We are in the position where we can only go backward unless we go forward. We can only go forward with the aid of Federal support.

Some will say that Federal aid will lead

to Federal domination and result in Federal control of the thinking of our citizens. I deny this. The tradition of local control of education is firmly established in America—I believe in it. I have no fear that the people of the land would ever let it be destroyed.

If there is any threat to local initiative and responsibility, it is not from a grasping Federal Government. It comes from the increasing deterioration of our educational system itself, through financial starvation. We who favor Federal aid are agreed that it should flow from Federal agencies directly to established authorities within the several States, the allocation of such funds to be made in terms of local needs and local policies. Adequate legislative safeguards can be provided to protect local institutions

(*Continued on page 14*)

Commissioner McGrath with Committee of Chief State School Officers. Left to right: Harry V. Gilson, Associate Commissioner of Education, New York; Dean M. Schweickhard, Commissioner of Education, Minnesota; Clyde A. Erwin, Superintendent of Public Instruction, North Carolina (President of National Council of Chief State School Officers); A. R. Meadows, State Superintendent of Education, Alabama; Commissioner McGrath; Hubert Wheeler, Commissioner of Education, Missouri; Edgar Fuller, Executive Secretary, National Council of Chief State School Officers; John H. Bosshart, Commissioner of Education, New Jersey.

Rall I. Grigsby, Acting Commissioner of Education since the resignation of Commissioner John W. Studebaker in July 1948, who made the following statement in presenting Dr. McGrath:

Mr. Kingsley, Distinguished Guests, Friends and Colleagues in the Office of Education:

I deem it both an honor and a real pleasure to have the privilege of presenting to you the next Commissioner of Education, the Honorable Earl James McGrath. Dr. McGrath is the eleventh in the line of illustrious citizens who have held this high educational office.

The first Commissioner, Henry Barnard, was appointed in 1867. It may be interesting to note, for purposes of continuity, that his first annual report dealt at length with the subject of Federal aid to education—in this case the management of funds derived from land grants by the Congress to promote education in the States.

The second Commissioner was General John Eaton. Appointed in 1870, he held office for 16 years. During that period the administration of education for the Territory of Alaska was made a function of the Office—where it remained for several decades.

The third Commissioner was Nathaniel Dawson. He held office from 1886 to 1889. Colonel Dawson was a lawyer of distinction and stressed administrative efficiency in the affairs of the Office.

The fourth Commissioner, William T. Harris, 1889 to 1906, was an educational philosopher of distinction. He it was who strengthened the program of the Office in the comparative study of foreign school systems.

Next came Elmer Ellsworth Brown, appointed by Theodore Roosevelt in 1906, who did much during his 5-year term of office to build up the professional library of education and to expand the Office program of publications and of school surveys.

Sixth Commissioner was Philander P. Claxton, who served from 1911 to 1921. Among other things Dr. Claxton had a large part in the initiation of American Education Week, establishment of the Federal Board for Vocational Education, and the publication of the official journal of the Office, known as SCHOOL LIFE.

The seventh Commissioner, John J. Tigert, served for 7 years—1921 to 1928. His term of office saw developments in Office sponsorship of important educational conferences and field services.

The eighth Commissioner, 1929–33, was William John Cooper, who directed the conduct of three national surveys—Teacher Education, Secondary Education, and School Finance.

Succeeding Commissioner Cooper was Dr. George Zook, the ninth to hold the office. Dr. Zook served but 1 year before resigning to become head of the American Council on Education.

The tenth Commissioner, John Ward Studebaker, took office in 1934, shortly after the old Federal Board for Vocational Education had been transferred to the Office. The 14 years of Dr. Studebaker's incumbency witnessed increased leadership by the Federal Office in matters of adult civic education, radio education, vocational guidance, and school administration. During the war years the Office was responsible under his leadership also for direction of the vocational training of some 14 million war workers by the vocational schools and colleges of the States.

And so, Dr. McGrath, I welcome you, as the eleventh Commissioner of Education. You are joining an illustrious company of leaders in the promotion of the cause of education. I have the honor, sir, to pledge to you the loyal support of the members of the relatively small but capable staff of the Office of Education as you undertake your challenging duties; and to convey to you, both personally and on their behalf, sincerest wishes for your success and high achievement.

School children help unload a sodium fluoride demonstration unit at the John Marshall School, Arlington, Va., where 313 children received full treatment.

Sodium Fluoride Goes to School

By V. R. Sill, Information and Education Specialist, Division of Dental Public Health, Public Health Service, Federal Security Agency

This article will help SCHOOL LIFE readers keep abreast of the latest great advance in preventive dentistry—applications of sodium fluoride to the teeth of school children. It was prepared at the request of the Office of Education by the Division of Dental Public Health of the Public Health Service, Federal Security Agency, and is a popularly written condensation of a number of research bulletins.

WHEN the children entered the schoolroom they were just a little nervous. There was Johnny, tow-headed, freckled, and noisy, now suddenly very quiet, his fingers on both hands crossed. There was Mary, big-eyed, and giggling at the boy ahead of her.

They sat down in the back of the room with 20 other children and waited, looking at the dental chairs facing the windows in front. First, Johnny climbed in the chair. The dentist leaned over, inspected his teeth, passed him on to the next chair. A young woman told him to hold his head back, then cleaned his teeth. It tasted good. Next she put cotton rolls around his teeth, dried and swabbed them with a clear, odorless liquid. He couldn't taste it and it didn't seem to hurt.

Johnny waited with his mouth open until the stuff dried. Turning his head awkwardly, he noticed that the other chairs had filled up. Mary was having her teeth inspected and another girl was getting her teeth cleaned. It was a little like an assembly line: First the inspection, then the cleaning and drying, then the application, and finally another drying. They were working quickly. The whole thing, Johnny guessed, would take little more than 10 minutes.

Then the young woman removed the cotton rolls from his mouth. Gosh, it felt good to be out of the room. He went back to class; whistling softly to himself. They'd said the liquid would give him better, stronger teeth. That he would not have as many cavities and toothaches.

30,000 More

That morning and afternoon hundreds of other children in many schools throughout the country received the same kind of inspections and applications John had. In a single month, probably more than thirty thousand children would climb into dental chairs. Then their teeth would be inspected, cleaned, and given applications of the stuff that looked and tasted a little like water. In a year close to a half million children in hundreds of schools would have the antidecay mixture swabbed on their teeth.

Probably none of the youngsters thought very much about it, but they were participating in a demonstration conducted by a

Public Health Service team under the immediate supervision of their State health department. The demonstration was on ways to reduce dental decay through the use of a new, almost revolutionary discovery. This discovery, the clear, odorless stuff the young woman had had in a small glass by her side, will reduce new dental decay by about 40 percent.

The story of this chemical mixture, called sodium fluoride—how the cooperation of local dentists and school teachers and PTA's is helping to bring it to the attention of communities, how fluoride was first discovered in a remote little town in Arkansas as the cause of an ugly discoloration, and how it was found to reduce decay—reads a little like an adventure tale. If you substitute scientists for detectives, tooth decay for criminals, and sodium fluoride for the hero, you have an exciting mystery story.

51 Years Ago

The story starts back in 1898 when Crichton-Browne, an Englishman, had what was then considered a half-crazy idea. He maintained that a lack of fluoride in the diet might have something to do with the tooth decay in the British Isles. At the time, Crichton-Browne was smiled at or ignored. Soon, his brainstorm was shrugged aside and forgotten.

A little later, halfway round the world in Colorado Springs, a group of dentists was puzzling over the cause of a brown discoloration of the teeth called "Colorado brown stain." For years they had wondered why it was that people living in some communities had the ugly spots. The stain was found on the teeth of people who had spent their childhood in those communities. These people never lost the stain. But adults who moved into the same communities never acquired it.

The dentists in Colorado Springs decided to investigate. They wanted the culprit, the villain in the piece. Not far from Colorado Springs was a community in which no one had the stain. Mottled teeth simply didn't exist there. Why?

All conditions in the community, they found, were pretty much the same as those in Colorado Springs with one exception. That exception was the water supply. Colorado Springs obtained its water from the Pikes Peak watershed; that of the other community was from a different source. Something in the water, these men reasoned, must cause the brown stain. But what?

They tasted the water, had analyses of it made, but still no clue. The water in the two communities seemed precisely the same.

Searching for a Clue

For 20 years Doctors Frederick S. McKay and G. V. Black investigated, searched the world for a clue. Colorado brown stain occurred in places other than Colorado. McKay and Black traveled far and wide to afflicted areas, analyzing and trying to puzzle it out. The water supply was changed in a number of places. The new teeth grew in sound and without stains. But always the question "Why?" eluded the researchers.

Then in 1928 a call came for Dr. McKay to go to Bauxite, Arkansas, apparently on a problem of brown stained teeth. Near Bauxite, he found, was a community where none of the children had mottled teeth.

Dental surgeon in charge of demonstration team dries the children's teeth before applying sodium fluoride.

The wells in Bauxite were cut off. Water from the neighboring town was used. Later, he examined the new teeth of the younger generation. They had grown in white and without stain of any kind.

As he had done countless times before, he took samples of the water, prepared them for shipment to a laboratory. But this time, since the town of Bauxite was built around the activities of a large corporation with the most modern laboratories at its command, he sent them to those laboratories. They ran their tests. More or less simple routine tests, but made with a precision impossible in the other laboratories. The answer came back. The water of Bauxite contained relatively large quantities of fluoride.

The Answer?

McKay could hardly believe he had found his answer. Frantically he obtained more samples from other towns afflicted with mottling. He shipped them to the same large laboratory. The answer was the same: The water contained fluoride in unusually high amounts. After 23 years of research the cause of "Colorado brown stain," now known as "dental fluorosis," was found. It was a long, hard road. However, with it he had noted that apparent freedom from dental decay was associated with brown stain.

But ugly, spotted teeth were a pretty high price to pay for less decay. The problem became one of how to get fluorine out of water supplies, rather than how it could be used to prevent decay.

Many research workers and dentists felt that only excessive quantities of fluoride in water could produce mottling, that lower concentrations might not stain the teeth.

Several scientists decided to find out, among them Dr. Trendley Dean of the Public Health Service. He and his associates wanted to find the exact amounts of fluoride that caused mottling. Dean finally found the answer—more than one part of fluoride per million parts of water. At one part per millions mottling was not apparent and

there was only a third as much decay as found in communities with fluoride-free drinking waters.

Another research worker, Dr. B. G. Bibby, then of Tufts Dental College, Boston, was fascinated by the findings of his fellow scientists. It would be difficult to add fluoride to the Nation's water supply; besides it would take years and years of research to establish the soundness of such a procedure. But if teeth absorbed fluoride, as he believed they did, a solution applied to the teeth might reduce decay.

To Find Out

There was one way to find out. He made arrangements with the Brockton schools and set out on his search. One hundred children were selected for the trials, all except two of them being between 10 and 12 years old. Then, after cleaning the teeth he dipped cotton wool into a nontoxic solution and swabbed them, keeping the teeth wet for several minutes with repeated applications of sodium fluoride. One quadrant of the mouth was wetted with the mixture, the opposite quadrant was left untreated to serve as a control. He repeated the procedure at 4-month intervals until he had made three applications.

Bibby must have had difficulty controlling his excitement when he made his final examination. Carefully, painstakingly he probed for cavities. At the time of the first application the number of cavities in both treated and untreated quadrants were about the same. A year later, he found 61 new cavities in the control quadrants, but only 33 in the treated quadrants!

At about this time, other researchers, including Dr. John W. Knutson of the Public Health Service and Dr. Wallace D. Armstrong of the University of Minnesota were pursuing the same clues that led Bibby to his discovery.

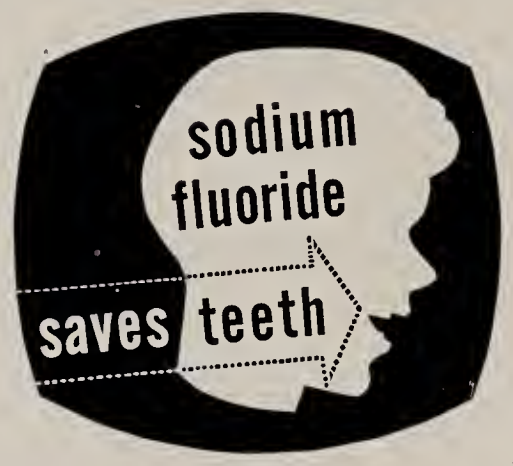
Knutson and Armstrong selected three Minnesota towns for their studies: North Mankato, Arlington, and St. Louis Park. They chose 337 school children between 7 and 15 years old and cleaned their teeth. They made a series of applications of a 2-percent solution of sodium fluoride to half of the teeth of each child. The other half were left untreated. About a year later, the scientists returned and examined the treated and untreated teeth. They found the teeth which had received fluoride applications were better than—and just as white as—the untreated teeth. The treated teeth had 40 percent less decay than the untreated!

Skepticism

It looked good. Indeed, it looked like the most important advance in preventive dentistry. But was it? Researchers were determined to find out. More children in more towns received the applications. For several years they made applications and examined the treated and untreated teeth. Always the results showed less decay in teeth receiving the sodium fluoride.

Still, some dentists were skeptical. They had seen other seemingly miraculous discoveries sweep across the dental horizon, then burn up and vanish like a falling star. They had to be careful. You can't take chances when you're dealing with the health of a child. Too much is at stake.

Then a hundred scientists and researchers and dentists meeting at Ann Arbor, Michigan, investigated the sodium fluoride studies. They analyzed the technique.



They investigated the samples, the solution, the reasoning in back of the procedure. They weighed the results, probed for possible sources of errors, and came up with the conclusion: *A solution of sodium fluoride properly applied to the teeth of children will reduce new dental decay.*

For Routine Use

The American Dental Association investigated and agreed that the method reduced decay. "Fluoride therapy," this national organization of professional dentists said, "should be used routinely in private dental offices and in school and community health programs."

Other organizations endorsed the use of topically applied sodium fluoride. The National Congress of Parents and Teachers said, "We feel that sodium fluoride applications should be made available to all the children of America."

But only a few people throughout the country knew of the discovery. Before every child could benefit it would have to be brought to the attention of parents, State and local health departments, school officials, dentists, and community leaders. The Public Health Service would have to take the discovery out of the laboratories and clinics. It would have to get it to the people of the country.

Federal Aid

In 1948 Congress made $1,000,000 available to the Public Health Service to bring the method to the attention of dentists, health officials, and others. The appropriations committee determined that field demonstration units should be established and operated in each State with the cooperation of State health departments, State dental societies, and other interested organizations.

These units or teams are mobile and are set up in key localities to assist in developing permanent local sodium fluoride programs and to demonstrate the technic of applying fluoride to the teeth of children.

The approved technic calls for four applications at intervals of 2 to 7 days. Ideally, this first series of four applications should be made when the child is 3 years old. The series is repeated three more times as new teeth come in, or at about ages 7, 10, and 13. However, every child should receive the applications as early after 3 as possible. From then on, sodium fluoride applications should be made in accordance with the tooth eruption pattern of the individual child. It is important to protect new teeth as they come in, before they can be attacked by decay.

But the demonstration teams now operating in 28 States, the District of Columbia, Alaska, Hawaii, and Puerto Rico can bring sodium fluoride to only an infinitesimal part of the total child population. Only through the development of continuing local community programs can the benefits of this first great advance in preventive dentistry be brought to all of the Nation's children.

Educators and school superintendents can be a potent force in helping to organize such community projects on a State-wide basis. With their assistance and aggressive leadership it will be possible to establish local programs to bring the benefits of fluoride applications to all children.

Child Development in High-School Home Economics Programs

by Edna P. Amidon, Chief, Home Economics Education Service

THE NATIONAL CONFERENCE on the Teaching of Child Development in High School Programs in Home Economics, recently held in Washington, D. C., worked in three principal areas: Curriculum, In-Service Training, and Pre-Service Training.

In the work on curriculum the teaching of child development in high-school home economics programs was considered from many angles. The objectives for teaching child development at the high-school level, set up by the conference, represent long-range purposes. They were stated as follows:

To Help a Student

1. See that many areas of knowledge and living contribute to his understanding of human relations, including other parts of the high-school program.
2. Grasp the whole range of human development through experiences with a range of ages.
3. Understand that all is not known about behavior, although more knowledge is being acquired all the time.
4. Develop respect for children as persons.
5. Accept, enjoy, and be interested in children.
6. Understand himself, including the effects of his behavior on others.
7. See himself in relation to others in his family.
8. Gain appreciation of values in family living for him.
9. Understand courtship, marriage, and parental relations.
10. See the reasons for taking an active part in promoting community understanding of individual and family needs.
11. See homemaking skills as means to ends, not ends in themselves.

The conference group developed materials dealing with methods of working toward these objectives, including some ways for high-school students to have first-hand experience with children. These materials have been mimeographed and distributed to State and city supervisors of home economics, and to heads of home economics in colleges and universities and teacher trainers in all the States.

Members of the conference group felt strongly that adequate opportunities for continuous in-service education in child development should be provided for all home economics teachers. The following excerpts are from the report of the conference dealing with in-service teacher training.

From the Report

"The rapid march of events in the world today makes the ability to adjust to change a necessary condition of living. More than ever is it true in education that learning is a continuous process. Pre-service training of teachers today can only be considered a phase of the on-going education of those whose chosen career is the teaching of others. Especially is this true in a field like child development where new findings in research can alter in one generation the attitude toward children of an entire culture.

"The keynote of effective, on-going education in a school, a community, or a State is cooperative thinking. In all group action which may properly be considered democratic, all concerned take part, according to their different abilities, in planning, carrying out, and evaluating group activities. In in-service teacher education in child development this may mean working with almost any number and variety of people, depending on the nature of the project to be undertaken."

Suggested Activities

The conference felt that certain kinds of educational experiences were especially suitable for in-service training in child development for home economics teachers. Among those mentioned were workshops, informal conferences, study groups, seminars, community institutes.

Although these periodic activities have undoubted value, teachers may gain even more, the conference thought, from working together throughout the year on projects or problems of their own. Examples of such projects would be:

1. Continuing work on curriculum in child development in the high-school home economics program.
2. Cooperative planning for the teaching of child development in the total school program.
3. Cooperative evaluation of work in child development throughout a school program.
4. Cooperative study of community resources for experiences with children which might be used as laboratory in connection with the teaching of child development in high-school programs of home economics.
5. Cooperative development of materials needed for teaching child development, such as bibliographies, resource files, poster displays, and other exhibits.
6. Evaluation of films and other visual aids and the preparation of annotated lists of such materials with notes on sources, prices, etc.
7. Cooperative development of meetings (parent, teacher, and parent-student-teacher) having child development themes.
8. Participation by home economics teachers in community activities involving children and/or child welfare.
9. Making of community studies and surveys concerning children.
10. Work with children of different ages outside of the classroom—in a Sunday school, a day nursery, or a playground.
11. Participation in planning and carrying on small conferences in which administrators, teachers, parents, and/or student discuss informally problems relating to the work in child development in the high-school home economics program.

Methods

The conference felt strongly that methods used in in-service training programs should be methods which teachers could well use in their own work. Special emphasis was placed, in conference discussions, on some of the newer techniques designed to give teachers and pupils maximum opportunity for choice-making, creative activity, and self-evaluation.

Materials from the conference dealing with pre-service and in-service training of home economics teachers have also been sent to leaders in home economics throughout the United States.

Loan Packets

A LIMITED number of loan packets of Administrative Manuals for use by high school principals and faculty committees is now available from the Office of Education. The idea of providing each teacher with a written statement of his relation to the organization of the school seems to be growing rapidly. To assist schools in developing such statements is the purpose of this loan packet.

In general, the packet materials pertain to high schools with over 500 pupil enrollment. Address requests for the loan packet to Division of Secondary Education, Office of Education, Federal Security Agency, Washington 25, D. C.

Suggestions on "T

CITIZENSHIP education is not new to educators. The major purpose of public secondary schools in this country, from their earliest origins on, has been that of developing citizens who are capable of living under and contributing toward our democratic way of life. Nor has that purpose changed. The war record of young men showed without doubt that American schools developed a deep-rooted loyalty and patriotism to our institutions. It remains to be seen whether school programs can do as well in providing youth with the necessary skills to solve peacetime problems so fraught with prejudices and selfishness, and complicated by unusually grave domestic challenges and international responsibilities. Now is not too soon for a rededication by schools to this, their chief task.

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HOW do you "teach" democracy? Obviously, there is no single program or simple answer. Were it that easy, there would be less talk about it and more doing. There seems to be agreement that education for democratic citizenship must operate within a common framework that yet allows details to be worked out in each classroom. Only in this way can the citizenship needs of individuals, in respect to their present and future living in a democratic society, be met.

The social studies will have to be taught principally from the point of view of developing better citizens. School programs must face American civic life realistically; political activities should be treated neither sentimentally nor cynically. Those who would teach citizenship need first to understand it and practice it themselves. Their own attitudes must be rooted in democratic principles.

This article calls attention to and briefly discusses specific phases of an over-all secondary school program of education for democratic citizenship, and identifies with each a few related readings.

What equipment does Democracy require of citizens?

An identification of the equipment that an American citizen needs in order to live effectively in his democratic society is not a simple matter. The issues facing him are much more numerous and complex than in an earlier age. Living in a world characterized by accelerated change demands of him far greater alertness and service to his country than were required of his forebears. To strengthen American democracy through education calls for school people to examine what they are doing that affects the ultimate behavior of the adult citizen. If, as sometimes asserted, the citizen fails to measure up to his responsibilities, then education must shoulder at least part of the blame and find new ways to help him live up to his obligations.

In general, the American citizen must be informed—about the growth and struggles of a great nation to improve itself, the operation of his government, and the conditions underlying current problems on which he must make decisions.

He must not only know these facts, but also must understand how they affect the social, political, and economic aspects of his daily life. His understanding of the basic principles of democracy colors his attitudes so that he is loyal to the best interests of his country and is willing to make sacrifices to defend its ideals. He desires to share in the management of a nation which is concerned with the welfare of every man, woman, and child.

He is appreciative of his rights, and accepts with them their requisite duties. He recognizes the supreme worth of every individual, and is guided in action by his realization that democracy grants him freedoms in so far as they do not detract from the freedoms of others. Among his needed skills are those of critical thinking, group processes, communication of ideas, political action, and leadership in areas wherein he is qualified to give it.

Many people have thought about the qualities of citizenship. A reading list on the subject may well include:

Citizens Federal Committee on Education, Office of Education, Federal Security Agency. ***Education for a Free Society.*** **Washington, D. C.,** ***School Life,*** **February 1948, Vol. 30, No. 5, p. 12.**

Denver University, National Opinion Research Center. ***The Public Looks at Politics and Politicians.*** **Denver, Colo., The University. (University of Denver Bulletin No. 2).**

Eldridge, Seba. ***Public Intelligence;*** **a study of the attitudes and opinions of voters. Lawrence, Kans., University of Kansas, Department of Journalism Press, 1935. 101 p. (Bulletin, Vol. 36, No. 7, Humanistic Studies, Vol. 5, No. 1).**

Mahoney, John Joseph. ***Needed-Civic Education.*** **Doctor's thesis, 1944. Harvard University. 794 p. typewritten.**

Overstreet, Bonaro W. ***Freedom's People—How We Qualify for a Democratic Society.*** **New York, Harper and Bros., 1945. 115 p.**

Russell, William F. ***and*** **Briggs, T. H.** ***The Meaning of Democracy.*** **New York, Macmillan Co., 1941. 413 p.**

Wilson, Howard E. ***Education for Citizenship.*** **New York, The Regent's Inquiry. New York, McGraw-Hill Book Co. Inc., 1938. 272 p.**

How do schools make better citizens?

While there is general agreement among educators as to the desired goals of civic education, differences often arise when methods for realizing them are chosen. How do you "teach" democracy? Certainly, it is not principally through the memorization of the Constitution of the United States section by sec-

aching" Democracy

BY EARL HUTCHINSON . FIELD REPRESENTATIVE . DIVISION OF SECONDARY EDUCATION

tion, nor by learning the names and dates of the administration of each President of this Nation. Neither do typical classroom procedures of assign, recite, and test attain the objectives. Only habits of nebulous practical application are formed in such a manner.

Rather, good citizenship is taught in a variety of ways. It permeates the whole school system. It develops and flourishes in a democratic climate where students work together on realistic problems. Such a description should not imply a confused, let-the-other-fellow-do-it situation. Education for citizenship does not consist of two uncoordinated and unrelated programs: one an immediate, challenging, but somewhat haphazard program of participation; and the other a scholarly, but relatively abstract program of academic studies. Rather, the best of the two should complement each other and gain vitality from the other. Both classroom and out-of-class activities are part of the school curriculum of civic education, and the two should become almost indistinguishable.

Citizenship studies should not be taught in a vacuum through the mere learning of textbook material. Instead, pupils should share in the selection of pertinent problems affecting their daily lives and study them, reaching back into the roots of the past to find out what caused today's dilemma. Management-labor relations, for example, is a problem which affects a vast segment of our population. Most students recognize that it has a direct bearing on the welfare of their own homes and on their personal well-being. In exploring this subject, they learn how free enterprise, kept in balance by bargaining between unions and industry, has provided Americans with an ever increasing standard of living and improvement in working conditions.

Meaningful participation is a requirement in the democratic process. One's civic education consists of becoming practiced in those skills one will use. Learning just for learning's sake is a wasteful procedure. School opportunities for practicing democracy should be examined in terms of how specifically they contribute to the behavior patterns of successful citizens. It must be remembered that good citizens are a long time in the making.

Some ideas of how they are developed may be secured from the following:

Abell, Marietta, *and* Anderson, Agnes. *Forward with Democracy*, a collection of up-to-date democracy programs for high schools. Minneapolis, Minn., The Northwestern Press, 1941. 102 p.

Herrick, Theral T. *School Patterns for Citizenship Training.* Ann Arbor, Mich., University of Michigan, Bureau of Educational Reference and Research, 1947.

Houdlette, Harriet A. *Growing Into Democracy.* Washington, D. C., Office of Education, Federal Security Administration 1948.

***Making Democracy Work and Grow.* Washington, U. S. Government Printing Office. (U. S. Office of Education Bulletin 1948, No. 10.)**

National Education Association, Educational Policies Commission. *Education for All American Youth.* Washington, D. C., National Education Association and the American Association of School Administrators, 1944. p. 75–100.

National Education Association, Educational Policies Commission. *Learning the Ways of Democracy*; a case book of civic education. Washington, D. C., National Education Association and the American Association of School Administrators, 1940. 486 p.

Peters, Charles C. *Teaching High School History and Social Studies for Citizenship Training*; the Miami experiment in democratic action-centered education. Coral Gables, Fla., University of Miami, 1948. 192 p.

Democracy in and through student activities

To the student, school is his world. It is, next to the home, the major institution in his life. He remains in it for many years. If, during that formative time, he is subjected to authoritative discipline only, if he is told continuously what to do and how to do it, if his experiences are anything but democratic—two results are possible. Either he has to learn all over again the ways of democracy when he becomes an adult; or else he is so conditioned that his capacity to serve and live in a democratic society never flowers.

In contrast to typical classroom performance, most schools provide for a democratic conduct of student activities. Yet, even in student activities, discriminations do creep in—discriminations because of race, religion, nationality, and economic status. Teachers and administrators would do well to examine how democratic actually is the student life of their school. Still better would be to ask students to evaluate how democratic are their class elections, their club meetings, or their school dances. When students live together democratically, fundamental and enduring lessons have been learned.

Among sources of help are:

Brogue, Ellen B. *Student Council Handbook*, a handbook describing 361 student councils. Washington, D. C., National Association of Secondary School Principals of the National Education Association. *Bulletin*, March 1940. p. 1–184.

Fretwell, Elbert K. *Extra-Curricular Activities in High School*, Boston, Mass., Houghton Mifflin Co., 1931.

Kelley, Earl C. *Student Cooperation*; a report of student government in high school. New York, National Self-government Committee, Inc., 1941, 20 p. (Write to Division of Secondary Education, Office of Education, Federal Security Agency, Washington, D. C.)

McKown, Harry Charles. *Home Room Guidance.* 2d ed. New York, McGraw-Hill Book Co., Inc., 1946. 521 p.

McKown, Harry Charles. *The Student Council.* New York, McGraw-Hill Book Co., Inc., 1944. 352 p.

Democracy in the Classroom

Is the classroom conducted under totalitarian methods and dominated by teacher commands and directions? Or is the atmosphere in the classroom one of teachers and students cooperatively planning the work to be done and together carrying it out? Do students assume responsibility for their share of the doing?

The democratic classroom seeks cooperative action for the common good, the welfare of each individual, the participation of all according to their abilities, the application of informed intelligence, a freedom for study and discussion of controversial subjects, and an acceptance of responsibility for individual and group action.

The democratic process in the classroom is sound pedagogy as well as good citizenship preparation. The democratic classroom induces a greater eagerness to learn than does the autocratic one. It provides daily practice in the application of democratic principles. Only in such a setting can lasting habits of desirable democratic relationships be developed.

Teachers will receive valuable suggestions from:

Association for Supervision and Curriculum Development. ***Group Planning in Education.*** **Yearbook 1945. Washington, D. C., National Education Association.**

Giles, Harry H. ***Teacher-Pupil Planning.*** **New York, Harper & Bros., 1941. 395 p.**

Junior Town Meeting League. ***Teaching Controversial Issues.*** **Columbus, Ohio, 1948. 32 p.**

Miel, Alice. ***Changing the Curriculum,*** **a social process. New York, D. Appleton-Century Co., Inc., 1946. 242 p.**

Participation in Community Experiences

Citizenship education should not be limited to student activities or classroom efforts. Too often, the school building is surrounded figuratively by a thick brick wall hermetically sealing it against contacts with the community. When the school is so insulated, fewer civic values are carried over into adult life. Good citizenship education utilizes the community as a laboratory of the school. When students share with adults the solving of problems of mutual concern, they slip more easily and sooner than otherwise into effective adult citizenship.

Devices to tie together the school and the community are numerous but are not employed universally or frequently enough. Among the most common are: Student surveys of occupations, health, politics, housing, taxes, recreation, zoning, and traffic; community councils of students and adults to solve problems involving youth; student-adult discussion groups on local, State, and national problems; coordinating councils including youth to mobilize the services of governmental and nongovernmental agencies in joint attacks upon local problems; work experiences for youth; and youth service projects to the community.

These readings may help teachers expand their school-community relationships:

Brunner, Edmund de S. ***How to Study a Community.*** **New York, Columbia University, Teachers College Record, March 1941.**

Covello, Leonard. ***The School at the Center of Community Life in an Immigrant Area.*** **New York, Appleton-Century Co., 1938. From the "Community School," edited by Samuel Everett.**

Wallace, Whilden, Heitzberg, James, *and* Sims, U. M. ***The Story of Holtville.*** **Nashville Tenn., Vanderbilt University, 1944. 191 p.**

Hanna, Paul R. ***Youth Serves the Community.*** **New York, D. Appleton-Century Co., 1936. 303 p.**

Leonard, John Paul. ***Work Experience in Secondary Education.*** **National Association of Secondary School Principals Bulletin, 28: 29–35, May 1944.**

Schools and Community Resources. **New York City, American School Publishing Corporation, 1948. (Reprint from School Executive Magazine, January 1948) Order from John E. Ivey, Jr., Division of Research Interpretation, University of North Carolina, Chapel Hill.**

Evaluation of a School's Citizenship Program

In a democratic system, who should evaluate the effectiveness of a school's citizenship education program—and how can it be evaluated? Surely, democratic principles require that all concerned should have a share in appraising it. That means students, parents, other lay citizens, and teachers together determine the quality and success of the program.

On what basis? It appears logical to evaluate a training program in terms of the end product. In this case, the product is capable citizens for American democracy. If the citizens of a community keep themselves informed on current issues, have skills of critical thinking, cast their votes intelligently and on every possible occasion, work unselfishly for the general welfare, constantly strive to eliminate their racial and religious prejudices, obey the laws, give such leadership as they are capable of for good government, and perform the many other obligations of the good citizen—then citizenship education has been effective. How well schools prepare for citizenship will have to be judged to a considerable extent in the long run by the quality of American citizens. The short term evaluation is concerned with how youth conduct themselves now in the school and community. Both appraisals are necessary, for the latter leads to the former.

The school must give community leadership to democratic living. Problems related to democratic behavior are not generally realized or recognized by most people. Citizens as a rule do not do much thinking about democracy as such. Therefore, the school may need to assume the initiative in drawing them together for surveys, discussions, and action programs. The school will not tell citizens what they should do or not do; rather it will expedite their getting together, arouse interest in making democracy work and grow, and solicit their cooperation in vital school and community programs for strengthening democratic citizenship. Parents may need help in determining how democratic is their home or how much they contribute to the democracy level of the community. Local organizations may need help in examining their purposes and programs in respect to democratic principles. Teachers will need to appraise the democratic climate of their school, their methods of teaching, the growth of children in democratic attitudes, and the realness of the school program.

Some helps on evaluation may be secured from:

Beery, John H. ***Current Conceptions of Democracy.*** **New York, Teachers College, Columbia University, 1943. 110 p. (Contributions to education, No. 888)**

Fortune Magazine. ***How Effective is Citizenship Education,*** **a survey of public opinion. November and December 1942.**

(Continued on page 3 of cover)

New College Radio Directory

FOR THE first time in two years, the Federal Radio Education Committee, in response to continuous demands, has revised its *Directory of College Courses in Radio and Television* for the school year 1948–49. It has been prepared by F. R. E. C. Secretary, Gertrude Broderick.

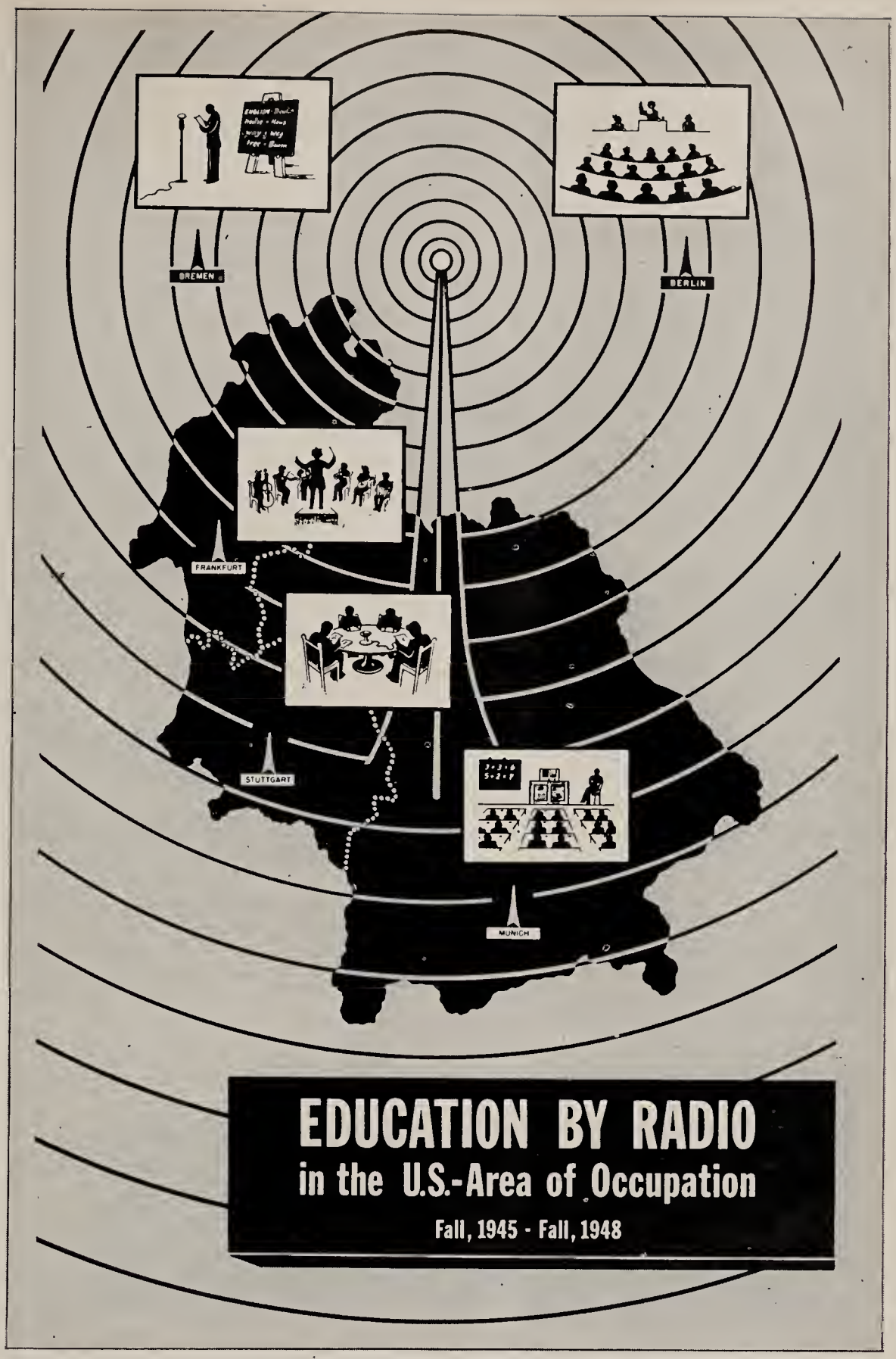
Arranged by States, the directory is intended as a guide to students in locating institutions which are most likely to meet their needs. It is based on data submitted by colleges and universities which appear on the list of accredited institutions of higher education in the Office of Education's *Educational Directory*.

The directory endeavors to present a fair picture of the extent of radio and television training in each institution. It shows range of courses in proportion to size of teaching staff and amount of available equipment for laboratory purposes.

Out of a possible 1,700 colleges listed, 410 reported course offerings, a gain of 25 percent over the previous listing in radio and television. A total of 46 institutions offer degrees in radio, 11 of them in the engineering field and the remaining 35 in the arts and sciences, journalism, and education. Included in the 35 are the 9 institutions which now comprise the charter membership of the newly organized University Association for Professional Radio Education.

Hundreds of students not primarily concerned with training for radio as a career are gaining practical experience in broadcasting through the 218 radio workshops that were reported. In addition to classroom training in radio speech and production, there is opportunity in the workshops for participation in campus broadcasts which are done on a more or less regular basis. Nine institutions listed special radio courses for those training for the ministry. Courses in teacher preparation in the utilization of radio programs are listed by 20 universities.

Greatest increase appears in the numbers of television courses. A total of 33 schools reported courses in television programming and an almost equal number included television engineering courses. According to Dr. Franklin Dunham, Chief, Educational Uses of Radio, Office of Education, "the coming of television alone heralds a new epoch wherein its uses as an educational tool call for the development of new skills both in production and utilization."



Copies of the Directory are available on request from the Federal Radio Education Committee, Office of Education, Federal Security Agency.

For Atomic Energy Education

NOW AVAILABLE from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., is a SCHOOL LIFE reprint, *Atomic Energy Education*, price 5 cents. This reprint includes the articles on the educational implications of atomic energy which appeared in the March 1949 issue of SCHOOL LIFE. It can be used as a companion piece to the special supplement to the March SCHOOL LIFE *Atomic Energy Here To Stay*, also available from Superintendent of Documents, price 10 cents.

Enrichment of Pupil Experiences Through Industrial Arts

by John R. Ludington, Specialist for Industrial Arts

FOR AT LEAST 50 years good schools have included more and more guided opportunities for pupils to think in terms of the reality of life in addition to abstractions and symbols. This tendency to emphasize direct-pupil experiences, such as sharing and participating in real-life activities while seeking solutions to individual, social, and economic problems industrial in origin gave rise to industrial arts as an area of school experience.

Conservative estimates now indicate that more than 2½ million pupils are enrolled in industrial arts courses taught by approximately 30,000 industrial arts teachers. One goal of these teachers is to give industrial arts, as a phase of the school program, a place in education commensurate with the importance of industry in community life outside of the school. Here, learning experiences are not only related to the meeting of certain practical needs and problems of the consumer and worker-citizen in daily life, but to an understanding and appreciation of common social and economic problems in an industrial age.

Through shops, laboratories, observations, and first-hand experiences young people should be given opportunities to become familiar with the basic materials. processes, and methods of industrial production and distribution. These experiences should not be planned as specialized training but should be provided as a part of the common learning that all must have if they are to live intelligently in an age when man's power of adjustment is being taxed to the limit by technology and the machine.

There is a need to develop the abilities of pupils to construct, to explore, to invent, to investigate, to experiment, and to learn through those activities in which they can engage with success and satisfaction. For all types of pupils, from the very superior to the very inferior in academic ability, a better balance is needed between learning situations in which abstract symbols predominate and those in which the reality of life predominates.

A balanced program of industrial arts will include opportunities with a wide variety of materials, tools, machines, and processes. These are the factors which determine and condition to a great extent the nature of the social-economic order—its personal and social relationships. Because of the nature of the problems involved in modern industrial development, pupil experiences in industrial arts should be closely related to those in social studies and science.

School communities can no longer be content with a unit course in woodwork or mechanical drawing inherited from the "manual training" era in their attempt to achieve the functions of industrial arts. Woodworking and mechanical drawing cannot be thought of as constituting a complete industrial arts program, but rather as only two phases or areas which, along with others such as printing, metals, electricity, ceramics, automotives, and plastics, go to make up a total program. Industrial arts should be a medium of interpretation through a wide range of practical experience which involves both manipulation and understanding on the part of the pupil.

A balanced program of secondary education provides industrial arts experiences designed to achieve the following:

Orientation and Common Understanding

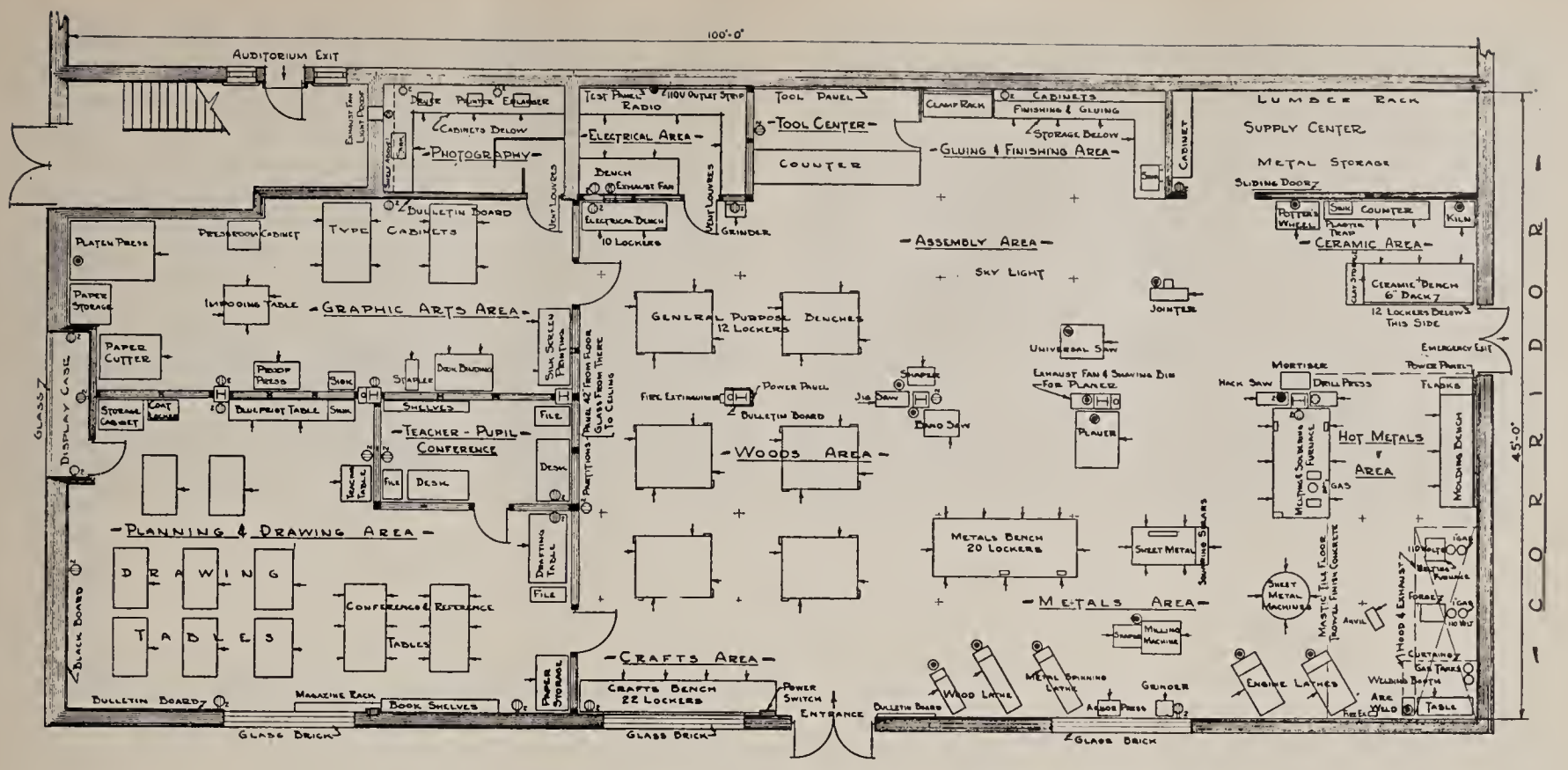
Experiences in industrial arts should help youth become better oriented in an industrial society by exploring many types of tools, materials, processes, products, and occupations. The emphasis should be upon attaining a pattern of knowledge, attitudes, habits, skills, and understandings essential to individual and group welfare in a technological society. One of the outcomes of this function is the exploration of individual interests, aptitudes, and capacities through educative experiences and materials. That individual capacities are revealed in the course of student activity has become a basic tenet in formulating and extending pupil experiences in industrial arts.

Technical Competency

Industrial arts programs should provide as many opportunities as possible for pupils to spend at least a year in a phase of work where initial orientation and exploration may help to define specialized interests that can be pursued with profit. Opportunities should be provided for pupils to participate in such activities as furniture making, radio assembling, auto mechanics, printing, boat building, drawing house plans, making a home workshop machine,

State Department Studies Made With Office of Education Aid

STAFF members of the Office of Education gave professional assistance to the States of Rhode Island and Arizona in studies recently completed of the organization and functions of the Rhode Island State Department of Education, and particular education problems confronting Arizona. The latter study included organization and services of the State Department of Public Instruction, school finance, a State-wide school trustees association, and State educational policies. Fred F. Beach, Specialist in State School Administration, served as chief Office of Education consultant for both State studies.



Floor plan of modern industrial arts general shop, Hugh Morson High School, Raleigh, N. C.

studying the occupational possibilities and requirements of certain local industries, or some similar problem in one or more areas of the industrial arts program.

Consumer Education

Industrial arts experiences can help pupils develop intelligent attitudes, understandings, and skills involved in the selection and use of the products of industry. Shops and laboratories can be used in first-hand studies of raw materials, methods of construction, relative costs of finished products, types of finishes, and techniques of home maintenance and repair.

Avocational Interests

Many pupils are interested in creative activities which involve the use of tools, simple machines, and materials as leisure-time pursuits or hobbies. Industrial arts facilities in modern schools are used to provide for a wide variety of useful and enduring recreational and avocational interests. Collection and appreciation are often involved in addition to manipulation. Increased leisure time affords not only an educational opportunity but it also becomes a liability and a responsibility with which the school must cope.

Social Responsibility

Because of the nature of industrial arts shop and laboratory activities, desirable social habits and attitudes can be developed. Here the program is concerned with helping pupils understand and formulate wholesome attitudes towards such things as integrity of workmanship, wages and hours, group effort and responsibility in production, safety, conservation of natural resources, industrial legislation, and other related social problems.

Not Isolated

Any consideration of learning experiences such as those mentioned in attaining the functions described here draws attention to the integrating relationship which industrial arts has with other areas in the school. In a very real sense industrial arts is closely related to the physical sciences, art, homemaking, the social studies, language, and economics and cannot function effectively as an isolated subject or course.

The industrial arts teacher has unique opportunities for guiding the growth of pupils and the development of basic understandings of our way of life, which are necessary to the effectiveness of teaching in other areas of learning.

Contributions

Largely manipulative in character, yet affording content which is informative, technical, and social, industrial arts contributes to adjustment and complete living because it meets needs that are real and satisfies interests that are desirable. It contributes in a unique way to social awareness and morale. Reading, discussion, observation, and experiment are combined with participation in activities which permit the discovery and development of creative and inventive abilities. Flexibility is provided for experiences varying in complexity with the maturity, interests, and needs of pupils. The extension of secondary education through industrial arts makes possible a more balanced contribution to intellectual development, to industrial orientation, and to economic adjustment.

Guide for Teaching About UN

THE Office of Education has just issued *A Selected Bibliography for Teaching About the United Nations,* prepared by Helen Dwight Reid, Chief, European Section, Division of International Educational Relations. This 6-page mimeographed guide lists the major official and private sources of useful materials and includes an annotated list of existing study guides and bibliographies and of commentaries and textbooks, with appropriate grade level indicated. It also suggests films, recordings, scripts, and a colorful pictorial map which many teachers would find helpful. This bibliography is available upon request from the Division of International Educational Relations, Office of Education.

"Shooting" the new Commissioner for television.

Recording his first address as Commissioner for radio broadcasting.

McGRATH

(*Continued from page 3*)

and agencies from governmental domination. It should never be forgotten that an uneducated and frustrated electorate is the best prey of demagogues and dictators. Education is the road to personal and political freedom. Federal support will help to keep this road clear for all our people.

Developments of this type and other changes now occurring in American society and in the educational institutions of the country will create new issues and new problems in the world of education. These matters must be studied intensively and fully if an adequate educational program for all the youth of the Nation is to be provided. In this task many agencies and many persons will take part. The Office of Education of the Federal Security Agency, if it is to discharge its full responsibility to the Government and to the citizens generally, must exercise dynamic leadership in such studies and in such planning, using all the resources in its own staff and others elsewhere available.

Fortunately the staff of the Office of Education is already composed of highly competent and well-informed educators. It is a team which I am proud to join. I plan to use the staff as a team in the fulfillment of our common purposes. With the full cooperation of the staff and with the support and encouragement already manifested by the able and enlightened top officials in the Federal Security Agency I believe the Office of Education can become an increasingly useful and important element in American education and in American society. Whatever talents and energy I have, I pledge you, will be used to that end.

U. S. Government Film News

by Seerley Reid, Assistant Chief, Visual Aids to Education

1949 Catalog of Government Films.—Nearly 2,000 visual aids of 13 different Government agencies are listed and described in the new 52-page catalog *U. S. Government Films for School and Industry*, now available without charge from the Office of Education, Castle Films, or local visual education dealers.

The 1949 edition of this catalog is 50 percent larger than last year's and includes 626 additional motion pictures and filmstrips. Published by Castle Films, the catalog covers all the films which have been released through the Office of Education and which may be purchased from Castle Films, 1445 Park Avenue, New York 29 (contractual distributor of films released through the Office).

Included in the catalog are films of the Office of Education, Departments of Agriculture, Air Force, Army, Navy, and State, the Coast Guard, Public Health Service, Civil Aeronautics Administration, and Fish and Wildlife Service. Subjects covered include agriculture, aviation, electricity, engineering, forestry, health, home economics, Latin America, medicine, nursing, radio, safety, science, supervision, woodworking, and World War II.

Inter-American Films.—The Coordinator and later the Office of Inter-American Affairs produced and released more than 100 films during 1942–45 as part of its information program in the American Republics. With the termination of the OIAA in 1945, custody of these films was transferred to the Department of State. Now, at the request of the United States Commissioner of Education, the Department of State has made 63 of these films available for noncommercial, educational use within the United States. Write to the Office of Education for a list of these films, which can be purchased from Castle Films.

The American Scene.—The Department of State has also released through the Office of Education certain films portraying American life which were produced in 1942–45 as part of the overseas information program of the Office of War Information. Prints of the following subjects may now be purchased from Castle Films.

Subject	*Length in Minutes*	*Price*
Capital Story	20	$26.41
Cummington Story	21	27.85
Freedom To Learn	17	23.54
Hymn of the Nations	28	34.43
Library of Congress	21	27.12
Northwest U. S. A.	21	27.85
San Francisco—1945	17	23.54
Steel Town	16	22.83
Swedes in America	18	24.26
Valley of the Tennessee	30	35.85

No Loans, No Rentals.—The Office of Education does not loan or rent films. Send requests to your 16mm film library. Purchase U. S. Government films from Castle Films.

Minimum Training Standards for Counselors

by Leonard M. Miller,
Specialist for Counseling, Pupil Personnel, and Work Programs

STATE and Federal agencies and national professional groups have been considering for some years the question of minimum standards for counselors' training. Their separate deliberations finally led to recognition, a few months ago, that their problems were mutual and needed common consideration. It was agreed that great advantage would derive from agreement by all the interested groups on the basic content of adequate professional training for counselors.

As a result, the Joint Committee on Counselor Preparation met recently in Washington, D. C. It was composed of an official delegate and two technical consultants from each of several professional groups and public agencies concerned with counseling and guidance. The organizations and their representatives on the Joint Committee were as follows:

American Psychological Association, Division of Counseling and Guidance: (delegate) MITCHELL DREESE, Professor of Educational Psychology, George Washington University; (consultants) EDWARD BORDIN, Professor of Psychology, University of Michigan, and CLIFFORD P. FROEHLICH, Specialist for Guidance Personnel Training, Office of Education, Federal Security Agency.

National Rehabilitation Association: (delegate) HOLLAND HUDSON, Director of Rehabilitation Services, National Tuberculosis Association; (consultant) E. B. PORTER, Acting Chief, Guidance, Training & Placement Bureau, Office of Vocational Rehabilitation, Federal Security Agency; (acting consultant) SALVATORE DI-MICHAEL, same address.

Office of Education, Federal Security Agency: (delegate) HARRY A. JAGER, Chief, Occupational Information and Guidance Service; (consultants) CLIFFORD P. FROEHLICH, Specialist for Guidance Personnel Training, and LEONARD M. MILLER, Specialist for Counseling, Pupil Personnel and Work Programs.

State Supervisors of Guidance Services and Counselor Training: (delegate) STANLEY R. OSTROM, State Supervisor, Occupational Information and Guidance, State Department of Public Instruction, Delaware; (consultant) EDWARD C. ROEBER, Assistant Professor of Education, University of Missouri.

Veterans' Administration: (delegate) CARLOS E. WARD, Special Assistant for Planning, Advisement and Guidance Service; (consultants) IRENE G. COOPERMAN, Chief, Special Guidance Programs; CLYDE J. LINDLEY, Chief, Publications, Advisement and Guidance Service.

U. S. Employment Service: (delegate) CHARLES E. ODELL, Chief, Counseling, Selective Placement and Testing Division; (consultants) BEATRICE DVORAK and HELEN RINGE, Counseling, Selective Placement and Testing Division.

American College Personnel Association: (delegate) C. GILBERT WRENN, President, American College Personnel Association, University of Minnesota; (consultants) FORREST H. KIRKPATRICK, Dean of Students, Bethany College, Bethany, W. Va., and MARIE A. CORRIGAN, Dean of Women, Catholic University, Washington, D. C.

National Vocational Guidance Association: (delegate) LEONARD M. MILLER, Specialist for Counseling, Pupil Personnel and Work Programs U. S. Office of Education; (consultants) LEONA BUCHWALD, Assistant Director of Guidance and Placement, Department of Education, Baltimore, Md., and ARTHUR J. JONES, Professor of Education, Emeritus, University of Pennsylvania.

The writer was elected chairman and Charles E. Odell of the U. S. Employment Service was elected secretary of the joint committee. Its hard-working sessions, expedited by preliminary explorations and draft materials, resulted in complete accord on the statement of seven "core" fields of knowledge, to be acquired at the graduate level, and considered essential to preparation for professional competence in counseling and guidance work. These are:

1. Philosophy and Principles of Guidance and Counseling.
2. Growth and Development of the Individual.
3. Techniques Used in the Study of the Individual for the Purposes of Counseling.
4. Techniques in Collecting and Using Occupational, Educational, and Other Information.
5. Techniques Used in Counseling.
6. Administrative and Community Relationships.
7. Supervised Experience.

The report of the joint committee was printed and made available for distribution at the convention of the National Council of Guidance and Personnel Associations held in Chicago, April 18–21, 1949.

New Books and Pamphlets

Administration and the Pupil. By William A. Yeager. New York, Harper & Brothers, 1949. 483 p. (Education for Living Series) $3.75.

America's Educational Press. A Classified List of Educational Publications Issued in the United States With a Listing of Foreign Journals. Washington, D. C., Educational Press Association of America, 1948. 40 p. (Twenty-Second Yearbook) 75 cents.

Classified List of Periodicals for the College Library. By Guy R. Lyle and Virginia M. Trumper. 3d Ed. Rev. and Enl. to June 1948. Boston, Mass., The F. W. Faxon Co., 1948. 99 p. $3.

Communications in Modern Society. Fifteen Studies of the Mass Media Prepared for the University of Illinois Institute of Communications Research. Edited by Wilbur Schramm, Director of the Institute. Urbana, Ill., University of Illinois Press, 1948. 252 p. $4.

The Elementary School in Action. Philadelphia Public Schools, Curriculum Office, 1948. 77 p. Illus.

A Guide to Good Reading. Prepared by the Committee on College Reading. Sponsored by the National Council of Teachers of English, Atwood H. Townsend, Chairman and General Editor. New York, Hendricks House, Farrar Straus, 1948. 228 p. $2.75.

Health Appraisal of School Children. Standards for Determining the Health Status of School Children—Through the Cooperation of Parents, Teachers, Physicians, Dentists, Nurses, and Others. Edited by Dean F. Smiley and Fred V. Hein; A Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Washington, D. C., 1948. 29 p. 15 cents. (Order from: National Education Association, 1201 Sixteenth Street NW, Washington, D. C.)

Highways to Jobs for Women: How to Pick College Courses for Your Career. By Josephine H. Gerth. New York, The Woman's Press, 1948. 132 p. $3.

Libraries in Florida: A Survey of Library Opportunities in the State. Prepared by the Survey Committee of the Florida Library Association. Tallahassee. Fla., Florida Library Association, 1948. 56 p. $1. (Distributed by The School of Library Training and Service, Florida State University, Tallahassee, Fla.)

Quiz on Railroads and Railroading. 7th Ed. Washington, D. C., Association of American Railroads, 1948. 64 p. Illus. Free.

Toward Better Teaching: A Report of Current Practices. 1949 Yearbook, Association for Supervision and Curriculum Development of the National Education Association. Washington, D. C., National Education Association, Association for Supervision and Curriculum Development, 1949. 282 p. Illus. $3.

United States National Commission for UNESCO. By Howard E. Wilson. New York, The Macmillan Co., 1948. 96 p. (The Kappa Delta Pi Lecture Series) $1.75.

Working With a Legislature. By Beatrice Sawyer Rossell. Chicago, American Library Association, 1948. 82 p. $1.90.

—Compiled by Susan O. Futterer, Head, Reference and Bibliographical Services, Federal Security Agency Library.

Selected Theses

Characteristics of Certain Teachers Accepted by Graduates as Evidences of Good Teaching. By M. Adeline Olson. Master's, 1948. University of North Dakota. 134 p. ms.

Analyzes 590 replies to questionnaires given to high school and college graduates in an attempt to determine the characteristics of the "best teacher." Concludes that elements that contribute to success in teaching are: Attitude toward teaching, knowledge of mental hygiene, teaching skill, personality, teacher-pupil relations, and competence in the subject matter field.

The Effects of Birth Rate on Public School Enrollment and the Need for Teachers, 1948–1960. By Lloyd H. Elliott. Doctor's, 1948. University of Colorado. 254 p. ms.

Forecasts needed expansion in elementary and secondary school buildings, based on the present birth rate, and shows the need for training more teachers to carry the load on both the elementary and secondary levels. Points out the need for an offensive to place teaching in the group of coveted professions.

Nutrition Education in the Elementary Schools. By Elizabeth A. Lockwood. Doctor's, 1948. Harvard University. 157 p. ms.

Discusses the results of an experiment conducted in six elementary schools. Concludes that the schools receiving the most help through the media of workshops, demonstrations, personal conferences, and visual aids showed statistical evidence of improvement in the daily eating habits of their students.

Prerequisites for Teacher Certification in Physical Education in the 48 States. By Marie R. Cunningham. Master's, 1948. Boston University. 72 p. ms.

Lists alphabetically by State, the prerequisites for teacher certification in physical education. Shows that there is little agreement among State laws as to the certification requirements for teachers of physical education.

A State Program in Reading. By Anna E. McGuinniss. Master's, 1948. Boston University. 43 p. ms.

Describes the Connecticut 2-year program for the improvement of reading on all levels, including adult reading, which was designed not merely to arouse interest in reading problems but to help teachers master the necessary instructional techniques and to develop regional leadership that would lead to a continuing program.

—Compiled by Ruth G. Strawbridge, Federal Security Agency Library Bibliographer.

U. S. GOVERNMENT PRINTING OFFICE: 1949

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

Pointers on Making Good Lawns. Yearbook Separate. Reprinted from p. 302–307 of the 1948 Yearbook of Agriculture. 5 cents.

Department of Commerce

Forecasts of Population and School Enrollment in the United States: 1948 to 1960. Bureau of the Census Current Population Reports: Population Estimates. (Series P–25, No. 18, February 14, 1949.) Free.

Department of Labor

Occupational Outlook Handbook. Prepared by the Bureau of Labor Statistics. Bulletin 1949, No. 940. $1.75.

Department of the Navy

United States Navy Occupational Handbook. 1948. Prepared by School and College Relations Office. Bureau of Naval Personnel. Free.

Department of State

National Commission News. The monthly publication of the United States National Commission for Unesco. (Department of State Publication 3412) $1 a year domestic, $1.35 a year foreign.

United States National Commission for Unesco. Report of Meetings 1947. (Department of State Publication 3173) 30 cents.

Federal Security Agency

Fair Labor Standards Act Seeks to Protect Children in Agricultural Jobs. Reprint from *The Child*, January 1949. Free.

Into Childhood. Prepared by Children's Bureau, Social Security Administration. (Children's Bureau Folder No. 10, 1949) $3.25 per 100.

Workshops of Wonder. Children's Museums are Creative Laboratories of Leisure. Reprint from *The Child*, February 1949. Free.

United Nations

Selected List of Current United Nations Documents and Publications, February 1949. Lake Success, N. Y., United Nations Department of Public Information, Sales and Circulation Section. Free.

Office of Education

Printed Publications

Atomic Energy Education. Reprint from School Life, March 1949. 5 cents.

Biennial Survey of Education in the United States: Index. Free.

Education Directory. Part 3, *Higher Education.* 1949. 30 cents.

Education Directory. Part 4, *Education Associations and Directories.* 1949. 20 cents.

Education of Negro Leaders. Bulletin 1948, No. 3. 20 cents.

Supreme Court Decisions Affecting Education. Reprint from February 1949 School Life. Free.

Processed Materials

(Free—Limited Supply)

Available Publications of the Division of Secondary Education. February 1949. Division of Secondary Education.

Bibliography of Bibliographies on Atomic Energy. For Teachers, Students, and Adult Discussion Groups. Interdivisional Committee on the Educational Implications of Atomic Energy, Bibliography No. 1, February 1949.

Dictionary of Occupational Titles, 1949. Misc. 3320, February 1949. Division of Vocational Education.

FREC Directory of Colleges Offering Courses in Radio and Television 1948–49. Federal Radio Education Committee.

Getting Programs of Life Adjustment Education Under Way. Life Adjustment for Youth Series, Circular No. 252, February 1949. Divisions of Secondary and Vocational Education.

Government Monographs on Occupations. Misc. 3296, July 1948. Division of Vocational Education.

Occupational Books, 1947–48. Misc. 3286. Division of Vocational Education.

Office of Education Publications Related to Elementary Education. Selected References No. 2, Revised January 1949. Division of Elementary Education.

Requirements and High School Students' Programs. Circular No. 300, February 1949. Division of Secondary Education.

Selected References on Conservation. December 1948. Division of Secondary Education.

The Seriousness of the Public School Situation. Circular No. 249, January 1949. Research and Statistical Service.

Teaching Aids in Atomic Energy. Bibliography for Teachers. Interdivisional Committee on the Educational Implications of Atomic Energy, Bibliography No. 3, March 1949.

DEMOCRACY

(Continued from page 10)

Hutchinson Earl. *How Democratic is Your School?* A checklist on democratic practices in a secondary school — for teachers and pupils. Washington 25, D. C., Office of Education, Federal Security Agency, 1949. Multilithed.

Leonard, John Paul. *Developing the Secondary School Curriculum.* New York, Rinehart & Co., Inc., 1946. Chapters 7 and 15.

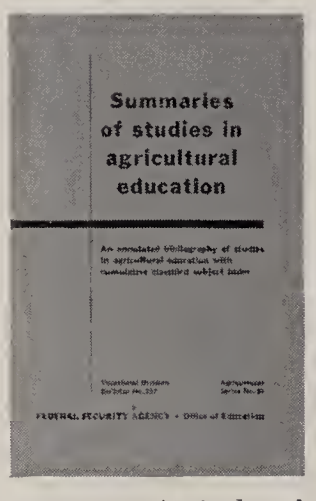
Merriam Charles E., *and* Gosnell, H. F. *Non-voting:* causes and methods of control. Chicago, University of Chicago Press, 1924. 287 p. (Studies in a Social Science)

Wrightstone, J. Wayne, *and* Campbell, Doak S. *Social Studies and the American Way of Life*, Part III, p. 231–288. New York, Row, Peterson & Co., 1942.

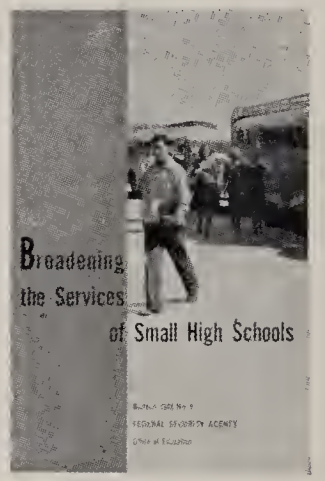
Looking Ahead

There is no more important task facing a school staff today than that of renovating its pattern of citizenship education. If every secondary school across the country adopted this year one specific project designed to strengthen a single phase of American democracy—a project democratically conceived and carried out with the cooperation of its patrons—the Nation's schools would build for themselves a reservoir of effective patterns for citizenship education.

4 NEW PUBLICATIONS of the OFFICE OF EDUCATION



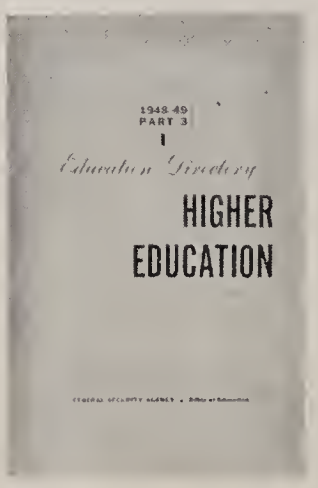
SUMMARIES of Studies in Agricultural Education, with cumulative subject index, was prepared by the Research Committee, Agricultural Education Section, American Vocational Association, and the Vocational Division, Office of Education. Voc. Div. Bulletin No. 237, price 30 cents.



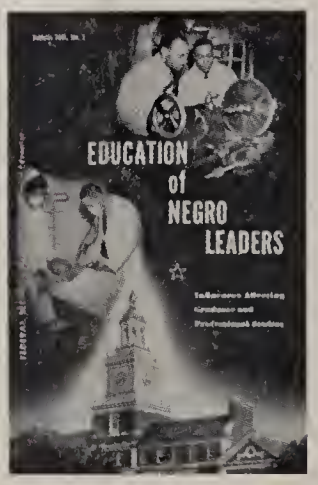
BROADENING the Services of Small High Schools, Bulletin 1948 No. 9, price 15 cents, is by Walter H. Gaumnitz, Specialist for Small and Rural High Schools, and Grace S. Wright, Research Assistant in Secondary Education. Describes programs of selected small high schools.

Order from Superintendent of Documents, Washington 25, D. C. 25 percent discount on order of 100 or more copies

PART 3, Higher Education, of the 1948–49 Education Directory, is the first part of the Directory for this year available. Prepared by Theresa B. Wilkins, Higher Education Division, price 30 cents. Part 3 gives names of all the higher education officials in the United States.



EDUCATION of Negro leaders—Influences Affecting Graduate and Professional Studies, Bulletin 1948 No. 3, price 20 cents. This publication, prepared by Ambrose Caliver, Specialist for Higher Education of Negroes, also offers some suggestions for programs of action.



4 NEW PUBLICATIONS

Volume 31 Number 9
JUNE 1949

Route to

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School Life

IN THIS ISSUE

FEDERAL SECURITY AGENCY
Office of Education

School Life ★ Official Journal of the Office of Education · · · · · · · · · Federal Security Agency

CONTENTS for June 1949

Volume 31 Number 9

Cover photograph was furnished by the Children's Bureau, Social Security Administration, Federal Security Agency. The photograph, appropriate to the summer vacation period for our Nation's school children, was taken by Esther Bubley, New York City.

School Life is indexed in Readers' Guide to Periodical Literature, and in Education Index.

School Life Spotlight

". . . the questions 'may . . . serve as springboards for constructive efforts to develop a more democratic climate in any school.'" . . . . . p. 2

★ ★ ★

". . . 26 of these schools attempt to offer 4-year high school programs . . . with but one teacher each; 560 four-year . . . high schools were dependent upon staffs of two." . . . . . p. 6

★ ★ ★

"In various ways, students and teachers in the United States have been brought into closer contact with those of other countries." . . . . . p. 7

★ ★ ★

"You Can't Argue With the Stork." . p. 8

★ ★ ★

"The teachers of America, with no blueprints to work from, are gradually developing competencies in the field of atomic education." . . . . . p. 11

★ ★ ★

"Are we preparing our children to make this, our way of life, live?" . . . . . p. 12

Published each month of the school year, October through June.

To order SCHOOL LIFE send your check, money order, or a dollar bill (no stamps) with your subscription request to the Superintendent of Documents, Government Printing Office, Washington 25, D. C. SCHOOL LIFE service comes to you at a school-year subscription price of $1.00. Yearly fee to countries in which the frank of the U. S. Government is not recognized is $1.50. A discount of 25 percent is allowed on orders for 100 copies or more sent to one address within the United States. Printing of SCHOOL LIFE has been approved by the Director of the Bureau of the Budget.

OSCAR R. EWING..... Federal Security Administrator
EARL JAMES McGRATH... Commissioner of Education
RALPH C. M. FLYNT..... Executive Assistant to the Commissioner
GEORGE KERRY SMITH... Chief, Information and Publications Service
JOHN H. LLOYD..... Assistant Chief, Information and Publications Service

Address all SCHOOL LIFE inquiries to the Chief, Information and Publications Service, Office of Education, Federal Security Agency, Washington 25, D. C.

THE Office of Education was established in 1867 "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of 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 otherwise promote the cause of education throughout the country."

Rall I. Grigsby Appointed Deputy Commissioner

DR. RALL I. GRIGSBY has been named Deputy Commissioner of Education, effective April 18.

In announcing the appointment of Dr. Grigsby to this position, Commissioner of Education Earl James McGrath said: "Dr. Grigsby brings to this office the highest qualifications both personal and professional. I am happy that he has consented to serve in this position."

Dr. Grigsby, a member of the Office of Education staff since 1939, served as Acting Commissioner of Education from July 15, 1948, when Dr. John W. Studebaker resigned as Commissioner, until March 18, when Dr. McGrath assumed office.

In referring to the appointment of Dr. Grigsby, Acting Federal Security Administrator J. Donald Kingsley said: "Dr. Grigsby has served the Office of Education with distinction and symbolizes the finest type of career official in the Federal Government. He has the confidence of educators throughout the United States and the support of all of us in the Federal Security Agency."

Dr. Grigsby's first service in the Office of Education was as a member of the Vocational Education Division staff. From 1942 to 1945 he was Special Assistant to the Commissioner of Education, and since 1946 has served both as Director of the Auxiliary Services Division and as Acting Associate Commissioner of Education.

Before joining the Office of Education staff 10 years ago, Dr. Grigsby was assistant superintendent of schools in Des Moines, Iowa, for several years. He was in charge of the high schools and of the adult education program of the Des Moines education system. In this position he was responsible also for guidance and visiting teacher services of the Des Moines schools. He has had experience as a high school teacher and principal, and as a school superintendent in both Illinois and Iowa.

Dr. Grigsby is a native of Indiana, and was reared in Nebraska and Iowa. He was graduated from Cornell College, Iowa, in 1918 and received the M. A. degree from Drake University, Iowa, in 1928. He has also done graduate study in education at the University of Iowa, the University of Chicago, and the University of Washington. He holds an honorary doctorate in education from Cornell College. Dr. Grigsby is a veteran of World War I.

WHAT DOES American democracy mean to teachers and administrators? What does it mean to students? What effect does a school's interpretation of American democracy have on the day-by-day life of students?

These questions introduce checklists recently compiled in the Office of Education to help administrators, teachers, and students study how democratic their schools are.

These "self appraisal" checklists, one for teachers and one for students, are the latest Office of Education contribution to the Zeal for American Democracy program. Judging from the large number of requests for additional copies, this publication is meeting a need for instructional materials on "teaching" democracy.

"Please send me 300 copies of the checklists on How Democratic Is Your School?"

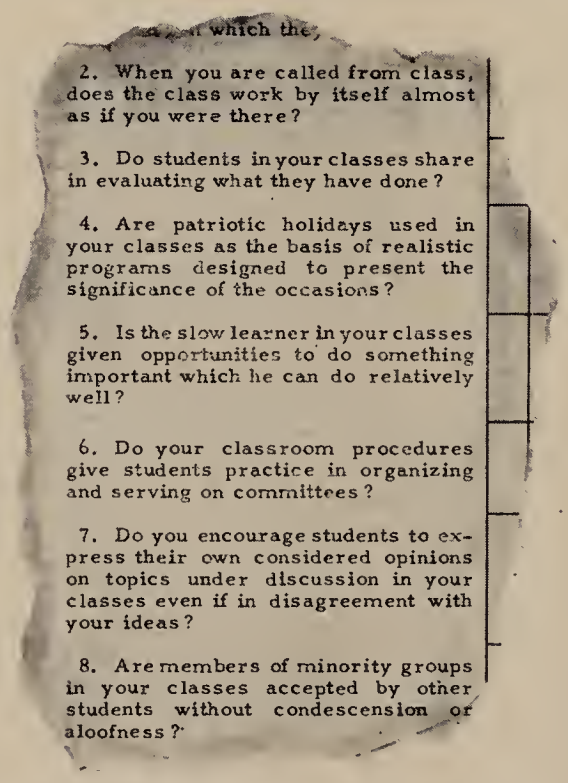
"Are the checklists on How Democratic Is Your School? available in quantity, and what is the price?"

"Would it be possible to send us 35 copies of the checklists on How Democratic Is Your School? to use in faculty discussions?"

These are typical of early responses to the mailing of sample copies of this publication. Several of the checklists came back to the Office of Education filled in, and with a request for more copies "of the questionnaire" for all teachers and students.

It is pointed out in the introduction to the checklists that the questions "may * * * serve as springboards for constructive efforts to develop a more democratic climate in any school." It is also urged that "a preliminary consideration of what democracy actually means should precede the use of the checklist" by either teachers or students.

Suggestions are given for their effective use. Fifty-five questions appear in each of


which the,

2. When you are called from class, does the class work by itself almost as if you were there?

3. Do students in your classes share in evaluating what they have done?

4. Are patriotic holidays used in your classes as the basis of realistic programs designed to present the significance of the occasions?

5. Is the slow learner in your classes given opportunities to do something important which he can do relatively well?

6. Do your classroom procedures give students practice in organizing and serving on committees?

7. Do you encourage students to express their own considered opinions on topics under discussion in your classes even if in disagreement with your ideas?

8. Are members of minority groups in your classes accepted by other students without condescension or aloofness?

the two lists. Several questions asked of the staff and students appear on these pages.

Because of the heavy demand for the pamphlet, requests for large numbers to be sent to one school cannot be filled. Only sample copies are available at this time, upon request. SCHOOL LIFE will announce if copies are later available in printed form by purchase from the Superintendent of Documents, Washington 25, D. C. At this time, however, all or any part of the brochure may be reproduced for use in a local school system, without advance approval of the Office of Education.

The introductory discussion of American democracy and the checklist questions

How Democratic Is Your School? (Checklists on democratic practices for secondary schools) _____ Free

Requirements and High School Students' Programs (Study of high-school graduation requirements of States and of actual 4-year programs of students of selected high schools), by Howard Cummings. Circular No. 300_____ Free

Selected Sources of Current Teaching Materials for Social Studies Classes, by Dorothy McClure, Circular No. 301, March 1949_____ Free

Teaching the Social Studies (Bibliography of periodical materials), by Dorothy McClure. Circular No. 302, March 1949_____ Free

A Selected Professional Library for the Social Studies Teacher, by Dorothy McClure. Circular No. 303, March 1949_____ Free

Some Criteria for Evaluating Democracy in School Administration (Digest of readings on school administration with special reference to democratic organization), by Clare B. Cornell. January 1949. Mimeographed_____ Free

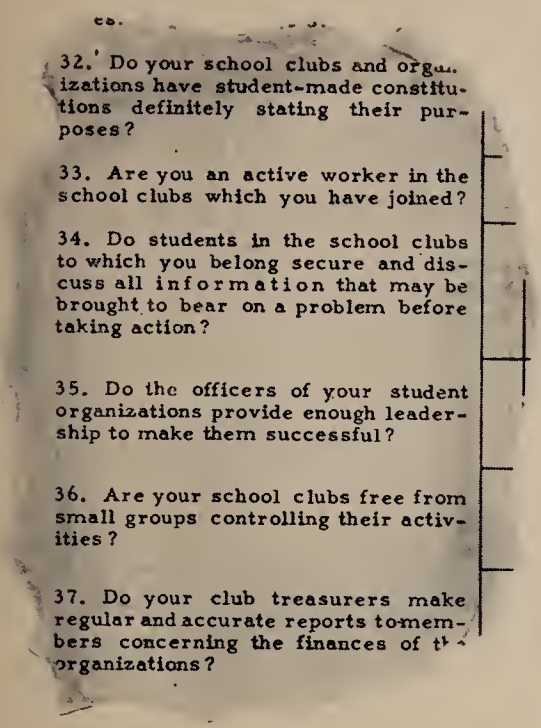
(Order the above circulars from the Office of Education, Washington 25, D. C.)

Growing Into Democracy (Series of leaflets especially helpful to teaching and parent groups as a basis for discussion on how people learn to become democratic citizens), by Harriet A. Houdlette_____ 30 cents

Education for Freedom (Concise analysis and compilation of State laws which require instruction in schools concerning the Constitution of the United States, American History, and matters related to American freedom), by Ward W. Keesecker. Bulletin 1948, No. 11_____ 20 cents

(Order the last two publications from the Superintendent of Documents Washington 25, D. C.)

have been designed to help administrators, teachers, and pupils arrive at a deeper understanding and appreciation of what democracy really means, both in theory and practice.


32. Do your school clubs and organizations have student-made constitutions definitely stating their purposes?

33. Are you an active worker in the school clubs which you have joined?

34. Do students in the school clubs to which you belong secure and discuss all information that may be brought to bear on a problem before taking action?

35. Do the officers of your student organizations provide enough leadership to make them successful?

36. Are your school clubs free from small groups controlling their activities?

37. Do your club treasurers make regular and accurate reports to members concerning the finances of the organizations?

As a school administrator or teacher, you may wish to plan now for use of this instructional aid in your school's citizenship education program next fall. "How Democratic Is Your School?" and other publications which may be helpful are listed in the accompanying box announcement.

A Suggestion

IT HAS BEEN suggested that the 1949 graduating classes may wish to consider making a contribution as a graduating class gift for the restoration of educational advantages to youth of war-devastated countries. This proposal, made by UNESCO and the U. S. National Commission for International Educational Reconstruction, covers donations which would be used for the purchase of educational books or equipment, scholarships or study grants. Certificates acknowledging such gifts will be awarded to each graduating class member as an evidence for future classes graduating, that the 1949 graduates recognized their responsibility in this way for world peace and international understanding.

Contributions should be sent to the Commission for International Education, 744 Jackson Place NW., Washington 6, D. C., for transmission to the UNESCO Reconstruction Fund or to a nationally recognized organization.

Winners of Awards for Educational Writing

WINNERS of the first annual awards made by the Education Writers Association for outstanding writing on education and interpretation of school programs to the public were recently announced by the Awards Committee.

Newspaper Top Award

Top award in the newspaper class went to Docia Karell, of the Springfield *News Leader and Press*, Springfield, Mo. The Karell series interpreted a survey of Springfield public schools. The survey director concluded that the series was "an improvement over the writing which appeared in the original document," and was "presented in such a way that a reasonably intelligent reader could understand many of the very complex concepts involved in judging the quality of modern education."

Newspaper—Honorable Mentions

For his series in the *Cleveland Press* titled "Your Child in School," Noel Wical, Schools Editor, received honorable mention. Photographer James Thomas collaborated in illustrating this series which described a day in each class, kindergarten to the 12th grade.

Jean Walrath, *Rochester Democrat-Chronicle*, also received honorable mention for her illustrated series, "Today We Learn," which took the viewpoint of the child, and dealt with subjects taught.

Magazine, Radio, Wire Service Awards

Fred Hechinger was voted the top award in the magazine category for his article in *Harpers*, February 1948, on "The Battle for German Youth."

To Charles S. Monroe, Columbia Broadcasting System, went the award for radio interpretation of education. Mr. Monroe wrote the script for the CBS documentary radio program "Report Card," broadcast March 24, 1948.

First award for wire service articles on education went to David Taylor Marke, *Associated Press Newsfeatures*. His story, "Religious Education Ruling by Supreme Court Stirs Debate," of March 28, 1948, was judged the best in this field.

Year's Total Contribution

To Ben Fine, *New York Times*, the judges voted an award for the most outstanding job of interpretation of education to the public during the entire year.

Honorable mentions in this category went also to Nancy Jordon, *Providence Sunday Journal*, and to Harrison Fry, *Philadelphia Bulletin*.

The *Christian Science Monitor's* editorial "Something Can Be Done" of February 16, 1948, was voted the best of all editorials on education. The Monitor's series, "Education for Freedom" also received commendation from the judges.

Awards Committee

Members of the Education Writers Association Awards Committee included: Dr. Floyd Taylor, Director, American Press Institute, Columbia University, Chairman; Mr. Harold V. Boyle, Pulitzer Prize winner, Associated Press; Dr. Belmont Farley, Director, Press and Radio Relations, National Education Association; Dr. Harold Taylor, President, Sarah Lawrence College, and Dr. G. Kerry Smith, Chief, Information and Publications Service, U. S. Office of Education.

Outstanding Film

A COMMITTEE of British film judges recently selected the American film, "The School That Learned to Eat," as the "best documentary film in education." The film was produced by the Southern Educational Film Production Service of Athens, Ga. Members of the staff of the University of Georgia served as consultants and advisers in the production.

Bookings for the film, which is free, may be obtained by writing to the Education Section, Public Services Department, General Mills, Minneapolis.

A Look at the Size of Our High Schools

By Walter H. Gaumnitz, Specialist for Small and Rural High Schools, and Ellsworth Tompkins, Specialist for Large High Schools

HOW LARGE are our public high schools? Perhaps it is more to the point to ask "How small are they?" Educational leaders the Nation over have been much concerned with the low end of the scale when high schools are arranged according to size. This concern in part results from the fact that there are so many of the smaller schools. The concern, however, has a much deeper basis than preponderance of numbers. Increasingly, all types of youth are entering our high schools—the bright and the dull, those studiously inclined and those intensely pragmatic, those destined to go to college and those going into a wide variety of occupations, those seeking high-school education as means to specific ends and those who stay in high school merely because it is "the thing to do," those from the higher social and cultural strata and those with very limited economic and community backgrounds.

These changes in the character of high-school enrollments have resulted in many additions to the courses and services offered by our secondary schools. Such additions have in turn required the employment of additional numbers of staff members competent to teach the growing variety of courses and to provide the other specialized services offered by our high schools. Obviously, when a high-school staff is increased in size the enrollment of such a school must likewise be increased if prohibitive per capita costs are to be avoided. It seems fair to generalize that so long as educators seek to improve the services of the high schools chiefly through additions to their offerings, so long will the organization of larger and larger schools present itself as the most obvious solution.

New School Centers

Another far-reaching concern over the small high schools stems from the extensive efforts now being made in many States to reorganize and enlarge the size of school-attendance areas and of the units of school administration. Obviously, if new school centers are to be established and new schoolhouses built, educational leaders must be sure that these centers are well located and that the buildings planned will best serve both the present and the future needs of their community. Since education in the United States has long been regarded as overdecentralized, with a multiplicity of small schools located near the homes of pupils attending, the attention in planning such reorganizations focuses chiefly on larger and larger schools. The high schools often become the centers for the new and larger units of school administration. Planned to serve all the children of high-school age, educators have widely insisted that a comprehensive, multipurpose program can be provided only by large, centrally located schools.

The question "How large are our high schools?" does, however, also express some concern for the large end of the scale. There is clear evidence that the largest high schools, especially those enrolling more than 1,500 pupils, have in recent years decreased in number. This seems to suggest that the very large high schools are regarded as undesirable, possibly because they tend more than the smaller schools to a mass production type of education. No clear minimum or maximum size of high school has been established as the result of much thought on this problem, but definite practices are emerging to suggest that high schools ranging in enrollment from 300 to 1,200 include the optimum.

It must of course be recognized that geographic, climatic, and other factors forcefully affect the desirable and feasible size of high schools. It would be a mistake to assume that high schools near a given optimum size should be established in every State. It would equally be a mistake to think of the statistics which show large numbers of very small schools in certain States as necessarily revealing a weakness in the secondary school services of such States. Schools must be planned and organized in keeping with geographic and climatic conditions, population sparsity, and road development, as well as certain educational factors. The statistics here presented, and especially similar statistics for the several States, must be considered with due regard for such factors.

In 1946 the Office of Education sent a questionnaire to every high school in the

Table A. Number and percentage of public high schools of the continental United States by size of enrollment, 1946

Enrollments	All high schools			4-year high schools			Junior-senior high schools		
	Number	Percent	Cumulative percent	Number	Percent	Cumulative percent	Number	Percent	Cumulative percent
1	2	3	4	5	6	7	8	9	10
1–9	234	1. 0		12	0. 1		16	0. 3	
10–24	975	4. 0	5. 0	445	3. 7	3. 8	28	. 4	0. 7
25–49	2, 689	11. 1	16. 1	1, 972	16. 5	20. 3	203	3. 2	3. 9
50–74	3, 119	12. 8	28. 9	2, 232	18. 7	39. 0	423	6. 6	10. 5
75–99	2, 548	10. 5	39. 4	1, 565	13. 1	52. 1	635	10. 0	20. 5
100–149	3, 657	15. 0	54. 4	1, 909	15. 9	68. 0	1, 289	20. 2	40. 7
150–199	2, 266	9. 3	63. 7	1, 014	8. 5	76. 5	938	14. 7	55. 4
200–299	2, 651	10. 9	74. 6	1, 129	9. 4	85. 9	1, 080	17. 0	72. 4
300–399	1, 467	6. 0	80. 6	485	4. 1	90. 0	579	9. 1	81. 5
400–499	919	3. 8	84. 4	249	2. 1	92. 1	330	5. 2	86. 7
500–749	1, 458	6. 0	90. 4	341	2. 8	94. 9	429	6. 7	93. 4
750–999	793	3. 3	93. 7	145	1. 2	96. 1	194	3. 0	96. 4
1,000–1,499	808	3. 3	97. 0	196	1. 6	97. 7	140	2. 2	98. 6
1,500–2,499	561	2. 3	99. 3	181	1. 5	99. 2	82	1. 3	99. 9
2,500–4,999	150	. 6	99. 9	84	. 7	99. 9	8	. 1	100. 0
5,000 or more	19	. 1	100. 0	10	. 1	100. 0	0	. 0	100. 0
Total	24, 314	100. 0		11, 969	100. 0		6, 374	100. 0	

Table B. Number and percentage of 4-year and junior-senior public high schools of continental United States, by size of professional staff, 1946

Staff	4-year high schools			Junior-senior high schools		
	Number	Percent	Cumulative percent	Number	Percent	Cumulative percent
1	2	3	4	5	6	7
1	26	0. 2	0. 2	17	0. 3	0. 3
2	560	4. 7	4. 9	54	. 9	1. 2
3	1, 588	13. 3	18. 2	181	2. 8	4. 0
4	1, 928	16. 1	34. 3	391	6. 2	10. 2
5–6	2, 653	22. 2	56. 5	1, 181	18. 6	28. 8
7–8	1, 542	12. 9	69. 4	1, 178	18. 5	47. 3
9–12	1, 568	13. 1	82. 5	1, 273	20. 0	67. 3
13–16	662	5. 5	88. 0	695	10. 9	78. 2
17–20	340	2. 8	90. 8	383	6. 0	84. 2
21–30	412	3. 5	94. 3	528	8. 3	92. 5
31–40	204	1. 7	96. 0	213	3. 4	95. 9
41–60	197	1. 7	97. 7	165	2. 6	98. 5
61–100	182	1. 5	99. 2	90	1. 4	99. 9
101 or more	95	. 8	100. 0	9	. 1	100. 0
Total	11, 957	100. 0		6, 358	100. 0	

United States asking for certain statistical facts of the type usually included in the Biennial Surveys of Education in the United States. After various efforts extending well into the succeeding school year, the necessary data were obtained for 100 percent of the public secondary schools of the United States.

Extensive Tabulations

Since the data gathered by the questionnaire were punched for machine tabulation, it was possible to make extensive studies bearing upon various questions relating to the size of high schools. The 10 enrollment-size categories, commonly used in the periodic report published by this Office as "Statistics of Public High Schools," were expanded to 14 by breaking down some of the wider intervals. State by State tabulations showing the sizes of high schools by number of staff members employed were added. Similar tabulations were also run to show the total number of pupils attending high schools of various enrollment sizes and the total number of persons comprising the professional staffs employed in each. Other tabulations were made to show relationships of size of enrollment to specific types of special staff members employed—principals, supervisors, guidance officers, clerks, etc.—as well as to enrollments by grades. Sixteen of these State by State tabulations, together with a brief explanatory text, have already been prepared for publication. Certain additional tabulations showing significant aspects of the sizes of high schools have been projected for publication later.

Inviting attention first to the total picture of the public high schools of the United States arranged by size of enrollment (see table A), it should be noted that in 1946 there were 24,314 such schools. This number includes all schools regarding themselves as high schools: (*a*) Those offering only 1, 2, or 3 years of a 4-year sequence; (*b*) those organized as regular 4-year high schools; (*c*) those administered separately as junior high schools usually offering 3 years of work ending with the 9th grade; (*d*) those administered as senior high schools usually offering 3 years of work ending with the 12th grade; (*e*) those administered as junior-senior or undivided (2-4, 3-3, 5-year, 6-year, etc.) high schools giving more than 4 years of work; and (*f*) those operating on the senior high school-junior college plan of organization and usually offering the last 2 years of work on the high-school level and 2 on the post-high-school or college level.

The data for all of this report except those presented in table A, columns 2 to 4, inclusive, are limited to the public high schools, classified in the groups described in the paragraph immediately preceding, as groups (*b*) and (*e*). The reason for limiting this study to those two basic groups is that the 4-year high schools and the junior-senior high schools are the only ones, except those complicated with grades 13 or 14 (group (*f*) above), which offer full 4-year, secondary school programs. The schools included in this report involve less probability of a part program or of sharing of staff members between two segments or schools which are otherwise administered as independent organizational entities. Two other types of high schools were also excluded from the major groups with which this article is concerned, namely, those enrolling fewer than 10 pupils (234 in number) and those functioning as ungraded schools (133 in number). The former were eliminated because they usually have an uncertain and transitory status; the latter were excluded because they include in their services programs chiefly maintained for adults—illiteracy removal, evening vocational courses, and other specialized functions, which make it difficult for these schools to classify their enrollments into the normal high-school grade groupings.

Table C. Number and percentage of pupils attending 4-year and junior-senior public high schools of continental United States, by size of enrollment, 1946

Enrollments	4-year high schools			Junior-senior high schools		
	Number	Percent	Cumulative percent	Number	Percent	Cumulative percent
1	2	3	4	5	6	7
10–24	8, 401	0. 3		504	(1)	
25–49	74, 250	2. 9	3. 2	7, 955	0. 5	0. 5
50–74	137, 681	5. 3	8. 5	26, 872	1. 5	2. 0
75–99	134, 453	5. 2	13. 7	55, 638	3. 1	5. 1
100–149	232, 942	9. 0	22. 7	159, 876	9. 0	14. 1
150–199	174, 084	6. 8	29. 5	162, 025	9. 1	23. 2
200–299	272, 287	10. 6	40. 0	263, 546	14. 7	37. 9
300–399	166, 997	6. 5	46. 6	199, 775	11. 2	49. 1
400–499	110, 710	4. 3	50. 9	147, 164	8. 2	57. 3
500–749	205, 769	8. 0	58. 9	259, 012	14. 5	71. 8
750–999	126, 806	4. 9	63. 8	164, 246	9. 2	81. 0
1,000–1,499	239, 467	9. 3	73. 1	169, 835	9. 5	90. 5
1,500–2,499	343, 949	13. 4	86. 5	149, 023	8. 3	98. 8
2,500–4,999	291, 557	11. 3	97. 8	22, 104	1. 2	100. 0
5,000 or more	56, 051	2. 2	100. 0	0	. 0	100. 0
Total	2, 575, 404	100. 0		1, 787, 575	100. 0	

[1] Less than 0.05 percent

Nearly 25,000

Of the total 24,314 high schools reported for 1946, 11,969 were classified as 4-year high schools and 6,374 as junior-senior high schools. These schools together total 18,343 or 76.6 percent of all of the public high schools in the United States. Only 12 of the 4-year schools and 16 of the junior-senior schools reported enrollments fewer than 10 pupils; none fell into the "ungraded school" group. For the statistical pictures here presented, other than those in table A, the number of schools included in this report is reduced to 11,957 and 6,358 for the two respective types of schools.

It should be noted that 2,429, or 20.3 percent of the 4-year high schools of the United States, have enrollments smaller than 50 pupils; 6,226, or 52.1 percent, have fewer than 100 pupils. At the other end of the scale there are 471 or 3.9 percent of the 4-year high schools with enrollments of 1,000 or more pupils and there are 486 or 4.0 percent additional 4-year high schools with enrollments ranging from 500 to 1,000.

The junior-senior high schools, as would be expected, show smaller percentages in the lower size categories. Only 20.5 percent of all the high schools of this type in the United States enroll fewer than 100 pupils each. On the other hand, 13.3 percent of these schools have enrollments of 500 or more pupils.

How Many Teachers?

What is the size picture of our public high schools when viewed from the standpoint of the number of professional staff members employed in each? Too often this approach to the size issue of these schools has been neglected. And yet, if it is important to bear in mind that "the teacher makes the school," it is of critical significance to remember that the professional team responsible for the various services provided in a given high school means everything to the development of the youth served. Not only do the high-school services provided by the staff available determine largely the continued educational growth of the pupils involved, but they deal with youth at a time in life, and in a way, which very often gives direction and purpose to both their present and their future development—direction and purpose relating to vocations, to home and family living, to leisure-time activities, to character, and all the rest. This is especially true of the smaller secondary schools where so very much depends upon so few.

Devoting our attention then to the national figures showing the sizes of our public high schools in terms of staff (see table B), it may be pointed out that 26 of these schools attempt to offer 4-year high-school programs and 17 others offer a 6-year junior-senior high-school program with but one[1] teacher each; 560 four-year and 54 junior-senior high schools were dependent upon staffs of two. The national median for the number of staff members employed falls between 5 and 6 for the first group and at 9 for the latter. Nearly 70 percent of the first group employ staffs of 8 persons or fewer; over two-thirds of the second group employ 12 or fewer persons (see columns 4 and 7, table B). The percentages of high schools with staffs larger than 40 are very small—4.0 for the 4-year schools and 4.1 for the junior-senior group.

Main Purpose—Education

The sole purpose of operating any school obviously is to educate youth. And yet seldom have the statistics relating to the size of our high schools shown the number or proportion of the pupils attending schools of various sizes. Data (see table C) presenting such information for the Nation as a whole were therefore made a part of this article. Of nearly 7 million youth in all grades of all types of public high schools, including those in the seventh and eighth grades in junior high schools, 2,575,404 are found in the 4-year schools included in this study, and 1,787,575 more are in the 6 grades of those organized on junior-senior high school plan. This part of the report, therefore, reveals the size of school attended by 4,362,979 or nearly two-thirds of the total public high-school enrollment. While only 13.7 percent of those in the 4-year high schools and only 5.1 percent of those in the junior-senior high schools are enrolled in schools smaller than 100, these small schools serve 354,785 and 90,969 pupils, respectively, totaling 445,754 children; 407,026 and 321,901 more, or 15.8 percent and 18.1 percent, respectively, are attending schools enrolling between 100 and 200 pupils. This is an additional total of 728,927 children. The aggregate attendance of these schools smaller than 200, therefore, is 1,174,681. On the other end of the size range the statistics show that 1,263,599 and 764,220, respectively, or 49.1 percent and 42.7 percent of all of the children in each of these two types of public high schools (total: 2,027,819), are attending large schools of 500 or more pupils; nearly two-thirds of these were in schools of 1,000 or more.

[1] Since the questionnaire used requested that only those staff members who give more than half-time to the high-school program be reported, it is possible that some of the smallest staffs disproportionately received help of less than half-time from persons serving primarily the elementary grades.

Many Factors

Many salient facts other than those here pointed out will be found in these statistical portraitures of the sizes of our public high schools. At best these national figures will afford only a quick look at a very complicated situation. For the significant causes and effects lying behind these situations, careful study must be given to the State by State statistics presented in some detail in the larger reports already compiled and those projected in connection with this overall study. Indeed, it is only as these size statistics are analyzed within the several States, and in the full light of the prevailing laws, policies, geography, and many other factors relating to secondary education of such States, and comparisons are made with similar situations in other States, that the full significance of the sizes of our high schools will appear.

U. S. Government Film News

AGRICULTURE.—Write to the Motion Picture Service, Office of Information, U. S. Department of Agriculture, Washington 25, D. C., for a copy of the new 1949 catalog of USDA films.

HOUSING.—Write to the Public Housing Administration, Housing and Home Finance Agency, Washington 25, D. C., for a copy of a 15-page bibliography of motion pictures, film strips, and slides on the subject of housing.

HOW TO OBTAIN.— Single copies of the chart, "How To Obtain U. S. Government Motion Pictures," which appeared in the April issue of SCHOOL LIFE, will be sent on request. Address requests to Visual Aids to Education, Office of Education, Federal Security Agency, Washington 25, D. C.

INDIAN SERVICE.—Because of the heavy demand, the Haskell Institute at Lawrence,

Kans., no longer is loaning films (except to U. S. Indian Schools). Prints of the following Indian Service color films can be purchased from the Educational Film Laboratory, U. S. Indian School, Sante Fe, N. Mex.

Subject	*Length in Minutes*	*Price*
The Desert People	25	$90.14
The River People	25	99.59
The Corn Dancers	20	77.60
A New Frontier	18	99.00
Indian Forests of the Southwest	18	72.53
Indian Gardens in Oklahoma	10	40.83
Trail to Health	20	81.04
Double Your Money from Traps	20	85.76
Indian Cowboy	20	81.06

PROJECTORS IN SCHOOLS.—The Office of Education is conducting a survey, statistically controlled upon a sampling basis, of projector ownership in secondary schools. Preliminary data indicate that more than 75 percent of public high schools now have 16mm sound projectors.

—Compiled by Seerley Reid, Assistant Chief, Visual Aids to Education

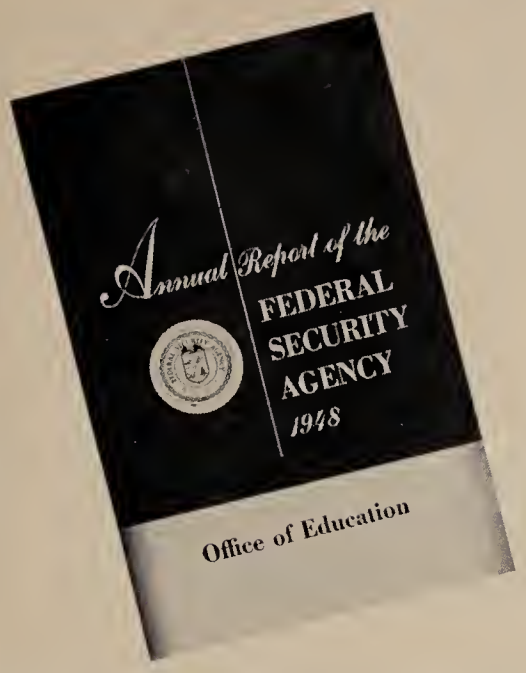
Add to Supreme Court Decisions Affecting Education

Farrington v. Tokushige, 273 U. S. 284 (1927):

In this case the Court held that a Hawaii statute and regulations which restricted attendance at foreign language schools to only pupils who regularly attended a public school or approved private school, or had completed the eighth grade, or were 14 years of age, and also which designated the textbooks to be used in private language schools, went far beyond mere regulation of privately supported schools giving instruction deemed valuable by their parents, and was therefore invalid. In holding the statute and regulations in violation of due process the Supreme Court said: "The Japanese parent has the right to direct the education of his own child without unreasonable restrictions; the Constitution protects him as well as those who speak another tongue."

Editor's Note: The above decision should be included among those listed in the article "SUPREME COURT DECISIONS AFFECTING EDUCATION," by Ward W. Keesecker, Specialist in School Legislation, which appeared in the February 1949 issue of SCHOOL LIFE. This decision concerning the Japanese language schools was inadvertently omitted at the time the February issue went to press.

Year's Focus on American Education



Statement by William H. Morris, Head, Editorial Branch, based on the Annual Report of the Office of Education for 1948.

THE SCHOOL YEAR 1947–48 brought little relief to the hard pressed educational systems and institutions in the United States. Elementary school enrollments increased almost 900,000 over the previous year; college fall enrollment, approximately 2,340,000, exceeded the high records of 1946–47 by about 13 percent; only secondary school enrollments declined slightly, almost 50,000, reflecting low birth rates of the 30's.

These enrollment trends led, in combination with other factors, notably the rise in the price level, to urgent shortages of plant and teaching personnel. The estimated number of emergency teaching permits declined from the peak of over 125,000 in the previous year to less than 100,000. Teacher shortages continued especially severe in elementary and rural schools, and in certain vocational subjects.

Educational plant needs were estimated by the Office of Education late in 1947 to be about 7½ billion dollars for elementary and secondary schools and about 3½ billion dollars for institutions of higher education.

The need to re-awaken students' understanding of democracy was the source for one of the Office's major efforts in curriculum, known as the Zeal for American Democracy program. Leading educational organizations, including the National Council of Chief State School Officers and the National Council for the Social Studies, endorsed this program.

In the effort to bring about re-evaluation of existing curriculum in the interests of the majority of secondary school students who go neither to college nor into vocational training, the Office published during the year *Life Adjustment Education for Every Youth.*

Systematic provision of education for home and family living is now widely regarded as a major responsibility of the public school system. It is so recognized as an integral part of life adjustment education.

Two other areas which seemed to compel particular attention by the Office in 1947–48 were: Development of curricula based on needs and interests of children, especially in cooperation with the National Council of State Consultants in Elementary Education; and programs to meet the imperative needs for understanding the implications of the great advances in science, in aviation, and especially in the development of atomic energy.

In various ways, students and teachers in the United States have been brought into closer contact with those of other countries. About 21,000 students, including over 1,200 from India alone, were enrolled in American colleges in 1947–48, an increase of some 4,000 over the previous year.

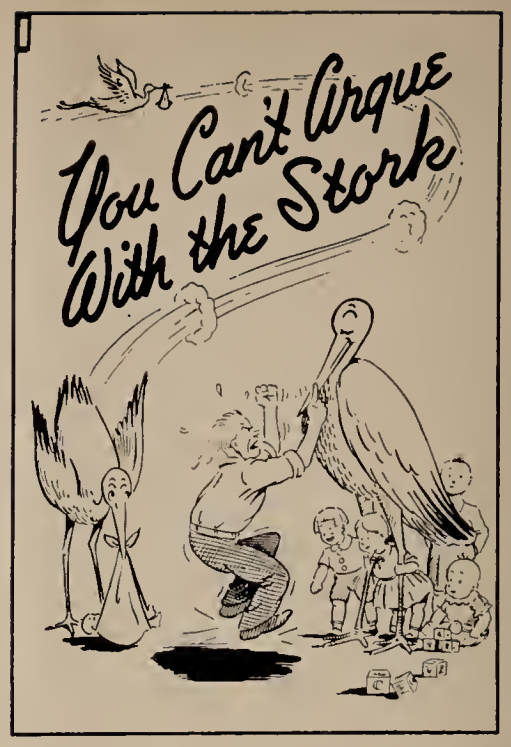
During the year, 126 British teachers exchanged places with the same number of teachers in 31 States; a small scale similar exchange took place with Canada, and plans were laid for an exchange of teachers in France in 1948–49. All these international programs have yielded evidence of greater international understanding and world-mindedness which extends beyond the schools into communities.

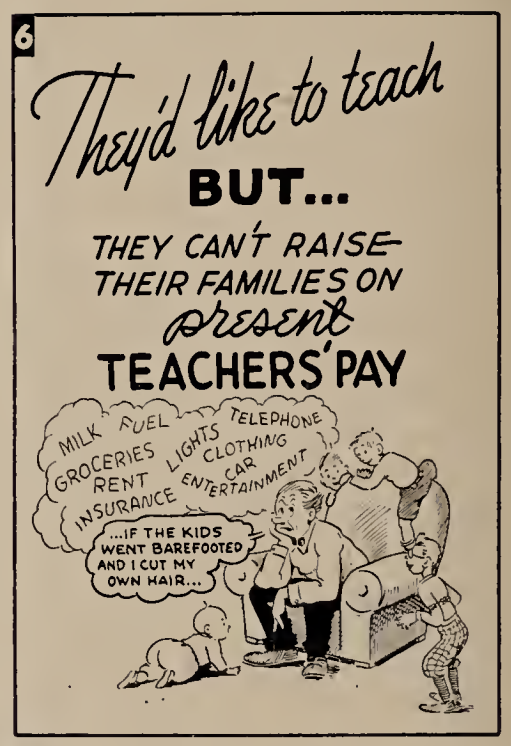
Home-School Relationships

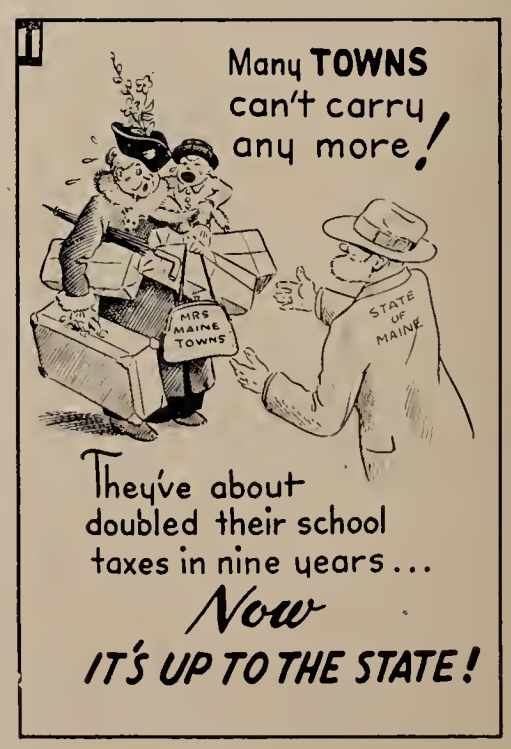
The Report of the Committee on Home-School Relationships of the National Conference on Family Life is available from the office of the National Conference on Family Life, 10 East 40th Street, New York 16, N. Y. The single copy price is 40 cents. Copies are not available from the Office of Education.

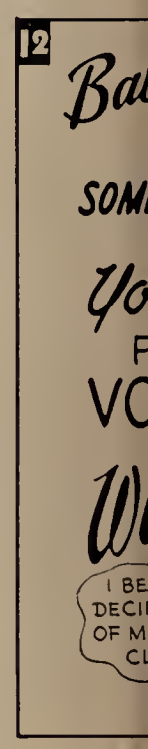
What One Teachers' Association Did

TO DRAMATIZE information about education in its State, the Maine Teachers' Association prepared a pamphlet titled, "You Can't Argue With the Stork." This report to the public presents facts and statistics in graphic form to show the effect of high birthrate and low teacher salaries upon the present status and future outlook of Maine schools. SCHOOL LIFE focuses attention upon this publication as an example of one effective way to tell the story of today's and tomorrow's school situation to our citizens. Drawings for the Maine brochure were done by Edwin Otis Nielson. The pamphlet was printed by the Augusta Press. Single copies are available at three cents each from the Maine Teachers' Association, 146 State Street, Augusta, Maine.









ROUGHT...
BABIES TO MAINE
BROUGHT...
BABIES
E BROUGHT...
,908 babies
es grow up to be
CHILDREN!

THIS PAMPHLET BY THE MAINE TEACHERS ASSOCIATION

3

With MORE CHILDREN
we have
FEWER TEACHERS.

OUR NORMAL SCHOOLS GAVE DIPLOMAS

IN 1933 to 575 GRADUATES

IN 1938 to 328

IN 1943 to 212

IN 1948 to 169

4

It's Going DOWN

SUPPLY- 169 TEACHERS IN 1948

MAINE'S ELEMENTARY TEACHER SUPPLY REQUIRED-5350

AVAILABLE IN 1949 CERTIFIED TEACHERS 4125

MATRIMONY
RETIREMENT
DEATH
INTO OTHER BETTER PAID WORK
TO TEACH IN OTHER STATES

For Various Reasons...
WE LOSE **450** TEACHERS A YEAR!

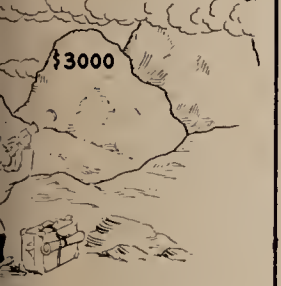
5

WE MUST TURN OFF

the faucets!

Let's cut down the loss of good teachers
trained at State Expense
at $3000 a piece
and skilled by practice on
Maine
BOYS and GIRLS

BEGINNERS
nterested in
ARIES, TOO,
Just
nd AVERAGES



8

Remember Those
23,908 Babies?

There's a place for them all in our
HEARTS and HOMES

Will there be a place for them in OUR SCHOOLS?

9

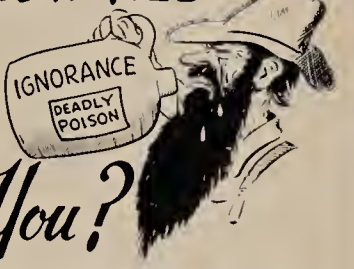
Some of our buildings are OLD
....
Some of them are
OLD FASHIONED...

And- there aren't enough of any kind!
We Need **2500** NEW Classrooms

Last Year We Built....
100

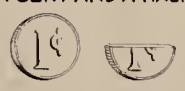
10

TAXES...
go with GOOD SCHOOLS
and some people hate taxes
WUS'N PIZEN



Do You?

THIS YEAR'S PROPOSALS TO PROVIDE STATE HELP FOR BUILDINGS AND SALARIES WOULD COST MAINE PEOPLE —ABOUT A CENT AND A HALF A DAY!



and little kids!
N'T VOTE!
them can't TALK
BUT
an speak
HEM-AND
for THEM!
You?

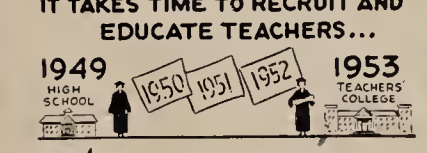
13

DON'T WORRY... about the POOR TEACHERS
They'll take care of themselves!

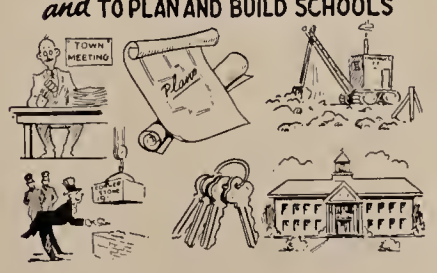
14

But the kids
CAN'T MOVE WEST
and
THEY CAN'T WAIT!

IT TAKES TIME TO RECRUIT AND EDUCATE TEACHERS...



and TO PLAN AND BUILD SCHOOLS



15

TELL THE WORLD
that with **YOU** - *the*
CHILDREN COME
BEFORE THE $

Chain Reaction in Education

by George L. Glasheen, Assistant Director for Educational Services, U. S. Atomic Energy Commission

A CHAIN REACTION in atomic energy education is under way. More and more teachers are beginning to learn about the atom. The impact of this new force upon our society has emphasized the urgent necessity for teacher orientation in this new science, if teachers are to discharge their responsibilities in preparing youth to meet the problems of the Atomic Age.

This is the story of a few teacher training programs that have been undertaken, and others that are planned for these summer months.

At Providence, R. I., under the auspices of the Rhode Island College of Education, an in-service training course on atomic energy education has been held on Saturday mornings, over a 14-week period, during the winter and spring terms. There, under the direction of Mr. Russell Meinhold of the school's faculty, approximately 35 Rhode Island teachers have been learning about atomic energy—what it is, what it means. These teachers are going to return to their classrooms prepared to cope with the problems of curriculum integration and implementation. They are fully aware that atomic energy cannot be considered as a separate subject, but that it will pervade all areas of the school's program—that it must receive the attention of the social studies teacher as well as that of members of the science faculties.

Training for 1,200

In New York City, the Board of Education has sponsored since mid-February, a rather ambitious training program for its teachers. Every week nearly 1,200 school people, representing many and varied subject areas, have been meeting, listening to leaders in the field of atomic energy, viewing films, making field trips, reading and studying selected literature. Upon satisfactory completion of this course, with its scheduled examination, a large segment of New York's teacher population will be able to meet intelligently the educational problems arising from the advent of atomic energy. They will possess, also, a clearer appreciation of the necessity for a general understanding of this greatest of material forces and its challenge to education.

This is only a start in the right direction—but an important one. Educators everywhere are rapidly coming to see their professional responsibilities in connection with the proper teaching of nuclear physics, with its socio-economic implications of great import. And they are recognizing, as well, that this is a job that they, and they alone, can handle—that there is no prescribed program precedent to build on—that pedagogical devices, techniques, and program units will have to be developed as they go along.

THIS ARTICLE by Mr. Glasheen is suggestive of what certain schools and colleges are doing to extend the chain reaction in training teachers to teach atomic energy education. Other evidences of such training are welcomed by the Office of Education Committee on Educational Implications of Atomic Energy, Henry H. Armsby, Higher Education Division, Chairman. The Committee developed the contributions to atomic energy education announced on the back cover of this issue.

This summer will see a variety of atomic-energy educational experiments under way. A most important one will be taking place at the Harvard Graduate School of Education in Cambridge, Mass. There, under the direction of Dr. Fletcher Watson, a professor of education at the school, a 5- or 6-weeks' course for teachers is to be offered. This course will be designed to teach teachers about the atom, to show them how it may be brought into the classroom, and to demonstrate that the subject is not "above their heads." Full particulars with regard to this course, for those interested in attending, may be secured from Dr. Watson.

8-Week Workshop

In Urbana, Ill., at the University of Illinois School of Education, an 8-week workshop on *Atomic Energy and World Unity* will be offered by Dr. R. Will Burnett. Dr. Burnett, author of *Atomic Energy, Double-Edged Sword of Science*, an instructional unit for secondary-school pupils, is one of the pioneers in the field of atomic-energy education. It may be anticipated that many teachers will become well grounded in atomic rudiments after their participation in this workshop. Further particulars may be obtained by communicating directly with the School of Education, at Urbana.

During the last week of June, a Workshop on Atomic Energy Education will be held at the University of Nebraska, in Lincoln. Under the joint sponsorship of the Nebraska State Department of Public Instruction and the university, a concentrated program will be offered, consisting of speakers, group discussions, and other directed activities. It is anticipated that attendance will consist largely of secondary school educators from the Midwestern States. Dr. Frank Sorenson, of the University, and Dr. Leo Black of the State Department of Public Instruction, extend an invitation to all teachers, however, and expect a large enrollment.

Social Studies Aspects

Dr. Clifford H. Coles announces an Atomic Education Workshop to be offered by the Keene Teachers College at Keene, N. H., during the latter part of July. "This course will constitute," he says, " a brief, mildly technical introduction to the field of atomic energy that will be of value to teachers in the elementary and the secondary schools and for those outside the teaching profession. It will emphasize particularly those aspects of interest to social studies teachers; the sociological, psychological, economic, political and scientific aspects of the problem. The majority of the time will be spent on a discussion of the peace-time implications and applications of atomic energy."

Dr. Coles indicates that he will be pleased to furnish further information regarding dates, credits, fees, etc., to those interested.

Atomic Energy and Its Social Implications will be the title of the Workshop to be held at the Washington Square Campus of New York University from July 5–22. This course will be taught by Professor Charles Pieper, chairman of the Department of Science Education at the School of Education.

"Teachers in the elementary and secondary schools are faced with a new need and obligation in the Atomic Age," it is announced. "Their pupils search for satisfying concepts, meanings, and attitudes regarding atomic energy and its implications in personal and group living. This search brings questions concerning the nature of the atom, the source of its energy, the uses and control of nuclear energy in war and peace times, and the effects of this new science upon present-day life. The teacher, accordingly, needs a background of elementary knowledge concerning the atom and its energy, an acquaintance with a variety of teaching aids, and a reservoir of pupil experiences and activities, all available to meet the obligation of satisfying the interests of the pupils and to ensure for youth a more intelligent adjustment to the modern environment. Moreover, the teacher himself has an impelling need here for his own liberal education as a citizen. Specialists in atomic physics and its control will be guest speakers."

And so the story goes. These are but a few of the known, announced activitics. There will be more, of course, some still in the formative stages. But progress to date can certainly be termed encouraging.

The teachers of America, with no blueprints to work from, are gradually developing competencies in the field of atomic education. They are not waiting for a set of training units to be handed them. They are displaying native ingenuity and inventiveness in building thcir own programs. They are doing this in keeping with the traditional methods of educational growth.

Educational Articles Published Elsewhere

(By Office of Education Specialists)

Criteria for Evaluating School Plants, by Nelson E. Viles, Specialist for School Plant Management, in *School Business Affairs,* October 1948.

Guidance for Active, Articulate Citizenship, by Howard R. Anderson, Chief, Instructional Problems, in *Educational Leadership,* November 1948.

Vocational Guidance: At the 31st Session of the International Labor Conference, by Harry A. Jager, Chief, Occupational Information and Guidance, in *Occupations,* December 1948.

I Don't Want My Science Pupils To Fail, by Glenn O. Blough, Specialist for Science Education, in *The Science Counselor,* December 1948.

Progress in Room 202, by Glenn O. Blough, Specialist for Science Education, in *National Elementary Principal,* December 1948.

Questions at the Ends of Chapters, by Glenn O. Blough, Specialist for Science Education, in *NEA Journal,* October 1948.

State School Plant Assistance, by Ray L. Hamon, Chief, School Housing, in *School Executive,* November 1948.

Teachers Around the World, by Helen K. Mackintosh, Chief, Instructional Problems, editorial in *Pi Lambda Theta Journal,* October 1948.

The Office of Education, by Andrew H. Gibbs, Research Assistant, in *The Phi Delta Kappan,* October 1948.

Basic Elements of a Public School Guidance Program, by Clifford P. Froehlich, Specialist for Guidance Personnel Training, in *California Journal of Secondary Education,* December 1948.

College and University Building Needs for the Next Decade, by Ernest V. Hollis, Associate Chief for Administration, in *American Association of University Professors, Bulletin,* Autumn 1948.

In-Service Training Programs That Succeed, by Clifford P. Froehlich, Specialist for Guidance Personnel Training, in *The Clearing House,* January 1949.

Planning Programs About Education, by Bess Goodykoontz, Director, Division of Elementary Education, in *The Phi Delta Kappan,* December 1948.

Social Work Education Today, by Ernest V. Hollis, Associate Chief for Administration, in *Social Work Journal,* January 1949.

The Problem of Adult Illiteracy, by Ambrose Caliver, Specialist for Negro Education, in *The American Teacher,* February 1949.

U. S. Government Films 1949, by Seerley Reid, Assistant Chief, Visual Aids to Education, in *Educational Screen,* January 1949.

Vocational Guidance at the 31st Session of the International Labour Conference, by Harry A. Jager, Chief, Occupational Information and Guidance, in *Occupations,* December 1948.

Vocational Teachers Can Use Guidance Procedures, by Clifford P. Froehlich, Specialist for Guidance Training, and Royce E. Brewster, Assistant Chief, Occupational Information and Guidance, in *American Vocational Journal,* January 1949.

A Formula for Measuring Adult-Education Programs, by Homer Kempfer, Specialist for General Adult and Post-High School Education, in *Adult Education Bulletin,* October 1948.

Pattern for Training in Communications, by William H. Morris, Acting Editor, in *Bulletin of the American Association of University Professors,* Winter 1948–49.

Population Characteristics of a V. A. Center, by Leonard M. Miller, Specialist for Counseling, Pupil Personnel, and Work Programs, and Walter H. Brackin, Jr., Director, Temple University V. A. Guidance Center, Philadelphia, in *Occupations,* January 1949.

The Division of Secondary Education in the U. S. Office of Education, by J. Dan Hull, Assistant Director, Division of Secondary Education, in *The High School Journal,* January–February 1949.

What the Polls Show, by Helen Crossley, Opinion Research Center, University of Denver, and George Kerry Smith, Chief, Information and Publications Service, in *Educational Leadership,* November 1948. (Reprints are available from the Office of Education.)

What Are Good Teachers Like, by Frances Rummell, Specialist for Service to Organizations, in *The Tennessee Teacher,* February 1949.

"The Gift of Freedom"

FACTORS which most basically influence and describe the economic and social welfare of American workers are discussed in a Department of Labor publication, "The Gift of Freedom," just off the press.

The concluding paragraph in the 142-page report, prepared by the Bureau of Labor Statistics, points out that "The methods of freedom and the institutions of free men vary from country to country; freedom, in essence, is a way of life. Workers in the United States have inherited that way of life," it is emphasized.

One of the purposes of this publication is to make known to workers in other countries the essential facts relating to the well-being of the American worker.

Content of the publication is grouped under six main headings: 1—The work force; 2—Productive- capacity; 3—Purchasing power and living standards; 4—Social security; 5—Labor organization, and 6—Civil rights.

Copies of "The Gift of Freedom" are available at 55 cents each from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

FOUR NEW specialists have been added to the staff of the Office of Education. The new staff members are Gertrude M. Lewis, Concord, N. H., Specialist for Upper Elementary School Grades; Wilhelmina Hill, of Denver, Colo., Specialist for Social Sciences in Elementary Education, Halene Hatcher, of Murray, Ky., Educational Specialist for Geography and Conservation, Division of Secondary Education, and George E. Van Dyke, of Syracuse, N. Y., Specialist in College Business Management.

Selected Publications of the Office of Education

IN THIS, the last issue of *School Life* until October, we are pleased to offer a review of certain selected Office of Education publications, which have come from the press during the past year. Several 1947 bulletins, as well as "best sellers," are included. Request publications from the Superintendent of Documents, Washington 25, D. C .

▶ SCHOOL FIRE DRILLS. This pamphlet stresses school obligations for fire safety, sets up criteria for safe exit lanes, and outlines need for frequency and procedures of school fire drills. Pamphlet No. 103. 1948. 19 p. 10 cents.

▶ GROWING INTO DEMOCRACY. Can democracy lead the way to a better world? Are we preparing our children to make this, our way of life, live? This bulletin is a series of seven study guides for discussion of these important questions. Suggestions for reading included. 1948. 54 p. illus. 30 cents.

▶ LIFE ADJUSTMENT EDUCATION FOR EVERY YOUTH. If secondary education is to become a part of the common heritage of youth, high schools must provide instruction which has meaning and value to all students. This publication outlines procedures which leaders in education believe will help high schools develop an educational program which meets these criteria. 1948. 122 p. 45 cents.

▶ LIGHTING SCHOOLROOMS. This pamphlet outlines principles of brightness balance in schoolrooms, defines new lighting terms, and describes procedures for adequate natural and artificial lighting. Pamphlet No. 104. 1948. 17 p. 10 cents.

▶ TEACHING ELEMENTARY SCIENCE. This bulletin is a how-to-do guide in elementary science for the classroom teacher. It includes direct and practical suggestions for the teacher who wishes to know more about beginning and carrying on an elementary science program. Bibliography included. Bulletin 1948 No. 4. 43 p. illus. 15 cents.

▶ FEDERAL GOVERNMENT FUNDS FOR EDUCATION—1946–47 AND 1947–48. Reports by State and Territory of the annual amounts of funds provided by the Federal Government for education purposes. Leaflet No. 79. 1948. 40 p. 15 cents.

▶ SCHOOL BUS MAINTENANCE. This pamphlet furnishes information and guidance for local school administrators and others who are concerned with school bus maintenance. Bulletin 1948 No. 2. 42 p. 15 cents.

▶ CRIPPLED CHILDREN IN SCHOOL. Teachers will find in this bulletin a wealth of ideas to help them meet the needs of various types of crippled children. It outlines programs that contribute to physical, intellectual, social, and emotional growth, and to vocational adjustments. Bulletin 1948 No. 5. 37 p. illus. 15 cents.

▶ MAKING DEMOCRACY WORK AND GROW. A collection of practical ways in which wide-awake schools and alert communities are helping to make democracy effective—for students, teachers, administrators, and other community leaders. Bulletin 1948 No. 10. 23 p. 15 cents.

▶ SCHOOL TRANSPORTATION INSURANCE. Sets forth the transportation insurance situation as of January 1947 in each of the States, primarily its legal status as indicated by statutory law and court decisions.

Pamphlet No. 101. 1948. 34 p. illus. 15 cents.

▶ Postgraduate Education in High Schools, 1947–48. This pamphlet gives answers to some pertinent questions related to various phases of high-school postgraduate education. Pamphlet No. 106. 1948. 11 p. 10 cents.

▶ Intellectual Abilities in the Adolescent Period—Their Growth and Development. This publication offers a comprehensive outline of the fundamental principles of mental ability and mental traits of adolescents, and gives implications for the curriculum and for guidance programs. Bulletin 1948 No. 6. 41 p. illus. 15 cents.

▶ Teacher Education for the Improvement of School Health Programs. A summary report of two demonstration workshops—suggested standards for the professional health education of teachers. Bulletin 1948 No. 16. 37 p. illus. 15 cents.

▶ Education for Freedom as Provided by State Laws. A concise analysis and compilation of State laws which require instruction in schools concerning the Constitution of the United States, American history, and matters related to American freedom. Bulletin 1948 No. 11. 38 p. 20 cents.

▶ 14 Questions on Elementary School Organization. This pamphlet presents facts to help answer questions frequently asked about elementary school organization and supervision. Current practices reported by school leaders in 52 city school systems are used to give answers to 14 specific questions. Of special interest to superintendents, principals, and others working

in elementary education. Pamphlet No. 105. 1948. 27 p. 10 cents.

▶ Working With Parents. This handbook shows some of the successful ways in which schools enlist the help of parents. It describes contributions parents can make to the school program—offers suggestions and ideas that will be valuable to superintendents, principals, teachers, students, parent-teacher leaders, and community workers. Bulletin 1948 No. 7. 46 p. illus. 15 cents.

▶ FM for Education. Suggestions for planning, licensing, and utilizing FM educational radio stations owned by schools, colleges, and universities. Misc. No. 7. Revised 1948. 30 p. illus. 20 cents.

▶ Education in Haiti. One of a series of basic studies on education in a number of Central and South American countries prepared under the sponsorship of the Interdepartmental Committee on Cultural and Scientific Cooperation, to promote understanding of educational conditions in the American countries and to encourage cooperation in the field of Inter-American education. Bulletin 1948 No. 1. 90 p. 25 cents.

▶ Practical Nursing.—An Analysis of the Practical Nurse Occupation with Suggestions for the Organization of Training Programs. This analysis was prepared by a national committee representing the principal nursing, hospital, public health, and educational organizations. Misc. No. 8. 1947. 144 p. 55 cents.

▶ Guide to Occupational Choice and Training.—Suggestions, Books, and Materials for Guidance Programs. This bulletin presents sources and references for persons interested in promoting a good guidance service, particularly those workers who serve large groups of individuals in school. Information carefully selected for work with students of all ages and to serve all levels of education. Vocational Division Bulletin No. 236. Occupational Information and Guidance Series No. 15. 35 cents.

▶ Teaching as a Career.—Contains information of interest to students considering teaching as a field of endeavor. Describes nature of the profession and of teacher's work, supply and demand, placement, working and living conditions, requirements, and opportunities for preparation.

Bulletin 1947 No. 11. 43 p. illus. 15 cents.

▶ Financing Public Education.—General features of a satisfactory State plan and the historical steps in the development of State plans now in effect. Leaflet No. 78. 1947. 18 p. 10 cents.

▶ Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1947. A complete report of 69 land-grant institutions. Data for each institution on staff, total enrollments of undergraduate, graduate, and special students, enrollment by field; number of degrees by level and by field; income by source; expenditures by purpose, and Federal funds by source. Bulletin 1948 No. 8. 44 p. 15 cents.

▶ Schools Count in Country Life.—This bulletin shows how teachers and children take part in such activities as community projects, school clubs, home improvements, school lunches, travel, and conservation. It suggests practical ways of learning and using reading, arithmetic, and spelling, in real life. Reading list included. Bulletin 1947 No. 8. 61 p. illus. 20 cents.

▶ School and Work Programs.—Reports experiences of 136 schools and school systems in operating programs involving employment of pupils in industry on a part-time basis while they are enrolled in school. Bulletin 1947 No. 9. 59 p. 20 cents.

▶ Cooperative Planning.—The Key to Improved Organization of Small High Schools. A brief series of suggestions on how the principal of a small high school, his staff, the pupils, and community leaders can cooperatively organize the school program for better educational services. Pamphlet No. 102. 1947. 21 p. 10 cents.

▶ What Every Teacher Should Know About the Physical Condition of Her Pupils. Many thousands of copies of this publication, first issued in the year 1921, have aided teachers in their day to day care of children in the classroom. This latest revision includes a summary of important points for observation, an eye chart, and other basic information useful to teachers and to those training prospective teachers. Pamphlet No. 68. Revised 1945. 19 p. 10 cents.

Theses in Education

Equalizing Educational Opportunity Through a Program of County Equalization and Consolidation. By Robert H. Benson. Master's, 1948. University of North Dakota. 127 p. ms.

Attempts to determine the practicability of equalization of the financial burden of school support on a county basis by means of a compulsory county 12-mill levy. Recommends consolidation in the 12 counties studied.

Related Information for the Comprehensive General Shop in a Functional Junior High School Industrial Arts Program in New York State. By Robert L. Thompson. Doctor's, 1947. New York University. 2 vols.

Develops a manual of instruction sheets to be used by the junior high school industrial arts teacher as an aid in presenting related information to students, including a series of short stories relating to the materials most often used in the comprehensive general shop.

Sex Differences in History and Geography Achievement in Grades 5 and 7. By Linwood R. Card. Master's, 1948. Boston University. 47 p. ms.

Analyzes results of tests administered to school children in Portland, Maine, in 1947. Finds significant differences in favor of the boys in both subjects on all grade levels studied.

Survey of School Building Needs of the Fertile, Minnesota, Community. By George I. Sholy. Master's, 1948. University of North Dakota. 140 p. ms.

Recommends that the entire Fertile school area be consolidated into one central school.

Teacher Preparation for the Teaching of the Social Studies in the New England Teachers Colleges. By Myrtis M. Clough. Master's, 1948. Boston University. 105 p. ms.

Studies curriculum offerings in the social studies, and the academic and professional training in the teaching of the social studies available in the State normal schools and State teachers colleges of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Finds that the teacher training programs vary widely.

A Survey of the Literature Relating to the Armed Forces Educational Program and Its Effect on the Secondary Education Program. By Dorothy S. Harris. Master's, 1947. University of Cincinnati. 118. ms.

Describes the characteristics of the military training program, and reviews the objectives of various types of schools. Compares related aspects of the secondary school program and notes the implications that may be drawn from the armed forces educational program for the secondary schools.

An Approach to the Development of a Functional General Education Program in Maryland. By James E. Spitznas. Doctor's, 1947. George Washington University. 381 p. ms.

Discusses the development and use of units of work on different grade levels prepared by teachers representing the various counties and teacher training institutions in a State-wide experiment.

An Evaluation of a Problem Checklist as an Instrument in Diagnostic Guidance Counseling of Veterans. By Mary E. Hatch. Master's, 1947. Boston University. 42 p. ms.

Describes the construction of a problem checklist based on problems noted in interviews with veterans in the Greater Boston area. Concludes that the checklist was useful when handled by a skilled counselor, but that it could not be used indiscriminately.

—Compiled by Ruth G. Strawbridge, Federal Security Agency Library Bibliographer.

Thank You

FOR the many letters received from you, the readers of *School Life* this year, we wish to express our sincere appreciation. Both format and content of the magazine have been improved during the year as the result of your expressed interest and counsel. We have regarded it a genuine challenge to serve you, the largest number of readers *School Life* has had since the Office of Education began publishing the magazine 31 years ago. Thank you, and may we continue to receive your comments and suggestions for improvement of *School Life* service to American education during the days ahead.

How to Obtain U. S. Government Filmstrips

compiled by Seerley Reid, Assistant Chief, Visual Aids to Education

U. S. Government agency	Kind of filmstrips	How to borrow or rent filmstrips [1]	How to purchase filmstrips	For further information write to
Department of Agriculture.	124 information and training filmstrips, all silent, on agriculture, forestry, home economics, conservation, and related subjects. Lecture notes furnished.	Not for loan. Rent from some educational film libraries.	From Photo Lab Inc., 3825 Georgia Ave., Washington 11, D. C.	Extension Service, U. S. Department of Agriculture, Washington 25, D. C.
Department of the Air Force.	30 training filmstrips, all silent, on aviation subjects.	Not for loan. Rent from some educational film libraries.	From Castle Films, Division of United World Films, Inc., 1445 Park Ave., New York 29, N. Y.	Directorate of Public Relations, Department of the Air Force, Washington 25, D. C.
Department of the Army.	10 sound filmstrips on personnel examination and supervision.	Borrow from Army Area Headquarters. Rent from some educational film libraries.	From Castle Films.....	Army Pictorial Service Division, Office of the Chief Signal Officer, Department of the Army, Washington 25, D. C.
Civil Aeronautics Administration (Department of Commerce).	150 Air Force, Navy, and CAA filmstrips, both sound and silent, on aeronautics and related subjects for aviation education.	Borrow from Regional Offices of the CAA.	Purchase CAA filmstrips from Castle Films. Others not for sale.	Audio-Visual Training Aids (A-167), Civil Aeronautics Administration, U. S. Department of Commerce, Washington 25, D. C.
Coast Guard (Treasury Department).	46 information and training filmstrips, all silent, on seamanship.	Not for loan. Rent from some educational film libraries.	From Castle Films.....	U. S. Coast Guard, Treasury Department, Washington 25, D. C.
Office of Education (Federal Security Agency).	432 silent filmstrips accompanying Office of Education vocational and industrial training films.	Not for loan. Rent from some educational film libraries.	From Castle Films.....	Visual Aids Section, Office of Education, Federal Security Agency, Washington 25, D. C.
Department of the Navy.	176 training filmstrips, both sound and silent, on aviation, radio, science, shopwork, health, and other subjects.	Not for loan. Rent from some educational film libraries.	From Castle Films.....	Office of Public Relations, Department of the Navy, Washington 25, D. C.
Public Health Service (Federal Security Agency).	4 information filmstrips, sound, on sanitation; 55 professional filmstrips, both sound and silent, on communicable diseases.	Borrow information filmstrips from State or local health departments; professional filmstrips from Communicable Disease Center, U. S. Public Health Service, Atlanta 3, Ga.	Purchase information filmstrips from Castle Films. Obtain authorization from Public Health Service to purchase professional filmstrips.	Public Inquiries Section, Public Health Service, Federal Security Agency, Washington 25, D. C. *and* Production Division, Communicable Disease Center, U. S. Public Health Service, Atlanta 3, Ga.
Public Roads Administration (Federal Works Agency).	2 information filmstrips, both silent, on roads. Lecture notes furnished.	Borrow from Public Roads Administration, Federal Works Agency, Washington 25, D. C.	Not for sale.....	Public Roads Administration, Federal Works Agency, Washington 25, D. C.
Veterans' Administration.	1 sound filmstrip on the relationship of the VA to the veterans.	Borrow from the Visual Aids Division, Veterans' Administration, Washington, D. C.	Not for sale.....	Visual Aids Division, Veterans' Administration, Washington 25, D. C.

[1] The cost of filmstrips is so low—50 cents to $1.00 for silent, black-and-white prints—that only a few educational film libraries distribute them

Henry Ridgley Evans

Dr. Henry Ridgley Evans, who served the Office of Education for 44 years in an editorial capacity before his retirement from government service in 1931, died in Baltimore, Md., on March 29 at the age of 87. Dr. Evans, educated in law, was a newspaperman, editor, author, magician, and historian. He was looked upon as probably the world's greatest authority on the history of magic. Since his retirement in 1931, noted in SCHOOL LIFE, November 1931, Dr. Evans wrote several books on magic. His widow, Florence Kirkpatrick Evans, also was retired from the Office of Education staff in the year 1931.

New Books and Pamphlets

Periodicals for Small and Medium-Sized Libraries. Prepared by a Subcommittee of the Editorial Committee, American Library Association. 8th Ed. Chicago, American Library Association, 1948. 106 p. $1.75.

The Recruitment, Selection, and Training of Social Scientists. By Elbridge Sibley. New York, Social Science Research Council, 1948. 163 p. (Social Science Research Council, Bulletin 58, 1948.) $1.50.

Understand Your Child—From 6 to 12. By Clara Lambert. New York, Public Affairs Committee, Inc., 1948. 32 p. Illus. (Public Affairs Pamphlet No. 144.) 20 cents.

The Cuyamaca Story. By James Mitchell Clarke. A record in pictures of San Diego's city-county school camp. Prepared for the San Diego city-county camp commission under direction of the school camp steering committee. San Diego, Calif., 1948. 32 p. Illus.

Matching Needs and Facilities in Higher Education. A report to the temporary commission on the need for a State university. By Floyd W. Reeves, Algo D. Henderson, and Philip A. Cowen. Albany, Williams Press, Inc., 1948. 126 p. (New York (State) Legislative Document, 1948, No. 31.) 35 cents.

Redirecting Education. Thirty-fifth annual schoolmen's week proceedings, joint meeting, southeastern convention district of the Pennsylvania State Education Association, April 13–17, 1948. Philadelphia, the University of Pennsylvania, School of Education, 1948. 360 p. (University of Pennsylvania Bulletin, vol. 48, No. 29, June 30, 1948.)

Advancing the Education of the Hospitalized Child. A Conference in Atlantic City, N. J., Feb. 26–27, 1948, Sponsored by the National Foundation for Infantile Paralysis. New York, The National Foundation for Infantile Paralysis, 1948. 96 p. (Publication No. 72.)

College Teaching and College Learning: A Plea for Improvement. The Frank Ellsworth Spaulding Lecture in Education for 1947–1948. By Ordway Tead. New Haven, Conn., Yale University Press, 1949. 56 p. $2.

Free and Inexpensive Learning Materials. Nashville, Tenn., Division of Surveys and Field Services, George Peabody College for Teachers, 1948. 175 p. 25 cents.

The School Custodian's Housekeeping Handbook. By Henry H. Linn, Leslie C. Helm, and K. P. Grabarkiewicz. New York, Bureau of Publications, Teachers College, Columbia University, 1948. 256 p. $3.75.

Teaching the Social-Studies Problems Course in Selected Senior High Schools. By Royce H. Knapp. Lincoln, Nebr., University of Nebraska, 1948. 26 p. (Contributions to Education XXV, University of Nebraska Publication No. 164, July 1948) 50 cents.

What Good is High School? By E. F. Lindquist, Lauren A. Van Dyke, and John R. Yale. Chicago, Science Research Associates, 1948. 48 p. Illus. (Life Adjustment Booklet.) 75 cents. (Other titles in this series include *Understanding Yourself; Why Stay in School?;* and *Understanding Sex.*)

Choosing Your Career. By J. Anthony Humphreys. Chicago, Science Research Associates, 1949. 48 p. Illus. (Life Adjustment Booklet.) 75 cents.

Comics, Radio, Movies—and Children. By Josette Frank. New York, Public Affairs Committee, Inc., 1949. 32 p. Illus. (Public Affairs Pamphlet No. 148.) 20 cents.

School Health Education. A Textbook for Teachers, Nurses, and Other Professional Personnel. By Delbert Oberteuffer. New York, Harper & Brothers, 1949. 405 p. (Harper's Series in School and Public Health Education, Physical Education, and Recreation.) $3.25.

Teaching Conservation; A Guide in Natural Resources Education. By Ward P. Beard. Washington, D. C., The American Forestry Association, 1948. 144 p. Illus. $1.50.

This Is Reading. Washington, D. C., Association for Childhood Education International, 1949. 40 p. (Bulletin of the Association for Childhood Education International, 1949). 75 cents.

Wanted: 30,000 Instructors for Community Colleges. A Bulletin for Prospective Teachers and for Institutions Preparing Teachers. Prepared by The Conference Committee on the Preparation of Instructors for Junior Colleges and Technical Institutes for the Council on Cooperation in Teacher Education. Washington, D. C., American Council on Education, 1949. 51 p. $1.

Sociometry in Group Relations. A Work Guide for Teachers. By Helen Hall Jennings, in Association with the Staff of Intergroup Education in Cooperating Schools, Hilda Taba, Director. Washington, D. C., American Council on Education, 1948. 85 p. (Intergroup Education in Cooperating Schools. Work in Progress Series.) $1.25.

Behind the Academic Curtain; A Guide to Getting the Most Out of College. By Archibald MacIntosh. (Sponsored by the Educational Research Fund of The Tuition Plan.) New York, Harper & Brothers, 1948. 165 p. $2.50.

—Compiled by Susan O. Futterer, Head, Reference and Bibliographical Services, Federal Security Agency Library.

EDUCATIONAL AIDS from Your Government

Free publications listed on this page should be ordered directly from the agency issuing them. Publications to be purchased should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Department of Agriculture

Guiding Family Spending. Prepared by Bureau of Human Nutrition and Home Economics, Agricultural Research Administration. Miscellaneous Publication No. 661, March 1949. 15 cents.

Materials To Help Teach Forest Conservation. Prepared by the Forest Service. 5 p. Free.

Ranger 'Rithmetic: For Sixth Grade Teachers. Prepared by the Forest Service. 10 p. (0–40, April 1948.) Free.

A Step-Saving Kitchen. 16 mm. film, 14 min., color, sound. Bureau of Human Nutrition and Home Economics. Available for loan or purchase.

Department of State

Educational Exchanges Under the Fulbright Act. Division of Publications, Office of Public Affairs. International Information and Cultural Series 2, August 1948. Pub. 3197. 6 p. 10 cents.

The Foreign Service of the United States. Department and Foreign Service Series 1. Reprint. Pub. 2991. 81 p. 25 cents.

International Educational Exchange. United States Advisory Commission and The Program of the Department of State. Division of Publications, Office of Public Affairs. International Information and Cultural Series 3, October 1949. 10 p. Free.

UNESCO and You. Division of Publications, Office of Public Affairs. International Organization and Conference Series IV; United Nations Educational, Scientific and Cultural Organization 4. Reprint. Pub. 2904. 41 p. 15 cents.

Smithsonian Institution

Arts and Crafts: A Bibliography for Craftsmen. Prepared by the Index of American Design, National Gallery of Art, in cooperation with the Division of Vocational Education, Office of Education. Washington, National Gallery of Art, 1949. 80 p. 63 cents.

Superintendent of Documents

Laws: Rules and Regulations. Price List 10, 38th Edition, February 1949. Free.

Office of Education

Printed Publications

Atomic Energy Education. Reprint from SCHOOL LIFE, March 1949. 5 cents.

Educating Our Young Adults After School and College. Reprint from SCHOOL LIFE, March 1949. Free.

Supreme Court Decisions Affecting Education. Reprint from SCHOOL LIFE, February 1949. Free.

Education Directory 1948–49, Part 1. *Federal Government and States.* 15 cents.

Education Directory 1948–49, Part 2. *Counties and Cities.* 20 cents.

Education Directory 1948–49, Part 3. *Higher Education,* 30 cents.

Education Directory 1948–49, Part 4. *Education Associations and Directories.* 15 cents.

Processed Materials

(Free—Limited Supply)

Earned Degrees Conferred by Higher Educational Institutions, 1947–48. Circular No. 247. Division of Higher Education.

The Federal-State Vocational Education Program. Misc. 2354 Revised, March 1949. Division of Vocational Education.

Foreign Educational Opportunities for American Students and Teachers. March 1949. Division of International Educational Relations.

How Democratic Is Your School? Checklists on Democratic Practices for Secondary Schools, 1949. Division of Secondary Education.

Offerings in Guidance Work in College and Universities, Summer 1949. Misc. 3162, Revised 1949. Occupational Information and Guidance Service, Division of Vocational Education.

A Selected Bibliography for Teaching About the United Nations. Division of International Educational Relations.

A Selected Professional Library for the Social Studies Teacher. Circular No. 303, March 1949, Social Studies Series. Division of Secondary Education.

Selected Sources of Current Teaching Materials for Social Studies Classes. Circular No. 301, March 1949, Social Studies Series. Division of Secondary Education.

Service Bulletin of the FREC. March 1949. Federal Radio Education Committee, Division of Auxiliary Services.

State Department of Education Personnel Responsible for the Supervision of Industrial Arts. March 1949. Division of Secondary Education.

Teaching Aids in Atomic Energy: Bibliography for Teachers. Interdivisional Committee on the Educational Implications of Atomic Energy. Bibliography No. 3, March 1949.

Teaching the Social Studies: A Bibliography of Periodical Materials. Circular 302, March 1949, Social Studies Series. Division of Secondary Education.

JUST OFF THE PRESS

With Liberty and Justice for All. 72 pages. Office of Education Bulletin 1948 No. 15, price 25 cents.

★

Radio and Television: Bibliography. 33 pages. Office of Education Bulletin 1948 No. 17 (last bulletin in the 1948 series), price 15 cents.

★

Education in Bolivia. 90 pages. Office of Education Bulletin 1949 No. 1, price 25 cents.

★

Class Size—The Larger High School. 29 pages. Office of Education. Circular 305, price 20 cents.

★

Directory of Secondary Schools in the United States. 496 pages. Office of Education Circular 250, price $1.50.

U. S. GOVERNMENT PRINTING OFFICE: 1949

Office of Education Aids for Atomic Energy Education

Atomic Energy Here to Stay (Special Supplement to SCHOOL LIFE, March 1949 issue)_____ 10¢

Reprint of articles on Atomic Energy (which appeared in SCHOOL LIFE, March 1949 issue)_____ 5¢

Special Atomic Energy issue of HIGHER EDUCATION (February 1, 1949, Vol. V, No. 11)_____ 5¢

(Order the three publications above from the Superintendent of Documents, Washington 25, D. C.

Series of Atomic Energy Bibliographies Compiled by Israel Light for the Inter-Divisional Committee on the Educational Implications of Atomic Energy:

1—Bibliography of Bibliographies on Atomic Energy_ Free

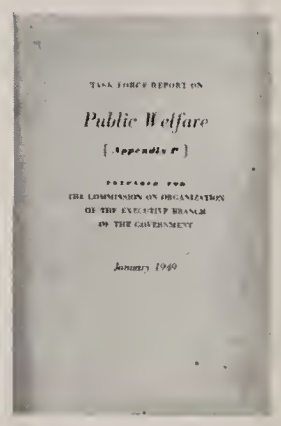
2—Introductory Bibliography on Atomic Energy_____ Free

3—Teaching Aids in Atomic Energy: Bibliography for Teachers _____ Free

4—Inexpensive Books and Pamphlets on Atomic Energy _____ Free

(Order Atomic Energy Bibliographies from the Office of Education, Federal Security Agency, Washington 25, D. C.)

Hoover Commission Reports on Education



TASK FORCE REPORT ON PUBLIC WELFARE (Appendix P). Part Three of this report, "Federal Policy and Organization for Education," presents: I. Introduction; II. The Educational Activities of the Federal Government; III. The United States Office of Education; IV. Effect of Federal Educational Activities on Education in the States; and V. Conclusions—Federal Policy and Structure for Education. Part Three covers pages 277 through 374 of the full 590-page Task Force Report_____ $1.25

SOCIAL SECURITY AND EDUCATION * Indian Affairs, A Report to the Congress, March 1949. The contents of this report are: I. Introduction; II. Proposed Department Organization; III. Grants-in-Aid; IV. Old-Age Assistance and Retirement; V. Federal Participation in Education Generally; VI. Educational Activities in the New Department; VII. Bureau of Indian Affairs, and Part Four: Separate Statements of Commissioners; Related Task Force Report_ 25¢

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School LIFE copy 2

Vol. 31

1948-49