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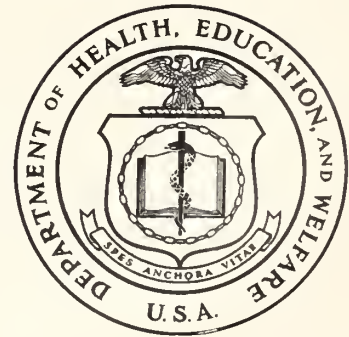
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SCHOOL LIFE

OFFICIAL JOURNAL OF THE * * * * *
OFFICE OF EDUCATION

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September 1958

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THAT THEY MAY BE MEN

NO one doubts that those who are stupid need instruction, that they may shake off their natural dullness. But in reality those who are clever need it far more, since an active mind, if not occupied with useful things, will busy itself with what is useless, curious, and pernicious; and, just as the more fertile a field is, the richer the crop of thorns and of thistles that it can produce, so an excellent intelligence becomes filled with fanciful notions, if it is not sown with the seeds of wisdom and of virtue; and as a mill-stone grinds itself away with noise and grating and often cracks and breaks, if wheat, the raw material of flour, be not supplied to it, so an active mind, if void of serious things, entangles itself utterly with vain, curious, and noxious thoughts, and becomes the cause of its own destruction.

Thus, all who are born to man's estate have need of instruction, since it is necessary that, being men, they should not be wild beasts, savage brutes, or inert logs. And since all have been born with the same end in view, namely that they should be men, it follows that all boys and girls, both noble and ignoble, rich and poor, in all cities and towns, villages and hamlets, should be sent to school.

JOHN AMOS COMENIUS from *The Great Didactic*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . . . ARTHUR S. FLEMMING, *Secretary*
OFFICE OF EDUCATION LAWRENCE G. DERTHICK, *Commissioner*

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Director
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Brief * * * * *
EDUCATION AND GOVERNMENT
Reports * * * * *

Administrators of HEW

THE two top positions in the Department of Health, Education, and Welfare have been given this summer to persons closely associated with education.

Arthur S. Flemming, the new Secretary, is himself an educator. He comes to his cabinet post from the presidency of Ohio Wesleyan University, a position he has held since 1948 with time out for Government service. Between 1927 and 1939 he served The American University in three capacities—first as an instructor, then as director of its School of Public Affairs, and finally as its executive officer.

Bertha S. Adkins, the Under Secretary, who before her appointment was assistant chairman of the Republican National Committee, was for 8 years dean of women at Western Maryland College and for 4 years dean of residence at Bradford Junior College in Massachusetts.

Dr. Flemming succeeded Marion B. Folsom on August 1; Miss Adkins, who follows John A. Perkins, was sworn in on August 19.

USA joins IBE

THE family of nations that belong to the International Bureau of Education grew by two during the IBE-UNESCO-sponsored 21st International Conference on Public Education in Geneva, Switzerland, July 7-16. The new members are the Republic of China (Formosa) and the

United States of America. Membership came to the United States by the unanimous vote of IBE's Council. At the closing session of the conference the chairman of our delegation, Wayne O. Reed, pledged the full cooperation of our government.

The International Bureau of Education acts as a clearinghouse for worldwide educational information. Member nations enjoy the benefits of helping and being helped through their own experiences and the experiences of others.

Four delegates represented the United States at the Geneva Conference: Lois Clark, assistant director of rural services, National Education Association; Mary A. Adams, assistant superintendent of elementary education, Baltimore, Md.; Wayne O. Reed, Deputy United States Commissioner of Education; and Fredrika M. Tandler, international organizations specialist in the Office of Education.

The United States annual report on its educational system and its pictorial exhibit were both prepared by the Office of Education. The exhibit centered on this year's conference topics — elementary school curriculums and facilities for rural education. Copies of the United States report—*Progress of Public Education in the United States of America, 1957-58*—in French, Russian, Spanish, and English, all under one cover—may be had from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 50 cents each.

For the nation's youth

PRESIDENT Eisenhower is the sixth President to call for a White House Conference on Children and Youth, a national meeting of leaders from many professions who are interested in the welfare of American young people. In May this year he asked that such a conference be held in March 1960 and that the Secretary of Health, Education, and Welfare take the lead in preparing it.

One of the Secretary's first actions was to send letters to all State governors inviting them to participate in the national rally. He requested each governor to appoint a liaison committee, broadly representative of all groups concerned with children and youth, to work with the national committee and to act as a communications channel between the State and the staff of the conference.

Choice of a theme for the 1960 meeting—one reflecting the needs of children and youth in these times—will be the task of the President's national advisory committee, which he plans to appoint this fall. Meanwhile, the Children's Bureau of the Department of Health, Education, and Welfare, in line with its assignment from the Department to put the conference in operation, is choosing a conference staff, to be attached to its office. Several professional groups have already met with officials of the Children's Bureau to discuss their

particular interests in children and youth.

The story of the White House Conference on Children and Youth goes back to 1909 and President Theodore Roosevelt. The great conservationist President saw in youth America's first treasure, more precious by far than the land and game he loved. A White House Conference on Children and Youth has been held in every decade since, and the results—such as the closer cooperation of the many organizations devoted to child welfare—attest to his wisdom. The Children's Bureau was itself founded as a result of the first conference.

Overseas opportunities

TEACHERS interested in a year's work abroad should act now. Already the Office of Education is receiving applications for the 1959-60 school year exchange-teacher program. Over 30 countries will participate—Afghanistan, Argentina, Australia, Austria, Belgium, Burma, Cambodia, Canada, Colombia, Cuba, Denmark, Finland, France, Germany, Greece, Haiti, India, Indonesia, Iraq, Israel, Italy, Japan, Laos, Lebanon, Liberia, Morocco, Nepal, the Netherlands, New Zealand, Norway, Pakistan, Peru, Thailand, Tunisia, Turkey, United Kingdom, and the United Kingdom colonial area.

The Office is also taking applications for the special seminars offered under the program during summer 1959 for U. S. foreign language teachers of modern European or world history. Language seminars will be held in Colombia, France, Germany, and Italy; history seminars, in Italy.

For application blanks and all necessary information, write to the Teacher Exchange Section, Division of International Education, U. S. Office of Education, Washington 25, D. C.

Report on smoking

THE Committee on Health of the School Age Child of the Depart-

ment of Health, Education, and Welfare calls the attention of administrators and teachers to a report of the United States Public Health Service on death rates among smokers and nonsmokers. The Committee suggests that school personnel will find this report useful in meeting their established responsibilities for health education. The PHS prepared the following statement expressly for *School Life*.

"A recent study by the U. S. Public Health Service again shows a significantly higher death rate among regular cigarette smokers than among nonsmokers. The study, presented to the 7th International Cancer Congress in London, is the largest statistical study to date on this question and generally supports the findings of earlier studies of the relationships between death rates and smoking.

"The study examines death rates among 198,926 U. S. Government insurance policyholders. Out of 7,382 deaths in the group during a 2½-year period, the rate for cigarette smokers was 58 percent higher than for nonsmokers; the rate of death from lung cancer was 10 times higher. Death rates among regular cigarette smokers show a close relation to the number of cigarettes consumed—rates for those who smoked more than 40 cigarettes a day were much higher than for those who smoked fewer than 10.

"Death rates declined among those who stopped smoking. Mortality was lower among those who had given up smoking before the study began than among those who continued to smoke. However, death rate for those who had given it up was still 30 percent higher than for those who had never smoked.

"In addition to higher mortality from lung cancer, smokers also had higher death rates from other diseases and disorders, such as bronchitis, pleurisy, emphysema, cirrhosis of the liver, and ulcers of the stomach and duodenum.

"Copies of the Public Health report can be had by request from the National Institutes of Health, Bethesda 14, Md."

Through *School Life* and other media the Committee on Health of the School Age Child will keep State and local school officials informed on pertinent data, materials, and resources.

Emblem for SEATO

THE South-East Treaty Organization wants an emblem—and will give \$500 to the person who can design it. Any national or institution of a member country (Australia, France, New Zealand, Pakistan, the Philippine Republic, Thailand, the United Kingdom, and the United States) is eligible to try. The second prize is \$200.

"Simple and memorable"—above all, the design must be both. The rules of the competition can be had from the Public Services Division, U. S. Department of State, Washington 25, D. C., but because time is short (entries must be at SEATO headquarters, in Bangkok, by October 31, 1958), we mention the two specific restrictions: No lettering, no more than three colors.

If information about SEATO itself is needed, send 15 cents to the U. S. Government Printing Office, Washington 25, D. C., for *SEATO: First Annual Report* (Dept. of State Pub. No. 6305, Far Eastern Series 72).

Upswing in Russian

THE Office of Education notes that at least 80 public schools in 25 States and the District of Columbia, and 17 private schools, are offering Russian this fall. Last year only 8 public and 10 private schools taught it.

Russian studies are also increasing in colleges and universities. Many of the 175 institutions already teaching Russian are expanding their programs; about a dozen others are beginning Russian this fall. During the summer 16 universities held classes or workshops for teachers.

Graduate literature and language courses are offered at 13 colleges.

Five cities are providing television courses in scientific Russian.

A BETTER SCHOOL IN HURON

For community effort, the President's congratulations

SCHOOL is different this year for eighth graders in Huron, Ohio. For one thing, they don't have time for arithmetic anymore: they're too busy studying algebra or general mathematics. And they're taking a full-scale course in general science besides.

Next year they'll enter high school with 2 full units of credit, ready for biology and geometry. By the time they're seniors, the high school will have added a fifth year of both science and mathematics.

A straitjacket discarded

Huron, a town of 5,000 population with a 4-year high school of about 400 students, is quickening its pace in science and mathematics not because it wants all its children to become scientists but because it is thoroughly convinced that school time is precious and must be wisely spent. "We've thought about it this way," says R. L. McCormick, superintendent of schools—and he speaks not only for himself and his teachers but for the school board and the entire community:

"As far back as anyone can remember—as far back as 1885, the records show—we've been holding our high school students down to 4 units of work a year. And all the while we've been accumulating new knowledge in every field and adding new courses to our curriculum—modern languages, home economics, industrial arts, vocational subjects, fine arts. We've finally asked ourselves, what's the point of spreading an educational feast before our students and then putting them into a 16-unit straitjacket so they can't eat?"

No point at all. Huron has decided and has gone on to work out a pro-

gram that leaves no room for straitjackets of any kind. It's a program that calls for the identifying of all talented children no later than the seventh grade and then "pouring it on"; for offering 6 consecutive years of a foreign language to develop real fluency; for lengthening the school year to 37 weeks and for lengthening the school day from 6 hours to 7 so that students can carry 5 units a year. The longer day and the heavier load were introduced experimentally last year, and the school was pleased to find that most of its students did better work with 5 courses than with 4. Eventually, Huron students will be able to graduate with 24 units of work.

The accelerated science program is getting some extra impetus from community cooperation. Henry M. Miles, a chemist by training and a citizen of Huron, last November heard President Eisenhower's television broadcast urging local communities to strengthen their schools; and the idea came to him of using the knowledge and skills of local scientists and technicians to bolster the school's science program.

He went at once to Superintendent McCormick, who is, as the *Sandusky Register Area News* puts it, "a school system head who will listen." A joint committee of teachers and citizens picked physics as the pilot course for the rest of the year, and Mr. Miles' idea went into practice. Not only have the citizen experts come into the classroom to demonstrate the practical applications of scientific principles, but they have helped in other ways—encouraging and assisting individual students in special projects or research, repairing laboratory equipment, lending or giving their own, securing used equipment from indus-

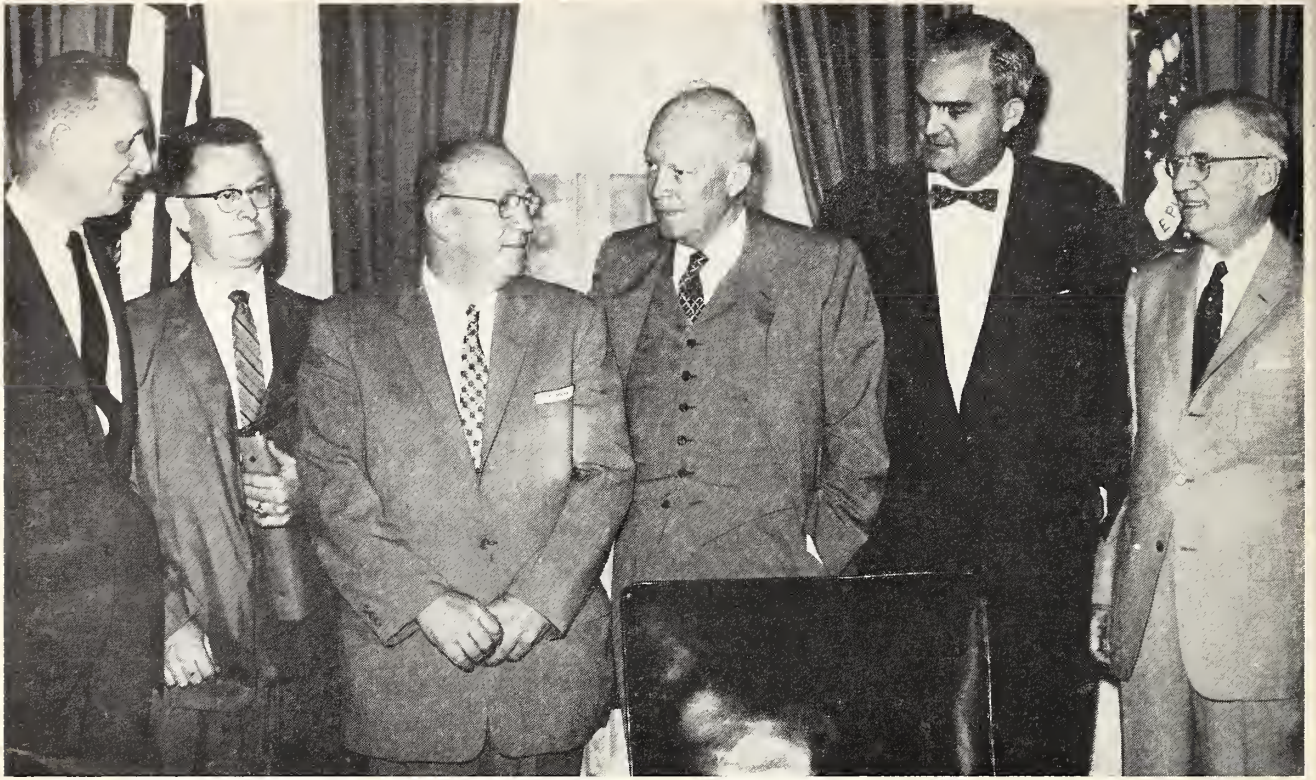
trial plants, arranging tours, showing films, and advising on purchasing and curriculum planning.

This year two doctors of medicine have joined the community-school committee, and the plan is being extended to biology and chemistry as well as into the elementary school, which has a well-defined science program in every grade. Something that works so well in science, says Huron, should be used in other courses—and the possibilities for the arts and the humanities are already being imagined.

Noted in Washington

In all this, of course, Huron is not unique. Throughout the country hundreds of communities are reaching the same conclusions and moving in the same directions. But so notable is Huron for the quality of its educational leadership and the cooperative spirit of its people that, early this spring, it caught the attention of officials in the Office of Education, as well as of the President, who ever since his November speech has been noting with special interest such examples of local effort. In May, therefore, Commissioner of Education Dertlick invited three men from Huron to Washington for a day, to confer with Office of Education staff; and arranged for them to receive in person the congratulations of the President.

For superintendent of schools McCormick, president of the board Robert E. Bowers, and citizen representative Miles, the most memorable part of June 12 was no doubt the half hour they spent with the President. But for specialists in the Office of Education it was the conference they had with the visitors from Ohio. In



With the President, from left to right: Lawrence G. Derthick, Commissioner of Education; the three visitors from Huron, Henry M. Miles, R. L. McCormick, and Robert Bowers; and Marion B. Folsom, then Secretary of the Department of Health, Education and Welfare

the morning the Office asked the questions: in the afternoon, the visitors. Out of the exchange emerged much more detail about Huron's accomplishments, plans, and problems—enough to intimate something of the tremendous complexity of a school system, of the problems that complicate change, and of the endless difficult decisions. For instance, in the words of the men from Huron—

About the 8th grade math courses. The student doesn't choose between them. He takes algebra only if he's ready for it, and his readiness is measured while he's still in the 7th grade. The pupil who takes general math can still get algebra in the 9th grade if he wants it and is ready, for we've still got to keep an algebra course for freshmen coming from other school systems.

Eighth grade arithmetic wasn't thrown out bodily. We've sorted; and what is worth keeping we've put into the 7th grade.

No, we've not had complaints from

parents whose children aren't on the algebra roster. After all, everyone understands that this is one of our ways of looking out for each child's interest.

About the fifth years of high school science and math. We're still undecided about content. Should the science be basic or applied? Should it be *space science*, including some astronomy? We've been advised to make our math course analytic geometry so that in college the students can go directly into calculus. In the end, for both sciences and math, we'll probably offer courses that will give the students advanced standing in college.

About local scientists in the classroom. The success of a plan like this depends on everyone's understanding it and approving. You can't afford to have your teachers resenting it, feeling they've been judged inadequate for the job; or the schoolboard saying, "Wait a minute, *we're* the ones

who've been elected to run the school"; or the scientist thinking *he's* the professional teacher.

The way we work it, the teacher and the scientists go over the course of study together; and if the scientist has something to contribute on a principle at the time we teach it, the teacher fits it into the schedule. But we keep one thing clear: The teacher runs the show.

One bonus from the arrangement is that it gives the school a good chance to interpret itself to the community. Some people come in with the idea that the school doesn't even have a science program, and for them the whole experience is quite an eye opener.

To make a good thing better, the board has authorized us to employ a coordinator of special community resources with the school program. He'll be a science teacher who knows industry. Because of his coordinating duties, he'll not have a full teaching load but will be employed for a longer

period than the usual classroom teacher, something like the football coach.

About languages. We're keeping our 2 years of Latin, high in demand among our pupils, and now we're adding a modern language. It'll probably be Spanish, in view of the fact that it's both an official language of the United Nations and a principal language of this hemisphere. We want 6 years of it: that's why we plan to start it in the 7th grade, a full period every day, 5 days a week, for high school credit. And while we're working on that goal, we're thinking of adding a second language, maybe Russian.

About finding talent. Other than a dean of boys and of girls, we have no special guidance staff, but we depend on our teachers, whom we try not to overburden.

In Grades 6, 7, and 8 we departmentalize half of each day, and we try to limit each departmental teacher to 60 children a day. If she is to think about each child for 1 minute outside of teaching time—and certainly a child is entitled to that much time alone in his teacher's mind—she'll not have time for more than 60. In high school we have 20 teachers for our 400 students; and since we've added another hour to the school day each teacher has another conference hour in which to give students individual attention.

AS the conference went on it became clear that Huron's evaluation of its school program had reached into every part of the curriculum. The community is concerned about science and languages but also about the adequacy of its courses in literature and history, the inservice training of its teachers, the quality of its library. All this and more augurs well for the balance and quality of the education it gives its children. And because the conscience and energy displayed in Huron are being displayed in local communities everywhere, it augurs well for the future of America.

Aviation



from an educator's view

by WILLIS C. BROWN

Specialist for Secondary Education, Office of Education

Workshop for teachers

A space-age workshop in Littleton, Colo., keeps the town's teachers up-to-date on rockets and jets. The Martin Aircraft Co. provides the consultants; the school board gives the teachers credit for participating (1 evening a week for 10 weeks); and the pupils eventually get the benefit.

Help from the Army

The U. S. Army has made it policy to encourage and assist amateur rocket experimenters. In Circular 360-5, sent to all posts in July, it includes as a sample the regulations at Fort Sill, Okla., under which high school and college students may fire their missiles on Army ranges.

Shrinkage by jet

Speaking of the day when turbojets will fly commercially in this country, Walter Johnson of American Airlines is quoted in *Travel USA*, June 1958: "The USA will shrink 40 percent in the next few months. No place in the Nation will be more than 4½ hours from any other place. No place in the world will be more than 11 hours away."

In Soviet skies

Aeroflot, a turbine-powered craft already in operation; the TU-104, a 70-passenger plane that can cruise at more than 500 m. p. h.—these and other developments in Soviet aviation are told in *Red Star Into the West*, a free booklet by the Air Transport Association of America, 1000 Connecticut Ave., Washington 6, D. C.

Wise substitution

The Florida Section of the American Rocket Society is trying to keep boys so busy learning the basics of rocketry that they haven't time for dangerous experiments at home. It's supplying high school

science clubs with lectures from local laboratories and plants—from the Polaris Project, RCA, Pan American, Ramo Woodridge, Douglas—and has added an essay contest to encourage serious thinking.

Speaking of space

The Space Frontier is a highly readable 18 pages, profusely illustrated, that will introduce students to many technical terms in space science. It can be had for 25 cents (20 cents in lots of 100) from the National Aviation Council, 1025 Connecticut Avenue, Washington 6, D. C.

Why explore space?

Four reasons why the USA should explore space have been put in simple language by the President's Science Advisory Committee, James R. Killian, chairman. *Introduction to Space* is for sale (15 cents) by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Scholarships

"Teen-agers are terrific," say the judges of this year's essay contest held by Boeing Airplane Co., Seattle, Wash. The 16 best essayists won four \$1,000 scholarships, two \$500, and ten \$100. This award is one of many made annually by aircraft industries and airlines, whose needs for topgrade specialists spur their interest in education.

Federal agency

The Civil Aeronautics Administration, which for years helped schools to educate for the air age, now is united with the Civil Aeronautics Board and other Federal aviation agencies into one body—the Federal Aviation Agency, created by Congress last month. James V. Bernardo is director of education.

45 Million in School

out of 4 enrolled This year the ratio means an increase of 1,750,000

JUST as they did last year, schools and colleges this year will enroll 1 out of every 4 Americans. But in the total count of pupils and students—the count that really matters when it comes to providing classrooms and teachers—this year's figures aren't the same at all. Enrollments are expected to surge upward by approximately $1\frac{3}{4}$ million to a grand total of 45 million—the latest in a series of increases that has been uninterrupted for 14 years.

These are the estimates of the Office of Education, which every year, just before school opens, assesses the size of the oncoming enrollments. The figures include both public and nonpublic schools at all levels from kindergarten through graduate school, for the entire school year 1958-59.

At all levels schools expect record attendance. Again, the largest enrollment will be in the grades K-8: 31,793,000, or 1,123,000 over last year's estimate. School attendance in grades 9-12 will increase by nearly half a million (456,000) to total 8,880,000 students. Colleges anticipate an increase of 173,000 pushing enrollments to 3,623,000.

Enough classrooms?

The classroom shortage remains serious. How serious we will not know for another two months, until the Office completes its study of classroom supply and demand. *School Life* will make a report at that time.

Enough teachers?

This year, too, the total number of teachers will climb. In all, the Office estimates, there will be 1,334,800 qualified teachers on hand to supply our elementary and secondary schools, public and private: 1,221,500 are

qualified teachers returning from last year; 23,000 are former emergency teachers who have now become qualified; and 90,300 are beginning teachers.

But all these will not be enough. Last year the schools had 1,412,000 teachers; and this year, to take care of the increase in enrollment, they will

need at least 55,000 more—1 teacher for every 30 pupils from kindergarten through grade 8, and 1 for every 25 in grades 9-12. Between supply and demand the gap is wide—132,200 empty places. Where teachers cannot be found to fill them, schools will enlarge classes, cut down on curriculum.

Estimated enrollments in educational institutions in the continental United States for 1957-58 and 1958-59

School	1957-58	1958-59
Kindergarten through grade 8:		
Public school system	26,037,000	26,927,000
Nonpublic schools	4,466,000	4,693,000
Federal schools for Indians	26,000	25,000
Federal schools under Public Law 874	¹ 20,000	20,000
Other	² 121,000	128,000
Total kindergarten through grade 8	30,670,000	31,793,000
Grades 9-12:		
Public school system	7,399,000	7,790,000
Private and parochial schools	942,000	1,002,000
Federal schools for Indians	11,000	11,000
Federal schools under Public Law 874	¹ 1,000	1,000
Other	² 71,000	76,000
Total grades 9-12	8,424,000	8,880,000
Total elementary and secondary	39,094,000	40,673,000
Higher education:		
Universities, colleges, professional schools, including junior colleges, normal schools, and technical schools	3,450,000	3,623,000
Other schools:		
Private commercial schools (day and evening)	560,000	560,000
Nurse training schools (not affiliated with colleges and universities)	91,000	89,000
Total other schools	651,000	649,000
Grand total	43,195,000	44,945,000

¹ Includes only "schools operated on post by Federal Agency."

² Includes residential schools for exceptional children and model and practice schools in teacher-training institutions.

Legislation for EDUCATION and DEFENSE

in the 85th Congress, Second Session

THE second session of the 85th Congress, which came to an end on August 23, produced a number of acts of great importance to the Nation's schools.

Foremost among them is the "National Defense Education Act of 1958" which was signed by the President on September 2 into Public Law 85-864. It provides for loans to college students; grants to the States and loans to private schools for better instruction in science, mathematics, and foreign languages; fellowships to increase the number of college teachers; aid to the States for more guidance, counseling, and testing; centers and institutes to train teachers and other experts in modern foreign languages; area vocational education programs; a science information service; research on the educational uses of television and other audio-visual media of communication; and aid to State departments of education for improving statistical services. To put these provisions into effect the Congress has made an initial appropriation of \$40 million for this fiscal year (the next issue of *School Life* will explore the law more fully—and its meaning for the Nation's schools).

Funds for the Office

Public Law 85-580, Aug. 1, 1958, gives \$7,850,000 to the Office of Education for salaries and expenses for the current fiscal year—\$850,000 more than last year. This includes \$2.7 million for the cooperative research program, now beginning its third year of operation.

The same law also appropriates funds for certain programs administered by the Office:

▲ \$33,750,081 for the vocational education program, with \$4 million of it earmarked for the practical-

nurse training program and \$228,000 for vocational education in the fishery trades and industry.

▲ \$2,501,500 for the land-grant college program.

▲ \$6 million for the rural library services program—\$1 million more than last year.

Other laws

Public Law 85-385 authorizes the District of Columbia to employ retired teachers in its public schools.

Public Law 85-458 amends the Tariff Act of 1930 to permit colleges and universities to import, free of duty, sound recordings and films.

Public Law 85-460 amends the definition of the term "State" in the Veterans' Readjustment Assistance Act and the War Orphans' Educational Assistance Act to make clear that persons entitled to benefits under these acts may take training while residing in the Panama Canal Zone.

Public Law 85-478 extends the special milk program for children in public schools through June 1961.

Program made permanent

Public Law 85-620, Aug. 12, 1958, extends and amends Public Laws 815 and 874, which since 1950 have together provided \$1.4 billion in Federal aid for constructing and operating schools in areas affected by Federal activities—\$769 million for construction and \$618 million for maintenance and operation. The new law makes the program permanent for children of persons who reside *and* work on Federal property; and extends until June 30, 1961, the aid for children whose parents *either* work *or* live on such property.

Public Law 85-485 amends the Agriculture Act to permit use of Fed-

eral surplus foods in nonprofit summer camps for children.

Public Law 85-544 amends the Public Health Service Act to authorize the Surgeon General to make certain grants-in-aid for training and services in public health and the administration of State and local public health programs in public or nonprofit accredited schools of public health.

Public Law 85-552 increases the salary of the Superintendent of Schools of the District of Columbia from \$18,000 to \$19,000 a year.

Public Law 85-613 exempts certain teachers in the Canal Zone public schools from prohibitions against the holding of dual offices and the receipt of double salaries.

Public Law 85-684 grants the consent of Congress to the several States to negotiate and enter into compacts for the purpose of promoting highway traffic safety, including improvement of driver education and training.

Public Law 85-871 amends the War Orphans' Educational Assistance Act of 1956 to authorize the enrollment of a handicapped eligible person in a specialized course of vocational training.

Public Law 85-875 requires the Commissioner of Education to encourage, foster, and assist in the establishment of clubs in localities throughout the Nation for boys and girls especially interested in science.

Also on the list of Congressional enactments for education is H. R. 13757, which at this writing has not yet been signed by the President. It would authorize grants to public or other nonprofit institutions of higher learning and to State educational agencies to promote the expansion of teaching in the education of mentally retarded children.

The Middle East . . . A Meeting Place

I like the name "Middle East": it harmonizes with the history of the land that bears it. There cultures have met . . . and men have met . . . and now, at last, men's minds must meet



MIDDLE EAST—the name is a fitting one for that wide quadrangle whose diagonals reach from Gibraltar to Karachi, from Khyber Pass to Casablanca. It carries a meaning that I like, for it harmonizes with both the history and the present condition of this cluster of lands that for centuries has been a bridge between East and West, a bridge on which the cultures of many nations have met and merged.

Today we wish very much to understand the Middle East, to have all the explanations for the forces that move its men and events. But the explanations lie in the past, and we have not consistently followed the advice we have inscribed at the entrance to the National Archives Building in Washington: *What is past is prologue. Study the past.*

For in our schools, where most of us learn our history and imbibe our cultural prejudices, we are teaching the history of western civilization as if it had begun with Greece and Rome; and even to Greece and Rome we give but brief attention before we rapidly turn to the Norman Conquest and the iniquities of King John. To most of our students *Byzantium* is just a name hard to spell, associated with a formless area producing vague emperors whose names are difficult to remember and whose reigns melt into one vast blank. And with the sweep of a few pages we dispose of the complicated past and the rich contributions of the Middle East.

Who, then, can be surprised that we in the West so often call the Middle East mysterious, beyond our comprehension? Sometimes I think it is the West that is mysterious, it is the West that is temporarily out of cultural

← *The first line on the first page of the Koran is the invocation with which the devout Moslem begins each day: "In the name of God, the beneficent, the merciful . . ."*



Abul H. K. Sassani, the author, is Office of Education specialist for comparative education, Near East and Africa. In Dr. Sassani, West and Middle East have met: he attended elementary and secondary schools in his native Iran; colleges and universities, in the United States.

touch with the East and must get back into the normal attitudes of interest and exchange of ideas.

Our approach to history still suffers, I think, from the naïve interpretation of the ancient past that prevailed during the 18th and 19th centuries. To be sure, Egypt had a place in it, but mostly as a museum piece. As far as the populous countries of Asia Minor and beyond were concerned, they existed mainly to be defeated at Salamis and Arbela.

But it has now no excuse to suffer further. Fortunately modern scholarship has given us a different concept of the ancient world. Not only has it enriched our understanding of our own history by extending our studies backward in time; but without diminishing the intellectual glories of the Greeks it has discovered that other nations, too, had brilliance. It has given ancient thought a wider range, a broader background, a greater sweep in time and space. Through the clear eyes of modern scholarship we see that the culture and intellect of the ancient Middle East was not disparate and apart from classical civilization; that from the vantage of its "middle-ness," the Middle East became the blender and transmitter of many cultures; that Greece and Rome belong as much to the Middle East as to Europe. It is not too audacious to suggest that some day someone will write the history of the Greek world and the Roman Empire not as the foundation of Western Europe but as an extension and modification of the cultures of their neighbors to the east.

When our schools follow the lead of modern scholars and give the Middle East its just place in history, one of our rewards will be that we will better understand ourselves. For there is hardly anything in Western civilization that cannot be traced ultimately to the Middle East. The alphabet and the art of writing, postal systems, number systems, leagues of nations, astronomy, the ideas of statutory law and republican government, monotheistic religion—the list is endless. And at the same time that we come to understand ourselves we will also come to understand the Middle East.

Understanding the Middle East means knowing many things.

It means knowing something of the diversities that militate against harmony there: sects among the Moslems; the oil-have's and oil-have not's; differences of many other kinds—ethnic, linguistic, political, economic, and social. It means knowing that, despite these divisions, the Middle East has a basic unity, shaped by a long history: Conquests, migrations, and deportations have diffused the culture throughout the area, making it a common bond; 180 million of the 200 million people are Moslems and all but 3 of the 14 countries have Moslem majorities; the three major languages—Arabic, Farsi, and Turkish—have interpenetrated each other to a marked degree.

It means knowing some of the changes that have contributed to the social upheaval now shaking the entire Middle East: the end of patience with poverty and disease, the disintegration of the traditional family pattern, the rise of nationalistic aspirations, the growth of industries and cities. It means knowing something of the frustration, the disillusionment, of people whose increasing contact with the West has sharpened their awareness of contrasting standards of living; something of the deepfelt cry for change and of the lack of unanimity on what the change should really be.

All these things and more we must know if we are to understand the Middle East, just as there are many things Middle Easterners must know if they are to understand us. And we *must* understand each other, for the Middle East has become once more the place of meeting. Knowledge of our common origins will make us know each other as brothers. But how shall we know unless we are taught? How else will we recognize each other when we meet?



Cooperative Research Program

review and anticipation

SO far has the Cooperative Research Program of the Office of Education* progressed since *School Life's* latest report, in April, that any attempt to bring it up to date in small space is a formidable task. In the brief interval between that report and June 30, when the program closed the books on its second fiscal year, 31 more contracts were signed; the advisory committee came to Washington to review the latest proposals; and the Office held the first of a series of meetings planned to bring researchers and Office staff together.

The Latest Contracts

The 31 contracts signed in the last few months of 1957-58 brought the total number of research projects initiated under the program to 133 and the total pledge of Federal support to \$6.5 million. Some of these projects require only a few months to complete, some as much as 5 years; for the first 2 years of work the Congress made 3.3 million available—\$1 million for 1956-57, \$2.3 million for 1957-58—and now, for the third fiscal year, it has appropriated \$2.7 million, 2 million of which will go to support projects already under way, leaving \$700,000 for new projects.

The last 31 projects to enter the program in 1957-58 are being carried out in 21 universities and 2 State departments of education. Classified roughly by the problems they attack, they are listed here (in

each case, the Federal-funds figure is the amount committed for the full length of the project):

Mentally retarded children

UNIVERSITY OF HOUSTON, *Measuring sensory thresholds in exceptional children*, 17 months, Lee Meyerson and John L. Michael, directors. Federal funds, \$23,370.

MAINE STATE DEPARTMENT OF EDUCATION, *A rural school program for educable mentally retarded children*, 19 months, Philip A. Annas, director. Federal funds, \$29,659.

UNIVERSITY OF MINNESOTA, *Modifying parental attitudes toward mentally retarded children*, 16 months, Dale B. Harris, director. Federal funds, \$21,735.

MISSOURI STATE DEPARTMENT OF EDUCATION, *Factors in the school's holding power for educable mentally retarded children*, 2 years, 9 months, Clyde J. Baer, director. Federal funds, \$34,474.

NEW YORK UNIVERSITY, *Measuring the educability of severely mentally retarded children*, 1 year, Howard Newburger, director. Federal funds, \$29,843.

SYRACUSE UNIVERSITY, *Effects of systematic variations of certain conditions related to learning*, 16 months, Kathryn A. Blake, director. Federal funds, \$31,508.

WASHINGTON UNIVERSITY (Missouri), *Achievement modification in normal and mentally retarded high school*

Some totals to indicate the growth of the Cooperative Research Program during its first 2 years, from July 1, 1956, to July 1, 1958

Proposals received and reviewed.....		490
Proposals recommended to the Commissioner by the Advisory Committee....		158
Projects signed into contract.....		133
Total Federal funds obligated to bring the 133 projects to completion*:		
Mentally retarded children.....	53 projects	\$3, 396, 098
Special abilities of students.....	13 projects	415, 066
Juvenile delinquency.....	4 projects	140, 440
Retention of students.....	8 projects	325, 764
School organization and administration.....	6 projects	398, 970
Staffing.....	18 projects	764, 755
School construction.....	1 project	166, 265
Vocational education.....	1 project	22, 227
Population mobility.....	4 projects	44, 090
Miscellaneous:		
Physically handicapped children.....	3 projects	128, 160
Curriculum and instruction.....	9 projects	198, 822
Social environment and personality.....	8 projects	270, 938
Other.....	5 projects	186, 625
Total.....	133 projects	**6, 458, 220

*Funds obligated for contracts running beyond the current fiscal year are of course contingent on Congress' appropriating funds. Appropriations for the first 2 years totaled \$3.3 million; and now \$2.7 million has been appropriated to carry the program through June 1959.

**In addition to the Federal funds, there are contributions from the participating institutions and agencies, usually in the form of services and facilities—enough, on the average, to defray one-third of the total cost.

*A program authorized by Public Law 531, 83d Congress, in which the Commissioner of Education "enter[s] into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education."



Alaska

1 Number of contracts
\$31 Federal dollars, in thousands

By June 30, 1958, the cooperative research program of the Office of Education had obligated a total of \$6.5 million to see 133 projects to completion in 31 States, Alaska, and the District of Columbia. The program extends also into 4 other States—Connecticut, Kentucky, Maryland, and Virginia—through the cooperation of 4 universities in a 20-university project directed by the Office of Education.

children, 10 months. Richard de-Charms and Thomas E. Jordan, directors. Federal funds, \$3,394.

Special abilities

UNIVERSITY OF CALIFORNIA AT BERKELEY, *Specialization of attitudes in relation to academic success at various academic levels*, 2 years. 10 months, T. Bentley Edwards, director. Federal funds, \$47,296.

HUNTER COLLEGE, *Identifying, in elementary school, gifted children with scientific talent*, 1 year. 9 months, Frederick B. Davis and Gerald S. Lesser, directors. Federal funds, \$23,431.

IOWA STATE DEPARTMENT OF EDUCATION, *Effect of special training on the gifted child's achievement and adjustment*, 15½ months. Arthur C. Anderson, director. Federal funds, \$44,150.

UNIVERSITY OF PENNSYLVANIA, *Differences between good and poor problem solvers*, 16 months, Merle W. Tate, director. Federal funds, \$10,051.

School organization

UNIVERSITY OF WISCONSIN, *Educational effectiveness of new centralized school districts in rural areas*, 3 years, 2 months. Burton W. Kreitlow, director. Federal funds, \$70,777.

Staffing the schools

INDIANA UNIVERSITY, *Problem-solving performance of elementary school teachers on professional criteria*, 2 years. Nicholas A. Fattu, director. Federal funds, \$43,470.

UNIVERSITY OF KANSAS CITY, *Role of the teacher and occupational choice*, 2 years, 1 month. Bruce J. Biddle, director. Federal funds, \$39,100.

UNIVERSITY OF MINNESOTA: (1) *Effects of direct and indirect teacher influence on learning*, 2 years. 3 months, Ned A. Flanders, director. Federal funds, \$34,595. (2) *Relation between the observed classroom behavior of elementary-school student teachers, predictors of that behavior, and rating by supervisors*, 16 months, Roger E. Wilk, director. Federal funds, \$31,763.

UNIVERSITY OF UTAH, *Means of assessing the quality of teaching in the elementary schools*. 14 months, Marie M. Hughes, director. Federal funds, \$37,570.

Vocational education

PURDUE UNIVERSITY, *Vocational education in the public schools as related to social, economic, and technical trends*, 1½ years, Frank J. Woerdehoff and Norbert J. Nelson, directors. Federal funds, \$22,227.

Population mobility

FLORIDA STATE UNIVERSITY, *Late school entrance and children's adjustment*, 4 months, Walter Douglas Smith and John A. Demming, directors. Federal funds, \$1,455.

SOUTHERN ILLINOIS UNIVERSITY, *Effect of migrancy on the education of children*, 13 months, Melvin S. Brooks, director. Federal funds, \$4,830.

Curriculum and instruction

BOSTON UNIVERSITY, *Adapting instruction to learning needs of children in the intermediate grades*, 1½ years, Donald Durrell, director. Federal funds, \$26,680.

UNIVERSITY OF CHICAGO: (1) *A Conceptual system for dealing with problems of curriculum and instruction*, 2 years, John I. Goodlad, director. Federal funds, \$32,718. (2) *Methods for different types of students*, 2 years, 2 months, Herbert A. Thelan, director. Federal funds, \$43,947.

WASHINGTON UNIVERSITY (Missouri), *Teaching and developing a physics-algebra course at 9th grade level*, 1 year, Alexander Calandra, director. Federal funds, \$12,995.

Attitudes, interests, personality

MICHIGAN STATE UNIVERSITY, *Critical thinking, attitudes, and values in higher education*, 1½ years, Paul L. Dressel, director. Federal funds, \$26,749.

NORTHWESTERN UNIVERSITY, *Interests of children and youth*, 1½ years, Paul A. Witty, director. Federal funds, \$13,800.

SYRACUSE UNIVERSITY, *College environments*, 2 years, C. Robert Pace and George C. Stern, directors. Federal funds, \$65,108.

WAYNE STATE UNIVERSITY, *Relation of self-concept to beginning achievement in reading*, 4 years, William W. Wattenberg, director. Federal funds, \$21,183.

Physically handicapped

BOSTON UNIVERSITY, *Teaching topographical orientation and spatial organization to congenitally blind children*, 1½ years, Ralph Garry, director. Federal funds, \$7,130.

UNIVERSITY OF MINNESOTA, *Cognitive development and performance in chil-*

dren with normal and defective hearing, 4½ years, Mildred C. Templin, director. Federal funds, \$62,952.

Test development

MICHIGAN STATE UNIVERSITY, *Educational, social, and psychological factors in occupational aspiration*, 3 years, Archie O. Haller, director. Federal funds, \$14,662.

Latest Committee Meeting

As a step toward setting still other projects in motion, the 9-member committee that advises the Commissioner of Education in his selection of projects met in the Office May 14-15. Fifty-eight proposals had been submitted since the Committee last met, in January, and from these it chose 14 to recommend to the Commissioner. Negotiations are now under way between the Office and the various institutions and agencies whose proposals have been approved; and the research will begin as soon as contracts are signed.

On this second anniversary of the committee, the terms ran out for three of the members: Ruth E. Eckert, professor of higher education, University of Minnesota; Frank Hubbard, assistant executive secretary for information services, National Education Association; and Willard C. Olson, dean, School of Education, University of Michigan. Dr. Olson had been cochairman of the Committee during the past 2 years; all three had given the program distinguished and devoted service. To fill their places the Commissioner last month named Dorothy Adkins, chairman of the department of psychology, University of North Carolina; Henry Otto, professor of elementary education, University of Texas; and Jerome S. Bruner, professor of psychology, Harvard University.

The committee meets again on October 16-17, to review proposals received on or before September 1.

First of the Seminars

To help make the several projects under the program as useful as possible to American education even

while they are still in progress, the Office of Education has begun to hold a series of seminars. In each, a research team from one of the projects meets with specialists in the Office of Education and with other national leaders close to the problems of teachers and administrators, to discuss not only the particular project but the problems that bear upon it.

The first of these seminars was held in the Office on June 12, with three researchers from a project at Stanford University—Arthur Partridge, Richard Carter, and John Sutthoff.

The researchers told how far they had progressed in the first third of a 3-year project. Their laboratory is extensive—it takes in 101 cities in all sections of the United States—and in it they seek a measure of the correlation between a community's willingness to support its schools and its understanding of what its schools are doing. Directed by William R. Odell of the School of Education and Wilbur Schramm of the Institute for Communication, both at Stanford University, the project brings together research talent in both education and communication; and from the beginning it has been "studded with opportunities" for acquainting young school administrators with research methods. As many as 85 graduate students in education have been involved in the study thus far who testify that they are having the kind of experience they could not duplicate in a lifetime of usual work, that for the first time they are seeing school-community relations as neutrals, from both points of view.

In fact, seeing things from more than one point of view was an advantage of the seminar, too. The questions raised stressed the practical problems that make up the environment—the very *reason*—for the study. Not only did the discussion bring out the pertinency of the research to educational practices and programs but it threw light on some of the problems that researchers themselves must solve. And at the close of the day

the participants were unquestionably readier than they had been at its beginning to determine the meaning of the findings—when the findings at last are in.

To reenforce the gains made in this first exchange, the Office is planning another, on a different project, for September. Other seminars will follow from time to time.

▶ We need more information about why those who are in teaching selected it as a career and what holds them to it despite poor salaries and crowded conditions.



Research Findings

HERE *School Life* continues its reporting-in-brief on projects that have been completed under the cooperative research program of the Office of Education. The projects reported below are seventh and eighth in the series; the first six were summarized in the issues for December 1957 and January, February, and April 1958.

FACTORS IN CHOICE OF COLLEGE TEACHING

WHY do people choose college teaching as a career and why do they stay at it?

To answer these questions John E. Stecklein, director, Bureau of Institutional Research, and Ruth E. Eckert, professor of education, University of Minnesota, went directly to Minnesota college teachers. The 706 replies to a questionnaire they sent to teachers in 32 public and private colleges and universities are the basis for their findings and conclusions.

Their chief findings are these:

- ▶ Most of the teachers entered teaching by accident and began their careers later than most engineers, scientists, or executives.
- ▶ Almost equal numbers of them prepared in public and private institu-

tions, but a majority teach in public colleges.

- ▶ Extensive training is behind most of the teachers. About half have completed their Ph. D. degrees.
- ▶ They tend to serve in institutions similar to their alma maters.
- ▶ They are assigned many professional tasks, though teaching takes up the larger part of their time.
- ▶ They find many rewards in their work though they have frustrations, too. Given the choice again, most would teach again.

From their findings, the researchers have come to certain conclusions:

- ▶ We need a well-organized effort to identify and enlist promising candidates for college teaching careers.
- ▶ We must broaden scholarship and fellowship provisions if we are to get good college teachers quickly.
- ▶ We must study private colleges to find why they produce more teachers than public institutions.
- ▶ We must analyze colleges known for producing college teachers for clues to their success.
- ▶ We must explore reasons for the discontent of unhappy teachers to improve initial selection and to increase the satisfactions of teachers in the field.

LANGUAGE GAINS OF THE RETARDED

TO discover language variations of children at different levels of mental retardation, Donald D. Durrell and Helen B. Sullivan, professors of education at Boston University, studied 209 educable mentally retarded children in 18 primary and intermediate classes sponsored by two cities of the metropolitan area of Boston. I. Q.'s ranged from 50 to 79. The children were tested on their ability to understand both the spoken and written word and to express orally or in writing what they had seen or heard.

The researchers found that for these children the spoken word is much more comprehensible than the written and that they greatly lack ability to express themselves in writing.

On a test in which the children chose pictures to illustrate what they heard, the primary children scored 14 months above their mental ages; the intermediate, 7 months. On the other hand, the children fell below their mental ages in reading ability. The primary group scored 2 months lower; the intermediate, 19 months.

In oral expression the primary group did better than their mental ages would indicate. The intermediate group were fair on this test.

Both groups did very poorly on written expression tests, especially the younger children. Both groups showed similar difficulties—low sight vocabulary, inadequate phrase perception, weak word analysis abilities.

The researchers point out that the poor reading ability of these children is probably not based on lack of comprehension but on inadequate mechanical attainment. Their weaknesses are those which might respond readily to remedial instruction. Drs. Durrell and Sullivan believe that both groups would profit from systematic instruction in reading, speaking, and writing.



ABRAHAM LINCOLN HIGH SCHOOL, SAN FRANCISCO. TEACHER, DR. ERWIN E. GORDON.

High school students
learn to speak
Mandarin Chinese . . .
Back of every
successful class in a
foreign language
lie years of professional
planning, research,
and interchange.

Office of Education program of research and services

FOREIGN LANGUAGE TEACHING

MARJORIE C. JOHNSTON

WHAT is being said now about teaching foreign languages—that we should begin early, offer many languages, maintain a long sequence of study, emphasize direct communication, and cultivate an understanding of other peoples—has been said many times in the past and will continue to be important even if the cold war ends tomorrow. The essential difference now is that we are suddenly faced with a public readiness for foreign language teaching that we are quite unprepared to satisfy.

We need more teachers, better qualified teachers, new materials and methods, and a whole set of answers to questions about the theory of language learning, the measurement of skills in listening comprehension and speaking, the development of intercultural understanding, and the application of linguistic science to language teaching.

The monumental work of redesigning the instructional programs in foreign languages has become so essential to the national interest that it

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demands resourcefulness and bold effort from all of us. If we recall how foreign languages have fared in our schools and colleges in the past, we have to conclude that no single group, either in or out of the teaching profession, can be said to have brought the languages to their present low status. Similarly, we are keenly aware that no single group now working alone, can ever build an adequate program.

What the Office of Education can give to the effort is a complex of services it has gradually developed in the 90 years since Congress established it to gather facts, inform the people, and “otherwise promote the cause of education.” In the field of foreign language teaching these services may be said to fall into five categories.

1. *Consultative services*

The day-to-day sharing of information with others is a substantial part of those services. It includes working with other Government agencies, meeting with educators from other countries, cooperating with professional organizations, answering inquiries, preparing refer-

ence lists for teachers and citizens' groups, supplying information for press releases, and planning interdivisional programs.

2. *Surveys and statistical studies*

The Office makes two kinds of surveys. One type emphasizes current and emerging issues and problems and is not repeated at regular intervals; examples are the report of last year's work conference on foreign languages in the high school and the survey just completed of language laboratories in schools and colleges.* The other type, the “status” study, is a periodic collection of information about offerings, enrollments, and instructional programs.

Three surveys of the second type are being planned on the status of foreign languages in the schools. Questionnaires for the first, which will cover grades 7–12 in this school year, have already been prepared. Information will be obtained from

*Editor's note: The first of these, OE Bulletin 1958, No. 16, *Modern Foreign Languages in the High School* (166 pp), edited by the author, is for sale by the Superintendent of Documents for \$1. The second will be published in November.

three sources: State departments of education, secondary school principals, and language teachers. From State departments, for instance, we are seeking answers to questions like these: How many languages are being taught in how many schools of what size and for how many years? How many students are enrolled in each language and how many teachers, full-time and part-time, are teaching them?

The second of these status studies, in 1959-60, will cover elementary grades in the same way. The third, in the following year, will concentrate on teachers—their number, preparation, assignments, certification, and the like. All three surveys are to be repeated at 5- to 10-year intervals in order to identify new trends and developments. Other recurring studies are analyses of research and of courses of study from city school systems and State departments of education.

3. *Teacher exchanges*

Right now, up until October 15, the Office is accepting applications from United States teachers of foreign languages who wish to exchange positions next year with a teacher from another country or to attend a summer seminar abroad. Arranging for such exchanges is a service given by our Division of International Education in cooperation with the Department of State, which administers the International Educational Exchange Program. Under that program, exchanges of teachers of French, German, Italian, and Spanish have grown from 7 in 1948 to 77 in 1958, mostly with Austria, Belgium, France, Germany, and Italy.

Recently Fulbright agreements and similar agreements providing foreign currency have become effective with several Latin American countries. A new seminar for United States teachers, like the seminars previously held in Mexico and now held in France and Germany, was established this past summer in Colombia, and 20 teachers of Spanish attended.

4. *Cooperative research*

Four years ago, in Public Law 531, the 83d Congress expressed its recognition of the need for educational research of a type that cannot be performed entirely within the regular program of the Office of Education. It authorized the Commissioner of Education to enter into cooperative arrangements with universities, colleges, and State departments of education, under which they would conduct research, surveys, and demonstrations in education.

So far the Office has received few applications for research projects in foreign language teaching. Practically, however, such projects are important, for they can help find solutions to some of the problems of language learning and point the way to improved instruction. The Cooperative Research Program is now entering its third fiscal year, and new Federal funds are available for new projects. Application forms and full information about the program may be obtained from the Assistant Commissioner for Research, Office of Education.

5. *Special programs*

The Office also administers certain educational programs authorized by special legislation. Such a program—a foreign language development program—is outlined in Title VI of the “National Defense Education Act of 1958,” passed in the last session of the 85th Congress. It was proposed by the Office of Education following two conferences called by the Commissioner of Education in the spring of 1957.

The first conference, held in March 1957 to determine the Government’s need for persons competent in foreign languages, was attended by officials of 20 Government agencies that train or recruit personnel for overseas assignments. This group stressed the urgency of (1) acquainting school people with the shortage of Americans qualified in languages and (2) action at the Federal level to train

more teachers and to introduce languages not now in the curriculum.

The second conference, a 3-day meeting of selected leaders in American education, studied primarily foreign language teaching in the high school and considered what could be done to refashion the program to serve better the national need. (Already there is evidence that the conference recommendation for a longer sequence of study is being adopted.)

The Foreign Language Development Program, now authorized, will provide through contract with universities (1) inservice institutes for teachers of modern foreign languages at all levels of the school system, (2) language and area centers for the study of languages not generally offered in our schools, and (3) research in teaching methods and materials. Through grants to State departments of education, also, the Office can assist elementary and secondary schools to provide language laboratory equipment, audiovisual instructional materials, and professional consultative services.

BACK of the complex of services now available from the Office of Education lies a history of intermittent peaks of attention at the Federal level to foreign languages *per se*. The first came in 1929-32, when the Office made a special national survey of secondary education and employed Helen M. Eddy of the State University of Iowa to report on foreign languages. Her survey (Office of Education Bulletin 1932, No. 17) takes on fresh interest today, for in the early 1930’s language instruction was in a period of transition just as it is now; at that time teachers were trying to apply the recommendations of the Classical Investigation and of the Modern Foreign Language Study.

The next significant effort came 10 years later, when the Division of Inter-American Educational Relations was created to promote inter-American solidarity. Then began the Federal encouragement of foreign languages in the elementary schools

and of summer seminars abroad for foreign language teachers. The new division had three language consultants on its staff—one each in Spanish, Portuguese, and English as a foreign language—and from 1942–46 they, together with other staff members, worked with curriculum committees and inter-American conference groups planning to introduce more Latin American content into school curriculums. For four consecutive summers, from 1944 through 1947, the Office in cooperation with the Department of State sponsored a Spanish language institute at the National University of Mexico and provided small stipends to the 400 teachers who attended.

The activities for promoting the study of Spanish and Portuguese came to an abrupt end at the close of World War II and little further attention in the Office of Education was devoted to foreign language teaching until 1952 and 1953. At that time Commissioner McGrath urged more teaching of languages, beginning in the early grades and continuing through high school and college. The 1953 Office Conference on the Role of Foreign Languages in American Education did much to revive the FLES (Foreign Languages in the Elementary School) movement. An Office liaison committee created for the conference continued until 1956 for followup activities, but its members had

other full-time staff responsibilities and lacked both budget and administrative machinery for language projects.

In 1956, however, the growing demands for information and services led to the addition of a full-time staff member in foreign language teaching, and for the past 2 years the work has been actively supported. That brings us up to date. We feel confident that the services offered now as well as those projected in the long-range plan can make some contribution on a national scale toward the development of adequate foreign language instruction.

In the curriculum, preparation for her role

THE PRACTICAL NURSE IN REHABILITATION

VERA P. HANSEL

THE patient was a war veteran. He had lost one hand and was paraplegic; and ever since his injury he had refused to see his fiancée and had stubbornly resisted all efforts to give him hand prosthesis. Now, as the practical nurse stood at his side, he suddenly asked her a question: "Would you marry a man without hands?"

The nurse had been well-trained and had learned the value of listening. She sensed in his question a clue to his antagonism, and reported it to the hospital staff. Her wise action gave those seeking ways to rehabilitate her patient their first opening.

The practical nurse in this instance put into practice what she knew about patients needing rehabilitation. She recognized that, because the aim of nursing is to help the sick and injured regain health and well-being, rehabil-

itation is an integral part of any nursing. Wherever she nurses, therefore, she, too, is part of the rehabilitation team.

A Growing Responsibility

During the past few years, more and more responsibility has fallen to the practical nurse for the care of the convalescent and for teaching the disabled the activities of daily living. When the patient is very ill the practical nurse assists the professional nurse, but when the situation becomes stable, she can assume care of the patient.

It is then she must use her ingenuity to devise ways of making the patient as self-sufficient as possible—to be able to do for himself the little things that make for independence—feeding, dressing, undressing, getting from bed to chair, operating his wheel chair. Often the nurse must practice self-restraint: it would be so much easier to help the patient than to stand by while he fumbles and

hesitates over some simple task, his face a picture of discouragement. During such a crisis she really shows her skill. The word of encouragement she offers and the patience she shows may be the very impetus he needs to complete the task.

Her manner of accepting the disabled patient can lead the way to his rehabilitation. For those used to command or lead, disability may be particularly difficult. The practical nurse with such a patient must teach him this primary lesson: The patient on his way back to regular life must make daily adjustments even as the uninjured must, and must face reality with all his resources, using them to the utmost.

The practical nurse can help the convalescent by helping his family. She must learn what adjustment they will have to make when he is returned to them. Her suggestions and encouragement can do much to help them in their role of taking over his care.

Mrs. Hansel is Chief, *Practical Nurse Education Section, Office of Education.*

The Training to Match It

The usefulness of the practical nurse in rehabilitation nursing cannot be doubted. But how can training for this phase of nursing be fitted into a busy schedule without sacrificing other parts of the curriculum?

Today, emphasis is placed on treating the total person, on the importance of teamwork among the various disciplines involved, and on the spirit and morale of the rehabilitation team. Since students must, in time, take their places on the rehabilitation team, it is important that they be taught teamwork from the beginning.

Students learn from the practice of those around them. What better way for them to receive lessons in rehabilitative teamwork than to observe a team at work?

How can we teach students what the end results might be when the curriculum is but 1 year in length? In a visit to a nursing home or rehabilitation ward of a teaching hospital? Yes, if the trip isn't one where the student walks through the physical plant and sees only patients in wheel chairs, in occupational therapy, or crutch walking. How much better if they could see patients demonstrating the aids for daily living they have gained after many months of patient teaching. The doctor and other members of the health team could explain their part in rehabilitating the patient and with pictures—before and after—make this a worthwhile experience for the student.

The student must be taught to recognize when there is a need for assistance beyond her ability. The teacher of nursing has the responsibility for helping the student analyze simple nursing problems. In time, the student can apply this teaching to her daily nursing problems.

When disease is taught on the basis of malfunction, the student has a firm foundation for understanding possible rehabilitative needs of patients. There is considerable opportunity for rehabilitative training when the stu-

dent is learning to care for the aged, the cardiac patient, or the amputee.

The teaching of rehabilitation starts with the faculty. To insure the integration of rehabilitation in the basic curriculum, all faculty members must do the planning and must review plans periodically. The faculty must see that the student has sound working knowledge of anatomy, physiology, and various diseases. In the study of anatomy, it is far more important for the student to know the basic structure as it relates to function (for example, the arm as it relates to movement) rather than to know the name of every bone. The

practical nurse student should know what functions are impaired in the patient and what measures to take to substitute or compensate for the impairment.

Rehabilitation nursing is part of the total nursing picture—and all nursing, in the end, aims at putting the patient back on his feet again. It follows, then, that all nursing training is applicable to rehabilitation nursing. The nursing school can integrate such training into the regular curriculum by pointing out the rehabilitative application of many of the things it is teaching the student as she goes through her regular course.

Teaching Aids on Social Security

SOcial Security offices have kits of teaching aids that will be sent to any teacher, supervisor, or school upon request. This kit includes information on the latest amendments to the Social Security Act, as well as a new comprehensive book entitled "Social Security in the United States." This material has been prepared and assembled to be especially useful to teachers of such subjects as the social studies, business arithmetic, and home economics.

In addition, the kit contains the following:

▲ A folder attractively printed with the essentials of the Social Security system explained on the cover.

▲ Three wall charts (38" x 52") to help explain how Social Security in general and old-age and survivors insurance in particular operate.

▲ A variety of pamphlets about old-age and survivors insurance for the teacher's use.

This kit may be requested directly from the local social security district offices (there's a district office in nearly every large community; the local post office can supply the address). Teachers who want additional supplies of any pamphlets for classroom use should request them from the local office as soon as possible to assure an adequate supply for the coming school term.

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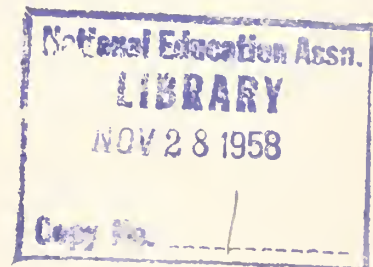
SCHOOL LIFE

OFFICIAL JOURNAL OF THE * * * * *

OFFICE OF EDUCATION

National Defense Education Act A Full Report

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October-
November 1958

PERSPECTIVE

THESE days, as we prepare to administer the National Defense Education Act, we are often tempted to consider it only title by title. But to succumb to that temptation is to lose perspective in minutiae.

We will do the Act justice only if we see it as a mighty complex, in which each part reinforces the other, and all parts join to strengthen education across the board.

We can see the Act as a juncture of forces bearing down on such problems as the omissions in our courses of study and the shortage of teachers. We can see it as a reaffirmation of our traditional faith that hard work and ability will have their reward.

We can see it as a source of technicians in an age of automation; as a source of ambassadors in an age of world responsibility; as a way of making the average citizen at home in an age of science. We can see it as a boon to our colleges a decade hence.

And all the while we can see it as an occasion for reaching, in education, a new high level of shared responsibility and creative cooperation—among public and private agencies, individuals, and institutions, wherever and whatever they may be. If we see it thus, each step we take will move us surely onward toward our goal: Defense of our Nation against every enemy of body, mind, or spirit that time may bring.

Lawrence G. Dertnick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ARTHUR S. FLEMMING, <i>Secretary</i>		
OFFICE OF EDUCATION LAWRENCE G. DERTHICK, <i>Commissioner</i>		
CARROLL B. HANSON <i>Director</i> <i>Publications Services</i>	EDITORIAL BOARD	and programs affecting education. Published monthly, September through May.
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CATHERINE P. WILLIAMS <i>Assistant to the Editor</i>	<i>School Life</i> reports Office planning and action and publishes articles by members of Office staff; presents statistical information of national interest; reports legislation and Federal activities	

Partnership Continued



THE NATIONAL DEFENSE EDUCATION ACT OF 1958 will bring to our educational system new resources and encouragement at a time when they are critically needed.

It continues a historic partnership which has demonstrated its value to the American people over many years in the past—a partnership in which the Federal Government assists States, communities, and private institutions to pioneer in new educational programs and to strengthen others that have proved their worth.

This legislation will, I believe, help to bring about a significant increase in State, local, and private support for the education of our young people. It offers a splendid opportunity for teachers, school administrators, and public officials to enlarge their services to our free society.

Arthur A. Flemming

The ACT As a Whole

THE NATIONAL DEFENSE EDUCATION ACT OF 1958, passed by the Senate on August 22 and by the House the next day,* and signed into Public Law 85-864 by President Eisenhower on September 2, authorizes something over \$1 billion in Federal aid. In the swinging sweep of its 10 titles it touches—and returns to touch again—every level of education, public and private, from the elementary school through the graduate.

A single purpose

Its billion dollars, though authorized for a dozen separate programs, have been authorized for a single purpose—that every young person, from the day he first enters school, should have an opportunity to develop his gifts to the fullest. This is the emphasis that gives the Act its name, for it recognizes that in a free society the individual is the first line of defense.

In this pursuit of excellence for the individual, the Act

does not concern itself with how much bigger our schools should be, or how they should be built, important though these matters are, but rather with the finding and encouraging of talent, with the improving of the ways and means of teaching, with the furthering of knowledge itself.

To assure the efficient use of Federal funds thus to improve the quality of education, the Act calls for responsible action at every level:

★To agencies of the Federal Government it says: Administer this bill, select well-balanced, representative com-

*In the Senate the vote was 66 to 15; in the House, 212 to 85. P. L. 85-864 is a compromise incorporating features of several bills, chiefly the Administration bill (S. 3163) and the Hill-Elliott bill (S. 3187 and H. R. 10279). For instance, its loan program is from the Hill-Elliott bill, though larger; and its provisions for language centers and institutes and for improving statistical services are from the Administration bill. In not including scholarships, it differs from both bills.

mittees to advise you; gather the facts, encourage research. But always remember that the States and local communities have primary responsibility for education and must retain full control over it. Therefore, do not construe any part of this Act to authorize you or any of your employees to exercise any direction over the curriculum, program of instruction, administration, or personnel of any educational institution or school system.

★To State departments of education it says: With the objectives of the Act in mind, measure your needs, improve your standards, give leadership and supervision to the administrators, counsellors, and teachers in the local schools.

★To teachers and counsellors it says: Increase your knowledge; learn to use the tools that will make your work more effective.

★To colleges and universities it says: You are the teachers of teachers. Marshal your forces to give them the knowledge and training they need to teach others.

★To students it says: Know yourselves. Discover your talents and make them grow; have confidence in yourselves and in the future.

★To all of them, by implication, it says: Plan together, work together, to meet each other's needs.

A complex of administration

The Act has 10 titles: The first one sets forth general provisions; the others outline, and authorize funds for, the various programs of Federal aid. Except for Title IX, which establishes a special service in the National Science Foundation, the Act will be administered, at the Federal level, by the Office of Education. (The discussion that follows does not include Title IX, except on pages

25-26, which are devoted specifically to it.)

So far, of the \$183 million authorized by the Act for the fiscal year ending June 30, 1959, the Congress has appropriated \$40 million to get things started (authorizations are merely permission to appropriate; it takes appropriations to make money available). A supplemental appropriation is expected later this fiscal year, sometime after the 86th Congress has convened, in January.

PARADOXICAL though it may seem, society as a whole must come to the aid of the individual—finding ways to identify him as a unique person, and to place him alongside his fellow men in ways which will not inhibit or destroy his individuality. By its educational system, its public and private institutional practices, and perhaps most importantly, by its attitude toward the creative person, a free society can actively insure its own constant invigoration.

—The "Rockefeller Report"
on Education

About three-fourths of the appropriated funds will be distributed as grants to the State educational agencies for strengthening instruction in elementary and secondary schools (Title III), testing and counseling (Title V), providing area vocational education (Title VIII), and improving statistical services (Title X). The rest will go to institutions of higher education for loans to students (Title II), fellowships (Title IV), institutes to train counselors (Title V), and foreign language centers and insti-

tutes (Title VI); and to agencies, organizations, and individuals for research in educational utilization of television, radio, motion pictures, and related media of communication (Title VII).

Prerequisites

Before the funds can be put into the hands of the users, however, there are a number of prerequisites to meet, not only for the Office of Education but for the recipient States and institutions as well.

For the Office, the prerequisite is principally the drawing up of regulations to take care of the many details of administration not specified in the Act but necessary to assure consistency and impartiality. On this matter, work is already in progress. Even at this writing, in mid-September, the U. S. Commissioner of Education is meeting with the chief State school officers and with college and university officials to present preliminary regulations and to test them against the many complicating conditions that may require revisions and modifications within the meaning of the law. Whether the final regulations can be completed with dispatch depends on the extent of these complications and the amount of study and compromise required to resolve them. The Office must also make some changes in its organization to cope with its new administrative duties; and before any money can be spent on research under Title VII, the Commissioner will have to appoint an advisory committee. Other determinations, too, must be made, but some are a matter for the regulations to decide.

The States, on the other hand, must have authorization from their legislatures to receive Federal funds before they can initiate a program for using such funds. A review of the State laws shows that 29 States al-

ready have the legislative authority to receive and administer Federal grants-in-aid; but the other 19 apparently will have to wait until such authority is forthcoming. For the States, conditions are further complicated by the fact that they must match the Federal funds dollar for dollar (though not in the first year for some of the programs); and this requirement they will be unable to meet until they have an appropriation from their State legislatures. Fortunately, all but three of the legislatures will convene in regular session this coming January.

Moreover, any State, before it can receive payments under a particular title, must submit to the U. S. Commissioner of Education its plan for using the Federal funds. There is no provision in the Act for a preliminary plan, or a piece of a plan, or even a 1-year plan; apparently a full-fledged 4-year plan is wanted from the very beginning. This is not to say, however, that a State is irrevocably bound to its first outline: it may make revisions as time passes and circumstances change.

Institutions of higher education, too, have prerequisites to meet: Setting up and contributing at least one-tenth of the loan fund, for instance, if they wish to participate under Title II; or establishing or expanding their graduate programs if they are to participate under Title IV.

For some titles, all of the administrative machinery may be running and the program under way by the end of this semester; for others, things may move slowly. But even the latest is expected to be making contributions to better education by the end of this fiscal year.

Now begins a detailed account of the provisions of the Act, title by title. Pages 28 through 34 of this issue have been reserved for the latest developments at the time this issue went to press.

Federal funds authorized by the National Defense Education Act, Public Law 85-864

	1958-59	1959-60 (thousands of dollars)	1960-61	1961-62
Title II. LOANS TO STUDENTS ¹	\$47,500	\$75,000	\$82,500	\$90,000
Title III. FINANCIAL AID FOR STRENGTHENING INSTRUCTION:				
Equipment and remodelling.....	70,000	70,000	70,000	70,000
State supervision.....	5,000	5,000	5,000	5,000
Title IV. FELLOWSHIPS	(²)	(²)	(²)	(²)
Title V. GUIDANCE, COUNSELING, TESTING:				
State programs.....	15,000	15,000	15,000	15,000
Institutes.....	6,250	7,250	7,250	7,250
Title VI. LANGUAGE DEVELOPMENT:				
Centers.....	8,000	8,000	8,000	8,000
Institutes.....	7,250	7,250	7,250	7,250
Title VII. RESEARCH IN USES OF TV, RADIO, MOVIES, ETC.	3,000	5,000	5,000	5,000
Title VIII. AREA VOCATIONAL EDUCATION	15,000	15,000	15,000	15,000
Title IX. SCIENCE INFORMATION SERVICE	(²)	(²)	(²)	(²)
Title X. (SEC. 1009). IMPROVING STATISTICAL SERVICES	(³)	(³)	(³)	(³)

¹ In addition to the amounts given here, the Act authorizes (1) "such sums as may be necessary" for the 4 years following 1961-62 to permit every student under the program to continue or complete his education, and (2) up to a total of \$25 million for the entire period for loans to the institutions to help them finance their share of the loan funds.

² "Such sums as may be necessary." For Title IV, however, maximum totals can be estimated (see p. 14).

³ "Such sums as the Congress may determine." No State may receive more than \$50,000 a year.



GENERAL PROVISIONS

IN ADDITION to stating the purpose of the Act and prohibiting Federal control, Title I defines the meaning of certain words recurring frequently in the Titles of the law—words whose exact meaning is essential to an understanding of the intent of the Congress:

Secretary

The Secretary of Health, Education, and Welfare.

Commissioner

The United States Commissioner of Education.

State

A State, Alaska, Hawaii, Puerto Rico, the District of Columbia, the Canal Zone, Guam, or the Virgin Islands. For Titles III and V, however, for the purpose of allotments, a distinction is made between Alaska, Hawaii, Puerto Rico, Canal Zone, Guam, the

Institution of higher education

An educational institution that (1) admits as regular students only persons having certificates, or recognized equivalents, of graduation from secondary schools; (2) is legally authorized to provide programs of higher education; (3) provides a program for which it awards a bachelor's degree, or a 2-year program creditable toward a bachelor's degree; (4) is a public or other non-profit institution; and (5) is accredited by a nationally recognized accredited agency* or has its credits accepted on transfer by not less than 3 accredited institutions. As used in Title II, the term includes a private business school or technical institution which meets also the 5 qualifications given above.

State educational agency

The State board of education or other agency or officer primarily responsible for State supervision of public elementary and secondary schools or an officer named by the State governor in the absence of such an agency.

School-age population

That part of the population between the ages of 5 and 17 inclusive, determined by the Commissioner from the most recent Department of Commerce data.

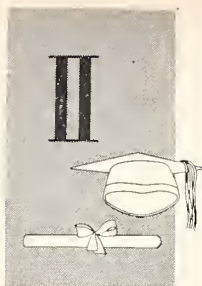
Elementary school

A school providing elementary education as determined by State law.

Secondary school

A school providing secondary education as determined by State law, excluding education beyond grade 12, except in Title III, where the term may include a public junior college, as determined by State law.

*As required by the Act, the Commissioner will publish a list of the agencies and associations he determines to be reliable authority.



LOANS TO STUDENTS

TITLE II. Loans to students in institutions of higher education.

FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: \$47½ million, plus this year's share of the \$25 million appropriated for loans to institutions over the years to help them finance their share of the loan funds.

INITIAL APPROPRIATION: \$6 million, specified by Congress.

The WHY of the TITLE

COLLEGE costs are at the highest point in history. For the average student in a publicly controlled institution the annual bill is \$1,500; for his counterpart in a private institution it is \$2,000.

Even if they work full time in the summers and part time during the school year, many college students cannot meet that kind of expense singlehanded. If their families can't help them, or their colleges, or someone else, they will have no choice but to drop out of college.

This is the choice thousands of young people are having to make every year. Some don't even make an attempt in the first place: figures show that only half of the top quarter of each year's high school graduating class enter college. Of those who enter, only about half stay on to graduate. There is little doubt that financial need is one of the biggest factors in the dropout.

The TITLE itself

TITLE II provides for substantial financial assistance to worthy and needy students. This assistance is in the form of loans that bear no interest until repayment begins, and borrower need not begin repayment until he has been out of school for a year. A student can get as much as \$1,000 a year for 5 years if he fulfills the conditions of the Act.

In order to provide these loans the Congress of the United States has authorized the appropriation of the following sums of money:

Fiscal Year 1959 _____	\$47½ million
Fiscal Year 1960 _____	\$75 million
Fiscal Year 1961 _____	\$82½ million
Fiscal Year 1962 _____	\$90 million

For the subsequent 4 fiscal years running through the end of June 1966, additional funds may be appropriated to enable students who had received loans prior to June 30, 1962, to complete their study. For example, if a

student received a loan of \$1,000 or less in fiscal year 1962, he could receive additional loans for the next 4 years if he needed them and if he fulfilled the conditions of the Act.

The total amount of money authorized to be appropriated in the period before the end of fiscal year 1962 is \$295 million. Assuming maximum use, this is enough to provide 1,000-dollar loans to 295,000 students, or to nearly 1 out of 10 in the entire opening fall enrollment in all institutions of higher education last year. Or it is enough to make 4,000-dollar loans over a 4-year period to 73,500 students—nearly as many as were enrolled for the first time last fall in all the institutions of higher education in the States of New York, New Jersey, and Maryland.

Enrollments Decide

Funds will be apportioned among the States according to their college enrollments: A State will receive money in the same ratio to the total allotment as the full-time enrollment in its higher educational institutions bears to the full-time enrollments in all the States. For example, in fiscal year 1960 State X has 100,000 full-time students, and all States together have 4 million. Thus, State X has $\frac{1}{40}$ th of the full-time students and is entitled to $\frac{1}{40}$ th of the allotment: in terms of the \$75 million authorized for that year, State X would be entitled to \$1.8 million.

The law also places a limitation on the amount an individual institution may receive. Regardless of the size of the college or university, it cannot receive more than \$250,000 in any one fiscal year for student loan purposes.

Federal contributions for loan purposes, called capital contributions, will not be made automatically to institutions of higher education. There are requirements to be met:

1. The institution must establish a student-loan fund.

2. The Federal capital contribution (an amount up to \$250,000) must be deposited in this fund. In addition, the institution must contribute to the fund—no less than one-ninth of the Federal contribution—and it must place in it all principal and interest payments on loans, as well as any other earnings of the fund.

3. The institution must provide for the proper, authorized use of the loan fund.

4. The institution, in making loans to students, must give special consideration to (a) students with superior academic background who intend to teach in elementary or secondary schools; and (b) students whose academic background indicates superior capacity or preparation in science, mathematics, engineering, or a modern foreign language.

5. Finally, provisions must be made to protect the financial interest of the United States, and to promote the purpose of the program.

These are the general provisions of the title as they apply to the institutions of higher education.

Answers for the Student

The student, or potential student, seeking a loan will need to know other things about the provision of Title II. Some of his questions will have to wait for the regulations, but for many of his questions the answers are implicit in the Act:

Q. Who can get a loan?

A. Anyone is eligible if he can show a need for financial help, is capable of "maintaining good standing" in his college work, and has been admitted by an institution of higher education as a full-time student.

Q. Will loans be granted only to undergraduates?

A. No. Graduate students are eligible if they are attending, or will attend, colleges or universities as full-time students.

Q. Suppose one meets all these qualifications, does that mean that he will automatically qualify for a loan?

A. No. The institution *selects* those to whom it will give loans; and it is obliged to give "special consideration" to (1) students with superior academic background who plan to become elementary or secondary school teachers and (2) students whose academic background indicates a superior capacity for or preparation in science, mathematics, engineering, or a modern foreign language. Within these limits, the loan fund is to be "reasonably available" to all students who meet the eligibility requirements of the Title.

Q. Why are students in the two groups favored?

A. Because manpower shortages are most acute at present in teaching and the four fields of science, mathematics, engineering, and modern foreign languages.

Q. What should the student do first, if he wishes to get a loan?

A. He should find out whether the college or university of his choice is establishing a loan fund with Federal assistance (he can inquire of the institution or he can consult the list which will be published soon by the Office of Education). If it is, he should make his application to the institution. The student should remember, however, that since the amount any one institution may receive is limited, the funds may be quickly exhausted, at least in the larger institutions.

Q. Exactly how much can a student borrow?

A. A student can borrow as much as \$5,000, but not more than \$1,000 in any fiscal year. Most loans, however, will probably be for lesser amounts, and there probably will not be many students requiring loans for 5-year periods.

Q. Does the borrower need security or an endorser on his note?

A. Not unless he is a minor and his note would not, under the law, create a binding obligation.

Q. How are the loans to be paid back?

A. The student's note will call for repayment in 10 equal annual installments, beginning 1 year after the date on which he stops being a full-time student. But, if the borrower wishes, he may repay in graduated periodic installments.

Q. How much interest?

A. Interest rate is 3 percent a year starting with the first payment. The money is loaned *without interest* during the years of study and for 1 year thereafter.

Q. Suppose a student finds himself in a position to pay off faster, can he do so?

A. Yes. The loan may be repaid in whole, or in part, at any time within the specified limit. Interest payments will be reduced accordingly.

Q. On the other hand, what if the borrower runs into financial trouble and cannot meet the 10-year limit? What can be done?

A. The 10-year period may be extended in accordance with the policy of the Commissioner.

Q. What happens if the borrower dies or is disabled before he has paid his debt?

A. In either case the liability to repay is canceled.

Q. What happens when a borrower goes into the Armed Forces of the United States?

A. During his period of service, if it does not exceed 3 years, interest will not accrue on the loan and the time will not count against the 10 years given for repayment. But after 3 years of service, interest will begin to accrue and the time will count.

Q. Suppose an individual who has borrowed the maximum wants to return for more study. Will terms of repayment be temporarily relaxed for him?

A. Yes. While he is a full-time student in good standing, no interest is charged and no payments fall due; nor does the time use up any of the 10 years he has for repaying.

Q. Is it true that the borrower need not repay all of the loan if he becomes a teacher?

A. Yes, if he becomes a full-time teacher in a public elementary or secondary school, up to half of the loan (plus the interest on that half) will be forgiven—at the rate of 10 percent a year. That is, 5 years of teaching can repay half of the loan. The amount forgiven each year is based on the amount still unpaid on the first day of each full year of teaching.

Q. Will the amount of the loan be paid to the student in a lump sum at the beginning of the school year?

A. No, he will get it in installments throughout the year (the Commissioner's regulations will specify *when*); and the installments will keep coming as long as the student maintains a satisfactory standing.

Allotments to the States under Title II, fiscal year 1958-59, under (1) total authorization and (2) initial appropriation

STATE	Authoriza- tion	Appro- priation	STATE	Authoriza- tion	Appro- priation
Alabama.....	\$701,618	\$88,625	New Jersey....	\$850,627	\$107,448
Arizona.....	314,333	39,705	New Mexico....	197,817	24,987
Arkansas.....	376,461	47,553	New York.....	4,935,583	623,442
California.....	4,525,953	571,699	North Carolina..	1,094,213	138,216
Colorado.....	642,167	81,116	North Dakota...	199,887	25,249
Connecticut....	658,751	83,211	Ohio.....	2,167,297	273,764
Delaware.....	92,281	11,657	Oklahoma.....	871,599	110,097
District of Columbia.....	564,265	71,276	Oregon.....	581,029	73,393
Florida.....	842,774	106,456	Pennsylvania...	2,804,019	354,192
Georgia.....	778,125	98,290	Rhode Island...	251,394	31,755
Idaho.....	180,580	22,810	South Carolina..	520,025	65,687
Illinois.....	2,420,267	305,718	South Dakota...	216,718	27,375
Indiana.....	1,380,328	174,357	Tennessee.....	872,634	110,227
Iowa.....	902,270	113,971	Texas.....	2,728,794	344,690
Kansas.....	771,937	97,508	Utah.....	478,644	60,460
Kentucky.....	613,319	77,472	Vermont.....	158,460	20,016
Louisiana.....	832,243	105,125	Virginia.....	764,939	96,624
Maine.....	180,962	22,858	Washington....	835,776	105,572
Maryland.....	645,407	81,525	West Virginia...	418,045	52,806
Massachusetts..	1,976,636	249,680	Wisconsin.....	1,072,409	135,462
Michigan.....	2,023,643	255,618	Wyoming.....	76,215	9,627
Minnesota.....	1,069,933	135,149	Outlying parts of the U. S.:		
Mississippi.....	520,273	65,719	Alaska.....	10,666	1,347
Missouri.....	1,124,704	142,068	Canal Zone....	3,420	432
Montana.....	186,431	23,549	Guam.....	1,350	171
Nebraska.....	453,329	57,263	Hawaii.....	114,514	14,465
Nevada.....	34,541	4,363	Puerto Rico....	265,211	33,500
New Hamp- shire.....	195,184	24,655	Virgin Islands..		
			TOTAL.....	47,500,000	6,000,000



STRONGER INSTRUCTION

TITLE III. Financial assistance for strengthening science, mathematics, and modern language instruction.

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: For equipment and remodeling, \$70 million; for State supervision, \$5 million.

INITIAL APPROPRIATION: For equipment and remodeling, \$19 million; for State supervision, \$1.35 million.

The WHY of the TITLE

WITNESS after witness appearing before the House and Senate committees on education during the past session of Congress has emphasized our need to strengthen instruction in the elementary and secondary grades in science, mathematics, and modern foreign languages.

Over and over, the committees have heard these three subjects named at the top of the "critical" list—first, because persons competent in them are desperately needed in a world that is both contracting and expanding at the same time; second, because our schools have lagged in preparing persons for such a world. And when all has been said, evidence is overwhelming to support the contention that the schools have lagged in at least 3 ways: By neglect of science, mathematics, and foreign languages in the curriculum; by an inferior quality of instruction; and by an inadequate budget for such things as laboratory equipment and audio-visual materials.

Neglect in the Curriculum

Neglect in the Curriculum

A number of studies have turned up dismal evidence of neglect in the curriculum:

- *Only 1 out of 3 high school students ever takes chemistry; only 1 out of 4 takes physics
- *Only 1 out of 3 takes intermediate algebra; 1 out of 3, trigonometry or solid geometry
- *Only 1 out of 7 takes a modern foreign language—

All these are the results of other equally dismal facts: That every year about 100,000 seniors are attending public high schools which offer no advanced mathematics of any kind; that 61,000 are in high schools offering neither chemistry nor physics; that more than half of all the public high schools in the United States offer not a single modern foreign language.

Perhaps even more discouraging is the evidence that in many high schools offering all these subjects, many students do not elect to take them, either because they have not discovered their capabilities along those lines or because they have seen few signs of enthusiasm in the students that *do* take them.

Inadequate teaching

When all is said and done, each of these circumstances—schools without courses, courses without students—come down to this: Not enough live, stimulating teaching. It comes down to guidance, too—but that is another matter, which the Act looks to in another title (see p. 15).

THE proper, resourceful teaching of science is expensive, compared to other fields of education. But efforts to teach science without adequate laboratory and demonstration equipment deprive students of experiences with the very heart and soul of the scientific endeavor.

In other words, to teach science without proper equipment is practically useless.

Glenn O. Blough,

Testimony before Senate Committee.

Now, stimulating teaching is the work of a strong teacher. Yet, in the three subjects under consideration here, the shortage of qualified, skillful teachers is greater than in most other subjects. One of our most favored States, for example, has found that nearly one-third of its high school mathematics teachers have not even a minor in

mathematics. And this is no exception: similar proportions obtain in many other States, in both mathematics and the sciences. As for the 15,000 high school teachers of foreign languages, far too many of them, too, are inadequately trained, either in teaching methods or in the language itself, or in both.

Much of the "unqualifiedness" of many teachers could be overcome under professional supervision, both from the State department of education and from the local school system; but only a fortunate few teachers have such help coming now. Only 3 States have full-time consultants in science; only 3, in mathematics; only 3, in foreign languages. Only 6 percent of the schools have the services of special county or city supervisors for science; only 5, for mathematics.

Inadequate equipment

Even the best of teachers, however, is hampered by lack of tools. The science teacher without a laboratory has nothing beside his own ingenuity—and in this highly technical age that is not enough—to make his subject come alive. Without concrete models the trigonometry teacher has little more than words for showing his students that the sum of the angles of a spherical triangle is truly more than 180 degrees.

And foreign language teachers, working to supply a demand for people who can talk and listen competently in a foreign language, need, as they have never needed before, auditory aids to train students' ears and be a model for their tongues. They need visual aids, too: slides and film strips, pictures, maps, foreign newspapers and magazines, all the things they call "realia." In the last few years the language laboratory has come upon the scene; and those who have seen what can be done with it, know that it is just as important as the long-accepted scientific lab. Although language laboratories in the colleges are well established, fewer than 100 high schools in the country have any of the electronic equipment needed for practice in hearing and speaking a modern foreign language.

But all these things cost much money; and lack of money, unquestionably, is what keeps the schools from having them.

An average general science lab for 28 students costs about \$8,000, including furniture, apparatus, and instruments; a physics lab, about \$10,000; a chemistry lab, about \$13,000. A language lab containing 20 individually equipped booths, with the tape-recording and playback instruments and other necessary facilities, costs between \$8,000 and \$15,000; even the relatively slight expense of one recorder-playback equipped with several sets of headphones wired in series is prohibitive for many schools.

Allotments to the States under Title III for grants to State educational agencies, fiscal year 1958-59, under (1) the total authorization and (2) the initial appropriation

STATE	Equipment and Remodeling		Administration	
	Authori- zation	Appro- priation	Authori- zation	Appro- priation
Alabama . . .	\$1,783,704	484,148	106,615	21,927
Arizona	530,890	144,099	34,995	20,000
Arkansas . . .	982,081	266,565	58,701	20,000
California . . .	3,036,487	824,189	362,993	74,656
Colorado . . .	622,016	168,833	47,538	20,000
Connecticut . .	494,188	134,137	59,077	20,000
Delaware . . .	95,470	25,913	20,000	20,000
D. of C.	141,646	38,447	20,000	20,000
Florida	1,367,956	371,302	105,110	21,618
Georgia	2,069,074	561,606	123,674	25,436
Idaho	335,890	91,170	20,696	20,000
Illinois	2,172,979	589,809	254,747	52,393
Indiana	1,604,380	435,475	129,443	26,622
Iowa	1,121,523	304,414	79,648	20,000
Kansas	793,313	215,328	59,454	20,000
Kentucky . . .	1,651,501	448,264	98,713	20,302
Louisiana . . .	1,668,278	452,818	99,717	20,508
Maine	406,147	110,240	27,344	20,000
Maryland . . .	930,931	252,681	81,655	20,000
Massachu- setts	1,204,497	326,935	126,308	25,977
Michigan	2,476,417	672,170	223,767	46,022
Minnesota . . .	1,349,480	366,287	97,083	20,000
Mississippi . .	1,265,373	343,458	75,634	20,000
Missouri	1,371,230	372,191	113,765	23,398
Montana	276,084	74,937	20,194	20,000
Nebraska . . .	560,132	152,036	40,138	20,000
Nevada	58,767	15,951	20,000	20,000
New Hamp- shire	206,457	56,038	20,000	20,000
New Jersey . .	1,209,753	328,362	144,620	29,744
New Mexi- co	482,636	131,001	28,849	20,000
New York . . .	3,427,840	930,413	409,778	84,279
N. Carolina . .	2,459,388	667,548	147,004	30,234
N. Dakota . . .	344,137	93,409	20,570	20,000
Ohio	2,740,446	743,835	257,005	52,858
Oklahoma . . .	1,055,296	286,437	67,857	20,000
Oregon	627,650	170,362	50,172	20,000
Pennsylva- nia	3,462,401	939,795	299,024	61,500
Rhode Is- land	228,869	62,122	21,825	20,000
S. Carolina . .	1,399,685	379,915	83,662	20,000
S. Dakota . . .	354,651	96,262	21,198	20,000
Tennessee . . .	1,823,554	494,965	108,998	22,417
Texas	4,094,710	1,111,421	278,203	57,217
Utah	455,471	123,628	28,096	20,000
Vermont	170,762	46,350	20,000	20,000
Virginia	1,718,169	466,360	112,887	23,217
Washington . .	888,940	241,284	77,139	20,000
W. Virginia . .	1,101,693	299,031	65,851	20,000
Wisconsin . . .	1,447,058	392,773	110,253	22,675
Wyoming	130,000	35,286	20,000	20,000
TOTAL	61,600,000	16,720,000	5,000,000	1,350,000

NOTE: Allotments to Alaska, Canal Zone, etc., to be determined by the Commissioner of Education, under sec. 1008 of the Act.

The TITLE itself

ON this combined need for equipment and supervision, Title III fits like a glove. For the former it authorizes a total of \$280 million; for the latter, a total of \$20 million. (Readers unfamiliar with other parts of the Act, or with earlier legislation for education, may wonder why, if inadequately trained staff is a major problem, Title III does not also provide for substantial teacher training. Actually, Title VI of the Act does exactly that—for language teachers. For teachers of science and mathematics the same has already been done in an earlier act, through a teacher-institute program administered by the National Science Foundation.)

EQUIPMENT AND REMODELING

The funds for equipment—\$70 million a year for 4 years, beginning in 1958-59—may be spent to acquire (1) equipment suitable for education in science, mathematics, or modern foreign languages in the elementary or secondary schools, or both, and (2) minor remodeling of laboratory or other space suitable for such equipment. "Minor remodeling" is not defined; but until the regulations make the term clear the Office is assuming that it does not include new wings on buildings but does include putting up partitions, knocking them down, and installing gas and electricity. On "equipment" the Title is more specific: it includes audiovisual materials and equipment, and printed materials other than textbooks.

For private schools, too

Some of the money is reserved for private schools—as loans. Each year 12 percent of the available funds will be set aside (12 percent because for the Nation as a whole that is the ratio of private school enrollment to public, in elementary and secondary schools) and each State will share in this amount on the basis of its private school enrollment. From each State's allotment, the Commissioner will lend directly to nonprofit private schools that apply to him. The loans will bear interest:

. . . at the rate arrived at by adding one-quarter of 1% per annum to the rate the Secretary of Treasury determines to be equal to the current average yield on all outstanding marketable obligations of the United States as of the last day of the month preceding the date the application for the loan is approved . . .

and will be repayable at any time agreed on up to 10 years after they were made.

The States' share

All the rest is for the States, to be paid to the State educational agencies. Up to 2 percent will be reserved

each year for Alaska, Hawaii, Puerto Rico, the Canal Zone, Guam, and the Virgin Islands, to be allotted among them according to their respective needs. The remainder will be allotted to the States on the basis of a formula that takes into account (1) each State's school-age population and (2) its total personal income.*

For every Federal dollar a State receives for equipment and remodeling, it must spend another, either a State dollar or a local dollar. A State has 2 years to use the funds allotted to it in any fiscal year; and from time to time, during the period when an allotment is available, the Commissioner will pay the State in amounts equal to one-half of its own expenditures for equipment and remodeling.

STATE SUPERVISORY SERVICES

Title III also appropriates \$5 million a year for 4 years to be paid to State educational agencies for expanding or improving their "supervisory or related" services to public elementary and secondary schools—in science, mathematics, and modern foreign languages. These funds are to be used also for administering the plans which the States must submit to the Commissioner before they are eligible to receive funds for either equipment or supervision (see section on State plans).

The phrase "related services" is generally being construed, pending definition in the regulations, as meaning such things as the use of expert consultants, the preparing of guides for curriculum planning and assisting in such planning, travel by supervisors and advisory committees, and the holding of conferences of teachers under the leadership of professional consultants. The last-named, however, will not be institutes of the kind conceived of in Titles V and VI; they will be briefer sessions, lasting, say, a few days, or a week or two.

Distribution of funds

Just as he does with the "equipment money," the Commissioner will reserve up to 2 percent of each year's "supervision money" to be allotted among Alaska, Hawaii,

*State X's allotment bears the same ratio to the total available Federal funds as its school-age population multiplied by its "allotment ratio" bears to the Nation's school-age population multiplied by the Nation's "allotment ratio" (Nation here means "continental United States," from which term the Act excludes Alaska).

The "allotment ratio" for any State "shall be 100 percent less the product of (B) 50 percent and (B) the quotient obtained by dividing the income per child of school age for the State by the income per child of school age for the continental United States, except that the allotment ratio shall in no case be less than 33 $\frac{1}{3}$ percent or more than 66 $\frac{2}{3}$ percent."

The allotment ratios now in effect will carry through 1959-60. Another set will be promulgated between July 1 and Aug. 31, 1959, to be effective for 1960-61 and 1961-62.

Puerto Rico, the Canal Zone, Guam, and the Virgin Islands.

The rest he will distribute among the States and the District of Columbia on the basis of each State's school-age population. If, on that basis, any State's share turns out to be less than \$20,000, adjustments will be made to raise it to that amount.

No matching to start

For 1958-59, the first year of the program, the Federal Government will pay *all* of a State's expenditures for expanding or improving its supervisory services. That is, no matching is required for the first year.

For the next 3 years, however, the State's payments will have to match the Federal funds fifty-fifty. Whether the matching funds must consist only of State funds is a matter for the regulations to specify.

STATE PLANS

To receive Federal funds under Title III a State will have to submit a plan to the Commissioner, through its State educational agency. The plan must do these things to be approvable:

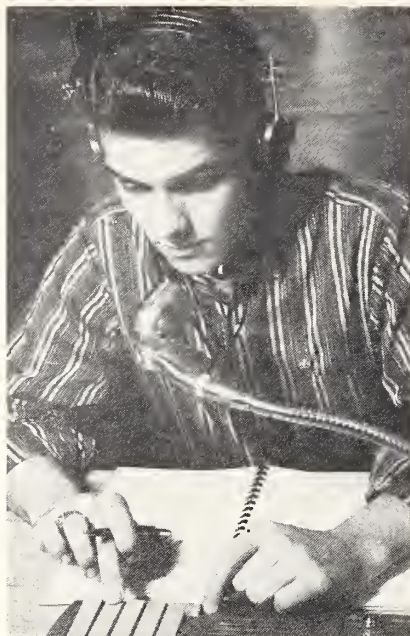
1. Set forth a program under which the equipment and remodeling funds will be used solely for projects that the State agency has approved as complying with the intent of the law.

2. Set forth principles for determining priority of the various projects.

3. Provide that any applicant for a project may have a hearing before the State educational agency.

4. Provide for establishing State standards for the equipment to be acquired.

5. Set forth a program under which the funds paid to the State for expanding or improving "supervisory or



Electronic devices are among the teaching aids now available for modern foreign languages

TULANE UNIVERSITY

related services" in science, mathematics, and modern foreign languages will be expended solely for those purposes—and for administering the State plan.

In addition, the plan must provide that the State educational agency will—

★Be the sole administrator.

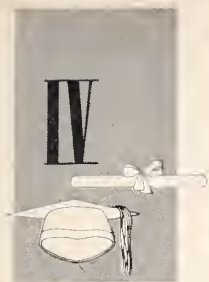
★Make such reports to the Commissioner "as may be reasonably necessary to enable him to perform his duties."

★Follow such fiscal and accounting procedures as will assure that Federal funds are properly disbursed and accounted for.

Local schools, of course, will be the ones to benefit from the State plans. With the funds they receive, they will be able not only to improve their physical facilities for teaching science, math, and modern foreign languages, but to employ supervisory assistance of their own, to supplement that which they will receive from their State educational agencies.

Allotments to the States under Title III for loans to nonprofit private schools, fiscal year 1958-59, under (1) the total authorization and (2) the initial appropriation

STATE	Authori- zation	Appropri- ation
Alabama.....	\$43,199	\$11,725
Arizona.....	37,694	10,231
Arkansas.....	16,322	4,430
California.....	459,163	124,630
Colorado.....	56,330	15,290
Connecticut....	130,158	35,328
Delaware.....	26,561	7,209
District of Colum- bia.....	39,990	10,855
Florida.....	78,088	21,195
Georgia.....	27,455	7,452
Idaho.....	10,484	2,846
Illinois.....	773,423	209,930
Indiana.....	183,297	49,752
Iowa.....	131,174	35,604
Kansas.....	70,058	19,016
Kentucky.....	119,603	32,464
Louisiana.....	201,022	54,563
Maine.....	57,522	15,613
Maryland.....	178,476	48,443
Massachusetts...	386,896	105,015
Michigan.....	445,821	121,009
Minnesota.....	220,009	59,717
Mississippi.....	31,137	8,451
Missouri.....	221,131	60,021
Montana.....	28,051	7,614
Nebraska.....	71,005	19,273
Nevada.....	6,066	1,647
New Hampshire..	53,876	14,623
New Jersey.....	439,475	119,286
New Mexico.....	40,394	10,964
New York.....	1,259,253	341,798
North Carolina..	23,633	6,415
North Dakota...	27,578	7,485
Ohio.....	522,611	141,852
Oklahoma.....	27,964	7,590
Oregon.....	45,794	12,430
Pennsylvania....	858,068	232,905
Rhode Island....	78,070	21,190
South Carolina..	14,324	3,888
South Dakota...	23,370	6,343
Tennessee.....	44,672	12,125
Texas.....	200,075	54,306
Utah.....	7,328	1,989
Vermont.....	27,806	7,547
Virginia.....	69,339	18,821
Washington.....	72,109	19,572
West Virginia...	23,668	6,424
Wisconsin.....	340,489	92,418
Wyoming.....	6,417	1,742
Outlying parts:		
Alaska.....	3,208	871
Canal Zone.....	789	214
Guam.....	3,910	1,061
Hawaii.....	46,881	12,725
Puerto Rico.....	84,697	22,989
Virgin Islands...	4,067	1,104
TOTAL.....	8,400,000	2,280,000



FELLOWSHIPS

TITLE IV. National Defense Fellowships.

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: "Such sums as may be necessary"; at the maximum, this could mean something like \$5 million.

INITIAL APPROPRIATION: \$800,000, allotted by the Office of Education.

The WHY of the TITLE

TITLE IV looks to the providing of more college teachers. It does so on the very eve of a crisis: in the next few years the colleges will feel the first shock of the "tidal wave" of students which for 12 years has been advancing steadily through the elementary and secondary schools; and within a decade college enrollments will probably double.

The impact will find the colleges short of room, but worse still it will find them short of teachers. In the last few years, when the ranks of teachers with doctors degrees should have been swelling and swelling fast, they have actually been thinning. The number of people earning Ph. D.'s has been falling off from 8,903 in 1955-56 to 8,756 in 1956-57 and 8,380 (estimated) in 1957-58; and of each year's total only about half have gone into college teaching. In certain fields—science and engineering, for example—the proportion has been even less. In 1953-54 about one-third of the new college teachers were Ph. D.'s; last year, less than one-fourth. In recent years colleges have been adding about 3,000-4,000 new teachers with Ph. D.'s every year; but additions like these will be utterly inadequate for the future. Conservative estimates say that in the coming decade colleges must recruit between 15,000 and 22,000 teachers a year.

A double problem

One of the reasons for the shortage of college teachers is the fact that graduate programs are not widely available. Out of approximately 1,350 degree-granting institutions in the United States, only about 160 give doctoral degrees; and many of these have resources for only a few

graduate students. Graduate education is the costliest education there is. It calls for professors of high rank, for the directing of students on almost an individual basis, for extensive and expensive libraries and laboratories. It is therefore not surprising that only a few universities and colleges have been able to offer substantial graduate programs: in 1956-57, one-third of the new doctoral degrees granted in the entire country were granted by institutions in only 3 States.

On the other hand, some institutions have good graduate programs going begging for students. After all, graduate education is expensive to get, as well as expensive to give; and by the time a would-be college teacher is ready for graduate work he is likely to be too burdened by financial responsibilities to be able to spend two or three years as a full-time student. Money is what he needs, both to pay his costs and support his dependents while he studies.

The TITLE itself

TO the solution of this double problem—the uneven distribution of graduate programs and the economic needs of students—Title IV addresses itself. It takes two approaches: Providing students with funds; and increasing the number and scope of graduate programs of study.

How much for how many?

Unlike most of the other titles in the act, Title IV authorizes not specific totals but "such sums as may be necessary." They will be spent on as many as 5,500 fellowships, each for not more than three years of study after the baccalaureate degree. The fellowships will be awarded over a 4-year period: 1,000 have been authorized for the year beginning July 1, 1958; 1,500 for each of the next 3 years. Each fellow will receive a stipend of \$2,000 during the first year, \$2,200 during the second, and \$2,400 during the third—plus \$400 a year for each of his dependents. In addition, his college or university each year will receive an amount to offset the costs of making the program available to the fellow.

Assuming the maximum number of fellows (5,500); the maximum length of fellowships (3 years); and, for each fellow, the maximum annual payments to institutions (\$2,500) and an average of 2 dependents, we can arrive at a dollar value for Title IV, as shown in the tabulation on the next page.

As the tabulation indicates, the Congress has authorized funds for 2 years beyond 1961-62, the last year of awards. These funds will make it possible for the last 1,500 fellows to continue their work for the full 3 years.

Academic Year	Number of fellows studying	Federal payments	
		To fellows	To institutions
(In millions)			
1958-59....	1,000	\$2.8	\$2.50
1959-60....	2,500	7.2	6.25
1960-61....	4,000	11.9	10.00
1961-62....	4,500	13.5	11.25
1962-63....	3,000	9.3	7.50
1963-64....	1,500	4.8	3.75
Total.....	49.5	41.25

Which students, which colleges?

The fellowships will be awarded by the Commissioner of Education to persons who have been accepted by a college or university offering a program the Commissioner has approved. Thus, to participate, the institution will apply to the Commissioner; the would-be fellow, to the institution.

Just having a good graduate program, however, is not enough to make an institution eligible to participate.

First, the program must be either new or expanded. The Federal grant the institution itself will receive for each fellow will depend on what share of the newness or the expansion it can reasonably charge to him.

Second, the program must be found by the Commissioner to be both a substantial addition to the Nation's graduate training facilities and a contribution to a wider geographic distribution of such facilities. The Commissioner's obligation to encourage a greater dispersion of graduate facilities throughout the country will of course impose some limit on the number of fellowships he can award at any one institution.

Third, the institution, in accepting students for fellowships, must give preference to persons interested in becoming college teachers.

As for the applicant for a fellowship, the law asks little of him directly, beyond an interest in college teaching. But the law makes it per-

fectly clear that, once he becomes a fellow, he must show himself worthy: his stipend will keep coming only as long as he maintains "satisfactory proficiency" in his work and devotes "essentially full time" to it. His gainful employment is strictly limited to part-time teaching or research at the institution, and must be approved by the Commissioner.

The field is open

Because college teachers are needed in every subject, the law puts no restriction on fields of study. Nor does it bind the student to college teaching when the fellowship ends; in not doing so it bows to the need for well-trained minds in other occupations, particularly in scientific research. Yet the language of the law leaves no doubt that this Title is directed toward the training of college teachers, who, because they train the teachers for all levels of education, are the very foundation of our educational system.

For the present, what?

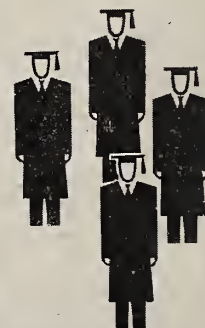
Out of the initial appropriation for the first fiscal year of the Act, \$800,000 has been allotted to Title

IV. Assuming that the first year's fellowships will average \$3,000 for the student and \$2,000 for the institution, this allotment will provide 160 fellowships.

The regulations under which the Title will operate are now being worked out. As soon as they have been issued, interested institutions may submit to the Commissioner their plans for new or expanded graduate programs. It is not yet known whether institutions will be able to develop satisfactory plans in time to permit the award of fellowships in the current academic year. *School Life* will carry announcements from time to time.

THE PROSPECT that in the coming years a large majority who enter college teaching may have only a year or so of advanced preparation is deeply disturbing. If this happens, the quality of college education will certainly undergo an insidious erosion which, though not dramatically apparent to the public, could have disastrous long-run effects upon our society. It is doubtful that any individual college or university, however strong its position, could hope to escape the impact of a quality shortage of this magnitude.

The President's Committee on Education Beyond High School



Graduate programs are unevenly distributed among the 160-plus institutions granting doctoral degrees. In 1956-57 one-third of the institutions produced four-fifths of the Ph'D's.



GUIDANCE, COUNSELING, AND TESTING

TITLE V. Guidance, counseling, and testing; identification and encouragement of able students: Part A, State programs; Part B, counseling and guidance training institutes.

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: For Part A, \$15 million; for Part B, \$6¼ million.

INITIAL APPROPRIATION: For Part A, \$5.4 million, specified by the Congress; for Part B, \$2 million, allotted by the Office of Education.

The WHY of the TITLE

EVERY year about 200,000 able young people, some of them exceptionally talented, drop out of high school or turn their backs on college.

For nearly half of them, the problem is only lack of money; but all the rest drop out simply because they do not want to go to school anymore. Their lack of *wanting* is more complicated than lack of money, and indefinitely more complicated to overcome.

Strangers to themselves . . .

Many of them have never found out that they are bright, have never thought of themselves as college material. And nearly all of them have set their sights on goals far beneath their powers to reach, chiefly because no one ever helped them to look farther and higher.

. . . through lack of guidance

That anyone should suffer from lack of guidance in the American school system, which counts guidance as one of its chief features, is on the surface unbelievable. But beneath that surface is an array of facts that should convince the most incredulous. Among the facts, these—

★Although 1 full-time counselor to 250 or 300 high school students is generally considered optimum, the current ratio for the Nation as a whole is 1 to 750. In other words, high schools have not even half as many counselors as they actually need: the current shortage is conservatively estimated at 15,000.

★Although guidance programs are excellent in some areas, they are entirely nonexistent in others. More than half of the counselors in the United States are in only 7 States, serving more than one-third of the Nation's school children.

★An estimated two-thirds of today's school counselors do not meet minimum certification requirements.

★The 233 colleges and universities granting master's and doctor's degrees in guidance get two placement requests for every graduate; and many high schools with full-time guidance positions are unable to fill them.

★Too many of the colleges providing graduate programs in guidance have only minimum offerings.

★Only 19 States have testing programs; 14 States have none at all.

★Although every year millions of children change schools, only 6 States insist that schools maintain cumulative records on pupils.

★Although most State departments provide some guidance services, nearly all report not enough staff, not enough money, and not enough coordination of State and local programs.

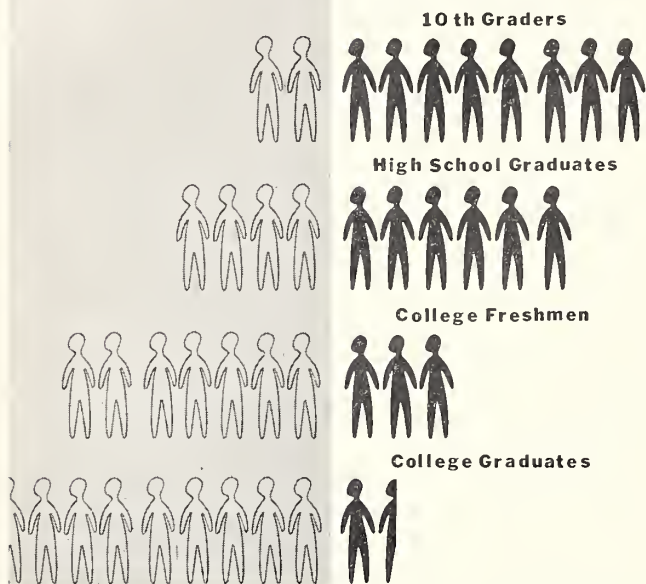
A FREE SOCIETY cannot commandeer talent: it must be true to its own vision of individual liberty. And yet at a time when we face problems of desperate gravity and complexity, an undiscovered talent, a wasted skill, a misapplied ability is a threat to the capacity of a free people to survive.

The "Rockefeller Report" on Education

Such inadequacies exist in the face of evidence from many well-designed studies that the benefits of organized guidance are substantial and persistent. Repeatedly the guided have shown themselves less likely than the non-guided to vacillate in their curriculum choices and more

SCHOOL DROPOUT

Out of every 10 fifth graders not even 2 graduate from college



likely to become honor students, more likely to continue their studies to graduate from college, more likely to make good emotional adjustments, and more likely to reach high cultural and economic levels.

The TITLE itself

TITLE V aims at bringing closer the day when the benefits of wise guidance will be available to all children. Its immediate goals are two: More guidance, including testing, in every State, and enough professional counselors and other guidance staff to do the job.

STATE PROGRAMS

Part A of Title V authorizes \$15 million a year for 4 years, beginning July 1, 1953, for grants to State educational agencies for better guidance programs, including both testing and counseling.

Double-barreled plan

To share in the funds, a State will submit a plan to the Commissioner, setting forth the details of its program for testing, guidance, and counseling.

For testing, the State plan is required to set forth a program that meets this one requirement: That it identify students with outstanding aptitudes and ability. The plan

is also required to set forth the "means of testing." Nowhere in the Act is any specification of what the "means" should be, or any requirement that the Commissioner compile a list of approved means.

For guidance and counseling, a State plan must set forth a program that does two things:

- ★Advises students on what courses are best suited to their ability, aptitudes, and skills.
- ★Encourages outstandingly able students to take courses that will prepare them for admission to institutions of higher education and, upon graduation, to enter such institutions.

In addition, the State plan must provide that the State educational agency will—

- ★Be the sole administrator.
- ★Make such reports to the Commissioner "as may be reasonably necessary to enable him to perform his duties."
- ★Follow such fiscal and accounting procedures as will assure that Federal funds are properly disbursed and accounted for.

Testing in private schools

Both the testing *and* the counseling—are to be carried out in the public secondary schools. But, because the Congress apparently intended that in the talent search no school should be missed, the testing program will go into the nonpublic secondary schools too.

In those States that have legal authority to test in nonpublic schools, the State educational agency will include those schools in its own testing program; in other States the Commissioner will arrange for tests in the nonpublic schools, in such a manner that students in both public and nonpublic schools in a State are tested in comparable ways, "at the same grade levels and under the same conditions." For instance, if a State contracted with a testing service to test in the public schools, the Commissioner would no doubt arrange for the same service to do the testing in the nonpublic schools.

Allotments and payments

From sums appropriated each year for these programs the Commissioner will first reserve up to 2 percent for Alaska, Hawaii, Puerto Rico, the Canal Zone, Guam, and the Virgin Islands, to be allotted among them according to their respective needs.

The rest will be allotted among the States on the basis of their school-age population; but if this rule-of-thumb results in any State's getting less than \$20,000 in any 1 year, proportionate reductions will be made in the other

GUIDANCE and COUNSELING

The two words are not synonyms. Guidance, the bigger term, includes counseling as one of its 6 elements:

1. Analysis: Helping the student get the facts about himself—from test results, cumulative records, and other means of identifying potentialities and interests.
2. Information: Giving him the facts about his environment—about educational and occupational opportunities and requirements.
3. Orientation: Helping him to get acquainted with the school program and educational and vocational opportunities and requirements.
4. Counseling: Helping him to develop self-understanding and to develop his educational and occupational plans.
5. Placement: Helping him carry out those plans.
6. Followup: Determining how his plans worked out and how effectively the educational program served him.

States' allotments to bring the low State up to \$20,000.

For the first year, the Federal Government will pay all the costs of the new programs for the States; thereafter each State must match the Federal funds fifty-fifty, using either State or local funds or both.

In each State where the Commissioner arranges for testing in non-public schools, he will pay the first year's costs of such testing out of the State's allotment; in the following 3 years he will pay only half of the costs. Presumably, the non-public schools themselves will pay the other half of their testing costs in those 3 years.

INSTITUTES

To make sure that the programs in Part A will have the effectiveness that only a strong professional guidance staff can give, the Congress has written Part B into Title V. It authorizes \$6¼ million for 1958-59 and \$7¼ million for each of the next 3 years, to establish training institutes to improve the qualifications of people who are, or will be, engaged in guidance in the secondary schools.

These institutes will be operated by institutions of higher education, under contracts with the Commissioner. They will be either for short terms or for regular sessions.

Individuals who attend—if they either are already engaged in counseling and guidance in a public secondary school or are preparing to be so engaged—are eligible for a stipend of

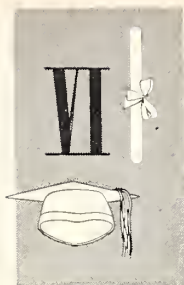
\$75 a week during their attendance, plus \$15 a week for each dependent. The stipend is not automatically given, however: the individual must apply to the institution operating the institute. The Office will keep the public informed, through *School Life* and other media, on the institutions that will participate, when the institutes will open, and progress in general.

For these institutes, as well as for those in Title VI, every effort is now being made to lay plans that will coordinate State programs and State needs with the work of the institute. Both college and university officials and chief State school officers, meeting with Office staff, have expressed their eagerness for such coordination, well aware that it will make the State programs and the institutes serve each other and thus enhance the value of both.

Allotments to the States under Title V, Part A, for guidance, counseling, and testing, fiscal year 1958-59, under (1) total authorization and (2) the initial appropriation

STATE	Authori- zation	Appro- priation	STATE	Authori- zation	Appro- priation
Alabama.....	\$323,018	\$115,359	Nebraska.....	\$121,607	\$43,429
Arizona.....	106,026	37,865	Nevada.....	21,281	20,000
Arkansas.....	177,850	63,515	New Hampshire...	47,503	20,000
California.....	1,099,783	392,763	New Jersey....	438,165	156,481
Colorado.....	144,028	51,436	New Mexico...	87,405	31,215
Connecticut....	178,990	63,922	New York.....	1,241,531	443,385
Delaware.....	34,582	20,000	North Carolina.	445,385	159,059
District of Co- lumbia.....	51,303	20,000	North Dakota..	62,324	22,257
Florida.....	318,458	113,730	Ohio.....	778,664	278,082
Georgia.....	374,701	133,816	Oklahoma.....	205,592	73,422
Idaho.....	62,704	22,393	Oregon.....	152,009	54,286
Illinois.....	771,824	275,639	Pennsylvania...	905,972	323,547
Indiana.....	392,182	140,059	Rhode Island...	66,124	23,615
Iowa.....	241,314	86,180	South Carolina.	253,474	90,523
Kansas.....	180,130	64,329	South Dakota..	64,224	22,936
Kentucky.....	299,077	106,808	Tennessee.....	330,239	117,937
Louisiana.....	302,117	107,894	Texas.....	842,889	301,019
Maine.....	82,845	29,586	Utah.....	85,125	30,400
Maryland.....	247,394	88,351	Vermont.....	33,822	20,000
Massachusetts..	382,682	136,666	Virginia.....	342,020	122,144
Michigan.....	677,959	242,117	Washington....	233,713	83,465
Minnesota.....	294,137	105,044	West Virginia..	199,511	71,251
Mississippi....	229,153	81,837	Wisconsin.....	334,039	119,294
Missouri.....	344,680	123,094	Wyoming.....	29,262	20,000
Montana.....	61,183	21,850	TOTAL.....	15,000,000	5,400,000

NOTE: Allotments to Alaska, Canal Zone, Guam, Puerto Rico, and Virgin Islands, to be determined by the Commissioner of Education, under Sec. 1008 of the Act.



LANGUAGE DEVELOPMENT

TITLE VI. Language development: Part A, centers for research and studies; Part B, language institutes.

FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: For Part A, such sums as may be necessary but not more than \$8 million; for Part B, \$7¼ million.

INITIAL APPROPRIATION: \$400,000 for each part, allotted by the Office of Education.

The WHY of the TITLE

IF we are not yet in the middle of a period of intense international competition and cooperation, we are at least well into the beginning of it; and lately we have become uncomfortably aware that as a Nation we lack a highly necessary qualification: Proficiency in other people's languages.

Some, rarely taught . . .

Millions of people—three-quarters of the earth's population—speak languages taught in only a few, if any, schools and colleges in the United States. Chinese is the native tongue of 500 million people, but only a handful of our schools offer courses in any of its dialects. High school students can take none of the 4 major African languages, and only a few can take an Asiatic or Slavic language. The college student, if he is determined enough, *can* find a school that teaches Arabic or Russian, but his chances of finding a class in a major African language are practically *nil*.

. . . Others, little and late

Our slighting attention to many modern languages is not particularly compensated for by our attention to others. In the past 35 years, even as our international contacts have multiplied and ramified, more and more of our high schools have been dropping language courses and the number of language students has been falling off. Thirty-five years ago, 27 percent of our high school students were taking at least one modern foreign language; in 1955 the percentage was down to less than 15, with

most of the students taking either French or Spanish and less than 1 percent taking German, the language of science.

Even the student who does take French or Spanish begins too late and stops too soon. His school probably does not offer enough courses for him to master the language (less than half our high schools offer *any* languages at all), and very often the quality of teaching does not inspire him to continue his study.

In our institutions of higher education the picture has not been much brighter, although more languages are available there. Not all colleges offer language courses. Only a few more than 15 percent of the students were taking foreign languages in 1955. For many of *them*, too, it is a case of starting too late and ending too soon.

Back of these inadequacies are many circumstances, but none weighs as heavily as the shortage of good language teachers. Archibald T. MacAllister, director of language instruction, Princeton University, in his testimony before the Senate Committee on Labor and Public Welfare, February 27, 1958, said that the greatest single need in modern foreign languages today is "the retraining and improving of language teachers and methods." Of the 1957 graduates preparing to teach, only 1.4 percent had majored in a foreign language. Many of our foreign language teachers majored in a subject other than the language they teach—probably because they teach Spanish or French only part time and teach it because the school has no one else to teach languages.

Every reason

Actually, the United States has every reason to be linguistically educated. Its investments outside its own shores are the largest of any nation in the world; its diplomatic corps represents it everywhere; its armed forces are stationed in many areas of the globe; and its citizens are the world's most ubiquitous tourists. Yet, it stands in desperate need of more and better modern foreign language teaching.

The plea that English is a second language in many countries does not excuse us from learning other tongues. We must be able to speak in the other man's language to establish effective working relations with him, to avoid

misunderstanding between him and us, and to show him the courtesy due a friend. The provisions that Congress has included in the National Defense Education Act for the improvement of modern foreign language teaching are, indeed, for the promotion of defense education.

The TITLE itself

TITLE VI attacks the problem at its root: The shortage of good language teachers. Through Part A (*Centers and Research and Studies*) it seeks more teachers of important but rarely taught languages; through Part B (*Language Institutes*) it seeks better teachers for the elementary and secondary schools.

CENTERS AND RESEARCH

Actually, Part A encourages two things—not only more study of the neglected languages but more research on language instruction.

More of the neglected languages

To get more proficiency in the rarely taught languages, Part A offers aid both to institutions of higher education and to individual students.

To the institutions it will pay, for the period between July 1, 1958, and June 30, 1962, up to one-half of the cost of operating centers to train specialists in certain languages. The matter of *what languages*—the critical languages, so to speak—will be determined by the Commissioner, who will be looking for (1) languages in which the Federal Government—or business, industry, and education in the United States—needs proficiency and (2) languages in which adequate instruction is not readily available.

Institutions that will receive Federal funds will be those that have contracted with the Commissioner to operate a center. In addition to instruction in a language, the contracts may provide also for instruction in subjects needed to understand the peoples in areas in which the languages are spoken (if such instruction is not available elsewhere)—history, political science, linguistics, economics, sociology, geography, and anthropology. The costs on which the institution may spend Federal money include not only the costs of sending its staff to travel or study in regions where the language is spoken but also the costs of bringing foreign scholars to the centers to teach. Up to 50 percent of costs may be paid with Federal funds. In each of the years of the Act, a maximum of \$8 million is authorized for Part A activities.

To qualified individuals, for the same period, the Act offers to pay stipends while they are taking advanced train-

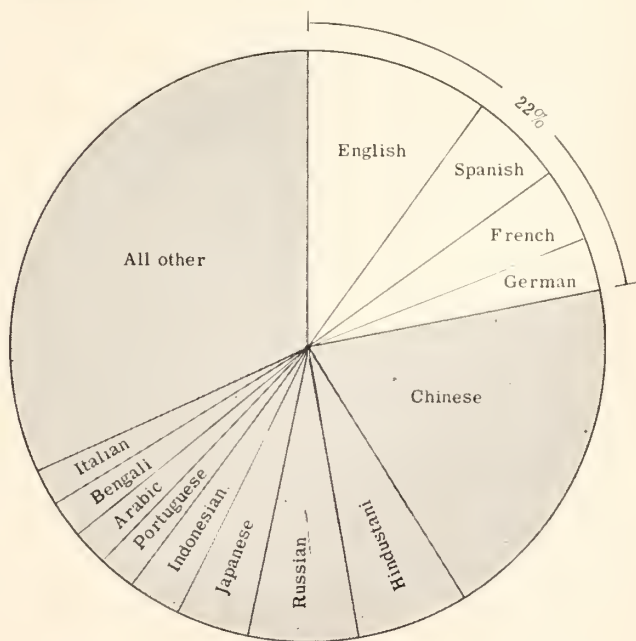
ing in any modern foreign language on the Commissioner's "Needed" list, or in any field that will give them greater understanding of the people living in countries where the language is commonly spoken. The stipends will be for either short terms or regular sessions in any institution of higher education, and will include allowances for dependents and for travel to and from the institution. But to receive a stipend the individual must give reasonable assurance that, when he has completed his studies, he will be available either for teaching a modern foreign language in institutions of higher education or for "service of a public nature."

Research and studies

Part A also authorizes the Commissioner to make studies and surveys to find out exactly what the needs are in foreign language instruction. For example: what, besides proficiency in the language itself, should be taught, and how should it be taught? What are the best ways of teaching a language? What materials do we need to develop?

In addition, the Commissioner is authorized to develop specialized materials that will be useful in training those who teach languages and "related" subjects.

All this the Commissioner may do either directly, i. e., in the Office of Education, or by contract with others—conceivably with either individuals or organizations, or with language centers, colleges, or universities.



Languages of more than three-fourths of the world's people are more or less neglected in U. S. schools and colleges.

INSTITUTES

The language institutes visualized in Part B will focus on one thing—the improvement of teaching modern foreign languages in all of our elementary and secondary schools, particularly through new teaching methods and instructional materials. They will offer advanced training to language teachers, both present and prospective, and to anyone who trains or supervises such teachers.

Federal money—\$7¼ million for each of the next 4 fiscal years, beginning July 1, 1958—has been authorized to help both the institutions that establish the institutes and the individuals who attend. The institutions, through contracts between themselves and the Commissioner, will receive funds to operate the institutes, either for short terms or for regular sessions. Public school individuals attending will receive stipends at the rate of \$75 a week for themselves and \$15 a week for each dependent for the period they are attending an institute.

Institutions that are ready to apply for financial aid for either a center or institute—or both—should apply directly

to the Commissioner. Individuals wishing to receive stipends should apply directly to the institutions. To receive a stipend under Part B, the individual will have to attend one of the institutes; to receive a stipend under Part A, however, he may attend any institution that will give him adequate training—not necessarily one of the centers receiving Federal assistance. The size of the stipend under Part A is not specified in the Act; this is a matter for the regulations to decide.

IT IS NOT possible to understand what is in the minds of other people without understanding their language, and without understanding their language it is impossible to be sure that they understand what is in our minds. Each language, including our own, is a delicate precision tool of immense potential value.

John Foster Dulles



COMMUNICATIONS MEDIA

TITLE VII. Research and experimentation in more effective utilization of television, radio, motion pictures, and related media for educational purposes.

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: \$3 million.

INITIAL APPROPRIATION: \$500,000, allotted by the Office of Education.

ONE of the great men of communication research has speculated about the conclusions which a social analyst might have reached if he had been working 20 years after the first publication of Gutenberg's Bible. If his thinking were tempered by normal scientific caution, he probably would have had to say that, while this new thing called printing had promise, it hardly had remade the world. Most people still could not read, and most of those who could still used hand-copied scrolls; most people did not as yet know that such a thing as a printed book existed. Here and there, the social analyst might have said, there are flashes of promise on the horizon,

but hardly a major alteration in the ways men live and work together.

An equally narrow assessment of the impact of communication change upon modern times would be defensible. Painfully little is known yet with certainty . . . [But we believe] there is profit in trying to go further, and that a larger pattern of insight and evaluation based on what is now known can provide some guidance for those concerned with the significance of the growth of mass communication.

EDUCATIONAL POLICIES COMMISSION

The WHY of the TITLE

MANY of the problems current in education warrant a full look at the use of mass communication media as aids to teaching. The shortage of teachers, the vast amount of knowledge instructors must impart to students, and the excellence of scholarship our modern world demands of graduates puts great strain on conventional teaching methods. We cannot afford to stand still educationally in a racing world. We must



Science aids science: Television brings the good teacher to many classrooms

ALABAMA EDUCATIONAL TELEVISION CO.

explore every avenue offering better means of imparting knowledge.

Of the various communications media—television, radio, motion pictures, tape recorders, and others—some are already playing large parts in education; others are just beginning to make their contributions. TV, one of the latest on the scene, already has been widely tried. Already 30 American cities have closed-circuit television systems and 40 more are building or planning to build educational TV stations. Washington County, Md. (Hagerstown), is well into the third year of a 5-year experimental project involving over 12,000 students in 14 schools. Both commercial and educational TV stations offer courses for home study. Educational TV programs have tentatively explored the curriculum, from arithmetic to zoology. But the potential of TV, like the potential of all the other media, has yet to be adequately measured.

Educators and laymen alike are looking at these media and asking questions. Are we doing all we can with motion pictures as a teaching aid? Mechanical and electronic equipment is revolutionizing language learning—how may we improve these devices to insure competence in language learning? And television, with its promise of an unlimited future, what can we expect of it? How can we make it give us all that it is capable of? And what are its fullest capabilities? What expanded use can we make of slides, filmstrips, magnetic tapes, radio? Where best can we use these devices—for adult classes, in conventional classrooms, in the home? What subjects do they lend themselves to most effectively? The list of

questions is long—and the answers are urgently needed.

The TITLE itself

TITLE VII aims at putting an end to the waste that goes on because educators do not have the facts they need to answer the questions. Its purpose is to get at the advantages of these media, at their limitations, at all the shades of *pro* and *con* that lie in between—and to get at them by the efficient, objective methods of research.

The title authorizes a total of \$18 million over a 4-year period (\$3 million in 1958–59 and \$5 million in each of the next 3 years) for a program with a double purpose: Getting the facts and assisting schools and colleges to make wider and better use of new communications media. Part A of the Title is given over to the first purpose; Part B, to the second.

Getting the facts

What facts, exactly, can best be told by quoting the Act's definition of the kind of research and experimentation it calls for—

... research and experimentation in the development and evaluation of projects involving television, radio, motion pictures, and related media of communication which may prove of value to State or local educational agencies in the operation of their public elementary or secondary schools, and to institutions of higher education, including the development of new and more effective techniques and methods—

(1) for utilizing and adapting motion pictures, video tapes, and other audio-visual aids, film strips, slides and other visual aids, recordings (including magnetic tapes) and other auditory aids, and radio or television program scripts for such purposes;

(2) for training teachers to utilize such media with maximum effectiveness; and

(3) for presenting academic subject matter through such media.

The Commissioner is authorized to use two methods of "conducting, assisting, and fostering" such research and experimentation. He may—

(1) make grants-in-aid to public or nonprofit private agencies, organizations, and individuals;

(2) enter into contracts with public or private agencies, organizations, groups, and individuals.

To enhance the meaning of whatever programs he conducts or finances under the title, the Commissioner must see that they are coordinated with similar programs conducted by others.

Getting the facts out

Part B of the title sets forth 4 ways in which the Commissioner "shall" or "may" keep State or local educational agencies, as well as institutions of higher education, informed about the latest developments in the educational uses of the various media—including, of course, the findings in the research projects under the title. He—

1. Shall make studies and surveys
2. Shall publish catalogs, reviews, bibliographies, and other needed materials.
3. May, upon request, provide advice, technical assistance, and demonstrations to State and local educational agencies and institutions of higher education.
4. Shall publish an annual report of developments in the use of communications media for educational purposes, including projects under the title.

Advisory committee

To help the Commissioner carry out his duties under Title VII, Part C establishes an Advisory Committee on New Educational Media. It will have 2 *ex officio* members—the Commissioner, who will be chairman, and a representative of the National Science Foundation—and 12 members appointed by the Commissioner:

Three persons identified with the sciences, liberal arts, or modern foreign languages in institutions of higher education

Three teachers or supervisors in elementary or secondary schools

Three persons with demonstrated ability in the use or adaptation of communications media for educational purposes

Three representatives of the lay public who have shown interest in the subject.

This Committee has much responsibility. It must consult with the Commissioner, advise him, and make recommendations to him. It must review all applications for grants-in-aid and all proposals to enter into contract, and must certify approval for any it believes will fulfill the title.



TECHNICIANS FOR DEFENSE

TITLE VIII. Area Vocational Education Programs

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: \$15 million

INITIAL APPROPRIATION: \$3¾ million, specified by Congress.

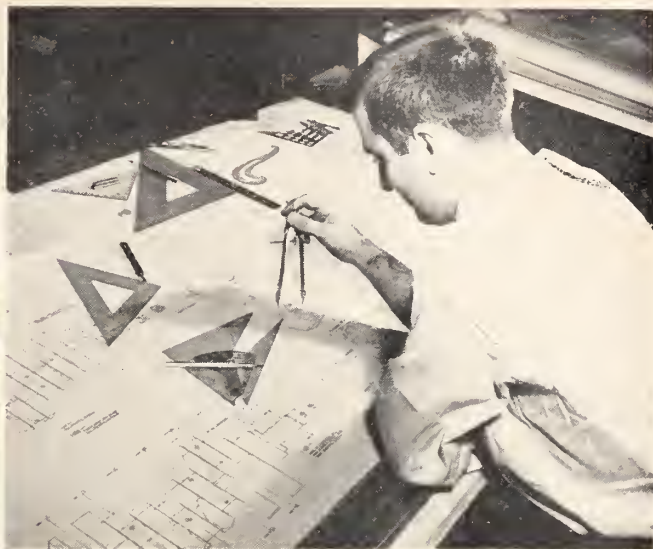
The WHY of the TITLE

EVERY engineer needs 5 technicians behind him if he is to put his knowledge and skills to their best use. But in the United States we have more engineers (in short supply though they be) than technicians—and scientists are performing jobs that technicians could do to better advantage. Chemists and mechanical engineers, for instance, would have more time for creative work if they were assisted by a strong second line of specialists—chemical technicians in the laboratories and skilled draftsmen at the drawing boards.

The United States needs technicians in all areas of scientific development: Electricity, electronics, atomic energy, engineering, chemistry, instrumentation, tool design, aviation, and industrial planning. To not produce technicians fast enough means denying ourselves many of the fine advances of science; it means weakening our first line of defense—skilled manpower—at the very moment we should be making it as strong as we can.



STANDARD OIL DEVELOPMENT CO.



GENERAL MOTORS CORPORATION

The TITLE itself

TITLE VIII, which aims at alleviating this manpower shortage, actually is an amendment to another act. Actually it adds a new title—Title III—to the George-Barden Act, which for a dozen years has augmented the vocational education programs of less-than-college grade begun by the Smith-Hughes Act back in 1917.

Something new

True, vocational education of less-than-college grade is nothing new. With its clearly defined categories (five now—agriculture, home economics, trades and industry, distributive occupations, and practical nursing), it long has been a familiar part of every State school system.

But the kind of vocational education Title VIII provides for—"area vocational education"—that is something new for most States. It's so new, in fact, that some of the chief State school officers, discussing it in conference last month, thought it should be called "technical education" instead of "vocational education," as a signal to everyone that it is definitely not "business as usual."

For this is education that will train the workers the Title describes as "highly skilled technicians in recognized occupations requiring scientific knowledge . . . in fields necessary for the national defense." What these phrases mean, in terms of specific fields, is now in the process of being decided, but there can hardly be any doubt that they mean electronics technicians, laboratory assistants, chemical aides, technicians in air conditioning, experts who know what the flashing lights in an automated

factory are saying—in short, any one of the hundreds of kinds of highly skilled workers who are needed to help turn the notes and drawings of scientists and engineers into workable products and processes.

What it says

Some of the questions people are asking about area vocational education will be answered when the regulations are final, but most of them are answered by the Act itself:

Q. *What, other than concentrating on technicians, are the characteristics of an area vocational education program?*

A. It is intended to provide technical training in those geographic areas now short of vocational education opportunities; it consists of 1 or more courses of less-than-college grade; and it is conducted under public supervision and control and on an organized, systematic class basis.

Q. *Who may enter the program?*

A. Both youth and adults. They must either have finished junior high school or be at least 15 years old, and must be able to profit from the instruction. The adults, for example, may be workers who need training for higher level jobs in industries, or technicians who need to brush up on the latest developments in their fields. It goes without saying that they should have strong backgrounds in science and mathematics if they are to be successful in the occupations for which they seek training.

Q. *How much Federal money has been authorized for these programs?*

A. \$15 million a year for 4 fiscal years to be allotted among the States.

Q. *How does each State share in the amounts appropriated under this authorization?*

A. In the same ratio as it shares in the total amount for the other programs under the George-Barden Act. If it does not require all of its share in any fiscal year, the remainder becomes available for reallocation from time to time to the other States.

Q. *How does a State establish its eligibility for Federal funds?*

A. It must amend its State plan for vocational education under the Smith-Hughes and George-Barden Acts by adding a new part for area vocational programs. This new part must—

1. *Make the State board the sole agency for either (a) administering the new program or (b) supervising the administration by State or local agencies.*
2. *Set up minimum qualifications for personnel.*
3. *Show plans, policies, and methods.*
4. *Provide for efficient fiscal methods.*
5. *Provide for the State board's making such reports to the Commissioner as he needs to perform his functions.*

Q. *Must the State match the funds?*

A. Yes, dollar for dollar. Both State and local funds can be counted as matching.

Q. *What may a State use the Federal funds for?*

A. Any of the following:

1. *Programs of administration, supervision, and teacher training.*
2. *Salaries and travel expenses of State or local personnel.*
3. *Travel expenses of advisory committees or State boards.*
4. *Acquiring instructional equipment and keeping it in working order.*
5. *Purchasing instructional supplies and teaching aids.*
6. *Transporting students.*
7. *Getting information needed to develop the programs.*
8. *Programs to train out-of-school youths.*
9. *Related instruction for apprentices.*
10. *Planning and developing the programs.*

Q. *Who owns the equipment and teaching aids purchased with Federal funds?*

A. The State.

Moving ahead

Title VIII seems to have an easier row to hoe, from the standpoint of writing the regulations, than many of the other titles in the Act, thanks chiefly to the long history of State-Federal cooperation in vocational education. Many of the rules and regulations that apply to the Smith-Hughes and George-Barden Acts apply also to Title VIII; and the questions that still await final decision—for example, How broadly did the Congress intend “national defense requirements” to be interpreted?—are few.

Three experts in vocational education have joined the Office staff for the next few months expressly to assist in setting up the new “technical education” programs. They are Lynn A. Emerson, professor emeritus in industrial education, Cornell University; Lewis A. Wilson, former commissioner of education in New York State; and Walter Arnold, executive officer and director of vocational education programs in the State of Kansas. In October the Office published a bulletin by Dr. Emerson, *Vocational-Technical Education for American Industry* (available from the Government Printing Office, Washington 25, D. C., for 25 cents a copy), which should prove useful to educators establishing and operating the programs under the Title.

In addition, Michigan State University has loaned George Brandon to the Office for a period of two weeks to work on this program. Dr. Brandon is the author of *Twin City Technicians*, a recent research report on technical training.

The Division of Vocational Education will assist States in the development of programs through visits of its staff members to State agencies and through the preparation and distribution of informational material pertaining to this Title of the Act.

S*TRONG forces . . . promise to promote wide concern and provision for . . . technical education: The advent and development of nuclear power, the implications of automated industry, the dynamic application and “gadgeteering” of American invention, the Soviet superiority (at least in numbers) of engineering and technician education, the nature of our occupational complexity, the recognition of communication and human relation values—all movements compelling a recognition of change in mid-century education.*

*Twin City Technicians,
Michigan State University, 1957*

Allotments to the States under Title VIII; fiscal year 1958-59, under (1) the total authorization and (2) the initial appropriation.

STATE	Authori- zation	Appropri- ation
Alabama.....	\$418,827	\$104,707
Arizona.....	73,722	18,430
Arkansas.....	311,906	77,977
California.....	681,801	170,450
Colorado.....	124,337	31,084
Connecticut....	131,284	32,821
Delaware.....	68,908	17,227
District of Columbia....	73,873	18,468
Florida.....	222,750	55,687
Georgia.....	446,298	111,575
Idaho.....	87,515	21,879
Illinois.....	627,416	156,854
Indiana.....	390,965	97,741
Iowa.....	344,505	86,126
Kansas.....	221,500	55,375
Kentucky.....	426,351	106,588
Louisiana.....	296,768	74,192
Maine.....	92,256	23,064
Maryland.....	179,569	44,892
Massachusetts..	258,464	64,616
Michigan.....	515,477	128,869
Minnesota.....	350,130	87,533
Mississippi.....	396,286	99,072
Missouri.....	422,814	105,703
Montana.....	80,788	20,197
Nebraska.....	173,766	43,442
Nevada.....	68,908	17,227
New Hamp- shire.....	68,908	17,227
New Jersey....	261,975	65,494
New Mexico....	80,750	20,188
New York.....	854,102	213,526
North Carolina .	603,146	150,786
North Dakota..	114,389	28,597
Ohio.....	644,405	161,101
Oklahoma.....	267,282	66,821
Oregon.....	152,987	38,247
Pennsylvania...	772,321	193,080
Rhode Island...	73,174	18,293
South Carolina .	306,791	76,698
South Dakota..	112,860	28,215
Tennessee.....	446,347	111,587
Texas.....	748,481	187,120
Utah.....	68,908	17,227
Vermont.....	68,908	17,227
Virginia.....	391,073	97,768
Washington....	208,569	52,142
West Virginia..	248,969	62,242
Wisconsin.....	372,414	93,103
Wyoming.....	68,908	17,227
Outlying parts of the U. S.:		
Alaska.....	68,908	17,227
Canal Zone.....
Guam.....	40,834	10,209
Hawaii.....	71,175	17,794
Puerto Rico....	375,815	93,954
Virgin Islands..	20,417	5,104
TOTAL.....	15,000,000	3,750,000



SCIENCE INFORMATION

TITLE IX. Science Information Service

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: Such sums as may be necessary.

INITIAL APPROPRIATION: Included in the total appropriation for the National Science Foundation.

The WHY of the TITLE

PERHAPS no challenge is greater to the alert scientist of today than that of keeping abreast of the advancing stream of scientific knowledge. A discovery a thousand miles away may make his own research out of date, his experiment useless. From the findings of a fellow scientist at his own back door he may gain knowledge that helps him in his own work—if he knows about it. Yet, were he to read all the material that is available, or should be available, to him on his field and fields related to it, he would have little time for work.

To remain a leader among nations, the United States must be a leader in science. The good of the Nation, the good of science, demand that we provide our specialists with an information service that is quick, timely, accurate, and centrally located.

The TITLE itself

TITLE IX, the only part of the Act not charged to the Office of Education, authorizes the National Science Foundation to establish a Science Information Service and a Science Information Council. The second will advise and consult with the first; and both will have one end in mind: Providing the scientist with information he needs, quickly and effectively.

Science Information Service

The Science Information Service is charged with two responsibilities. It will provide indexing, abstracting, translating, and other services necessary to disseminate scientific information; and it will undertake programs to develop better and faster methods—mechanized systems, for example—of making the information available.

Actually, these functions are not new to the National Science Foundation. Ever since the Foundation was established, in 1950, its Office of Scientific Information has been giving such services to the American scientist. What this new title *does* do is to spell out authority in a certain field, without curtailing any of the present activities of the Foundation for disseminating scientific information.

Really new, however, is the Science Information Council, which will assist the Science Information Service in carrying out its twofold assignment.

The Council will have 19 members. Four will be *ex officio*:

The head of the new Science Information Service

The Librarian of Congress

The director of the Library of the U. S. Department of Agriculture

The director of the National Library of Medicine

The other 15 will be appointed by the director of the National Science Foundation:

6 leaders in the fields of fundamental science

6 leaders in librarianship and scientific documentation

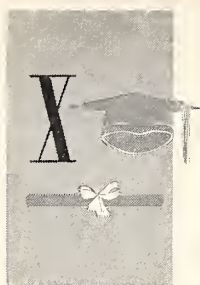
3 outstanding representatives of the lay public who have demonstrated an interest in the problems of communication.

Members of the Council will hold office for 4 years each except that, of those initially appointed, 4 members will hold office for 3 years, 4 for 2 years, and 3 for 1 year; thus each year's committee will be composed chiefly of continuing members. No appointed member will be eligible for reappointment until a year has elapsed after the end of his preceding term.

The Council will meet at least twice a year. It will meet more often if a majority of its members believe that additional conferences are needed.

Appropriations

For fiscal year 1959 and each succeeding fiscal year, Congress authorized "such sums as may be necessary."



STATISTICAL SERVICES

TITLE X (Section 1009): Improvement of statistical services of State educational agencies.

FEDERAL FUNDS FOR FISCAL YEAR 1958-59—

AUTHORIZED: "Such sums as the Congress may determine . . . [but] the payments to any State . . . for any fiscal year may not exceed \$50,000."

INITIAL APPROPRIATION: \$400,000, allotted by the Office.

The WHY of the TITLE

IN today's massive business of gathering, analyzing, and interpreting data about the public schools, the State educational agencies are squarely in the middle. From every district, large or small, they must painstakingly gather the facts: on pupils and teachers, organization and curriculum, sites and classrooms and equipment, moneys received and moneys spent—in short, on anything they deem important to the quality of education. And, being the collectors of data, they are also perforce the suppliers. They face an almost overwhelming demand for facts, not only from the legislatures, research organizations, and citizens of their own States, but from those who, like the Office of Education, seek the facts for the Nation as a whole.

What is needed

Fact seekers want two things in a statistical service: Promptness and accuracy. Yet many State educational agencies have neither the staff nor the equipment to meet the demand for promptness. And from State to State—even from district to district—many educational terms and units of measure vary so much in their meaning that national statistics based on them are blurred and unreliable.

The TITLE itself

TO help overcome these shortcomings, Section 1009 of Title X of the National Defense Education Act authorizes "such sums as Congress may determine" for annual grants to the States over a 4-year period, beginning with this fiscal year. (Section 1009 is the only section in Title X that authorizes a program; the other eight set forth certain specifics about administration, method of payment, etc., and are the ones that give the title its name: *Miscellaneous Provisions*.) No State, under this section, may get more than \$50,000 in any 1 year; and it must match each Federal dollar with one of its own.

Who does what

The first thing that a State must do to get a grant under Title X—assuming State legislative authority for receiving it and the availability of State funds to

match it—is to submit a plan to the Commissioner of Education. Included in this plan must be the program the State will carry out to—**improve and strengthen the adequacy and reliability of educational statistics provided by State and local reports and records and the methods and techniques for collecting and processing educational data and disseminating information about the condition and progress of education in the [State].**

So long as the program is a new one or an addition to an existing program, and fulfills the purpose of the Act, the State can make it anything it wants. Conceivably a State might decide that it should spend its entire grant on improving the collection of data from local educational units; if so, its program might include the development of accounting and reporting manuals and a series of training conferences for local personnel. Or it might prefer to concentrate on improving methods of getting data from other State agencies within the State, or on installing mechanical equipment to expedite the processing and reporting of data.

One State may use the grant to appraise its existing statistical services and to expand or strengthen them in the light of its findings. Another may put into practice the standard terminology and classifications developed in recent years by the nationwide cooperative projects on educational records and reports. Another may increase its staff so that it can meet requests for data with thoroughness and promptness. Each State has the opportunity of finding what its needs are and of supplying them.

Whatever the State's choice, it is its own. True, the plan must meet three requirements to be approved by the Commissioner, but these are requirements that every State plan under the Act must meet, and in no way do they

pertain to the program itself. They are these:

★The plan must be administered solely by the State educational agency.

★The agency must make such reports to the Commissioner "as may be reasonably necessary to enable [him] to perform his duties."

★Fiscal control and fund accounting procedures must be such as to assure that Federal funds are properly disbursed and accounted for.

The Commissioner of Education is now preparing a preliminary draft of the regulations under which Section 1009 of Title X will be administered. These regulations will be developed after full consultation with the chief State school officers, and, when they are complete and have been published in the *Federal Register*, all will be in readiness, on the Federal level, to put the program in action. Out of the initial appropriation for the first year of the Act, \$400,000 has been allotted to Section 1009—enough to put nearly \$1 million to work within the next few months.

Means to an end

If circumstances would shape themselves so that every State every year could take advantage of the maximum specified in Title X, by the end of 4 years the States and the Federal Government together would have put \$22 million into the improving of statistical services in State educational agencies. But even at less than maximum pitch, the joint effort should bring the collection and dissemination of educational information close to the goals envisioned by the House Committee on Education and Labor in its report on the National Defense Education Act of 1953:

Fast schedules in State educational agencies for meeting local, State, and national demands for data.

Complete and up-to-date reporting by the Office of Education.

Full facts on which to base decisions about educational programs.

Adequate data to facilitate research.

Standard terminology, and comparability of data throughout the country.

THE ASTOUNDING LACK OF FACTS

WE HAVE been struck above all else by the astounding lack of accurate, consistent, and up-to-date facts, and by how little this Nation knows about its enormously vital and expensive educational enterprise in contrast to how much it knows, in great detail, about agriculture, industry, labor, banking, and other areas.

We speak not of those difficult facts about education which can only be dug out by painstaking research but of those which are as susceptible to prompt and regularized reporting as steel output in Pittsburgh, potato prices in Maine, bricklayers' wages in Houston, hogs slaughtered in Chicago and bank loans in San Francisco, all of which are reliably reported every month or every week by various Federal agencies.

Until the gross deficiencies in education reporting are remedied, all advisory work, all research, all educational planning throughout the country, and all efforts by individual States, communities, and institutions to devise effective actions will be severely handicapped.

President's Committee on Education Beyond the High School



PUTTING THE ACT TO WORK

IN the two months since President Eisenhower signed the National Defense Education Act, literally hundreds of persons both individually and representing dozens of organizations have met in Washington with the Commissioner of Education and his staff, to help identify the problems inherent in the administration of the Act and to advise on policy. Excerpts from the Office calendar—a list is given overleaf—indicate how widely the Commissioner has sought counsel in his efforts to know and serve the will of the people.

Meanwhile the Office of Education has initiated a recruitment program among professional educators to obtain the staff members it needs to administer the Act. The Act will be administered within the established framework of the Office, under the four divisions logically responsible for the various titles or parts of titles: the Divisions of State and Local School Systems, Higher Education, Vocational Education, and Statistics and Research Services:

TITLE II. Loans to college students, *Higher Education.*

TITLE III. Strengthening science, mathematics, and modern foreign languages, *State and Local Schools.*

TITLE IV. National Defense Fellowships, *Higher Education.*

TITLE V. Guidance, counseling, and testing; Part A, State programs, *State and Local Schools*; Part B, Institutes, *Higher Education.*

TITLE VI. Language development, *Higher Education.*

TITLE VII. Research, etc., on educational uses of new communications media, *Statistics and Research Services.*

TITLE VIII. Area vocational education, *Vocational Education.*

TITLE X, SEC. 1009. Improving statistical services of State educational agencies, *State and Local Schools.*

STATE AND LOCAL SCHOOLS

Those parts of the Act that affect State and local school programs will be administered from the Division of State and Local School Systems, under the direction of Assistant Commissioner E. Glenn Featherston:

Title III: Strengthening Science, Mathematics, and Modern Foreign Languages.

Title V: Guidance, Counseling, and Testing (Part A, State programs).

Title X: Improvement of statistical services of State educational agencies.

A NEW BRANCH

For the first two—Titles III and V—a new branch has been created in the Division—the *Aid to State and Local Schools Branch*. John R. Ludington, formerly assistant director of the Instruction, Organization, and Services Branch of the Division, is the Director. His executive assistant is Clifford A. Carlson, formerly chief of the management advisory branch, Bureau of State Services, U. S. Public Health Services; and his program management officer is Charles E. Dell, formerly chief of the budget methods and procedures section of the Department of Agriculture.

Within this new branch are four sections:

1. Science, Mathematics, and Foreign Language Section. At this writing, recruitment is in process for the chief of this section, who must be a scholar-administrator with proficiency in one of the three subjects. Marjorie Johnston, Office specialist for foreign languages, has transferred from the Secondary Schools Section to the new section. Other specialists are being recruited.

2. Guidance, Counseling, and Testing Section. This section comes readymade into the new branch, having been transferred out of the In-

struction, Organization, and Services Branch. Chief is Frank L. Sievers.

3. Loans to Schools Section. This section will be concerned with the loans that will be made to nonprofit private schools under Title III. George C. Decker is its chief. He formerly headed the educational advisory services to the college housing program, in the Division of Higher Education, Office of Education. Cecil Yarbrough, formerly superintendent of schools of Snyder, Tex., also will be on the staff of this section.

4. State Plans and Reports Section. All the State plans and all the State reports under Titles III come under review by this section. Its chief is Lloyd W. King, recently executive secretary for the American Textbook Publishers Institute and formerly the State commissioner of education for Missouri. Assisting him is Robert A. Crummel, program analyst, who formerly served the American Council on Education and the Committee for International Economic Growth.

TO ADMINISTER TITLE X

One program for State and local school systems will be administered *outside* the new branch—simply because it is closely interwoven with the ongoing cooperative record and reports program in State school administration. This is the program set forth in Section 1009 of Title X—the program to help State departments of education improve their statistical services.

It has been assigned to the school Administration Branch, under the direction of Fred F. Beach. There it will be administered in the State School Systems Section, by James E. Gibbs, Jr., chief of the section. First staff member to be added to assist in the work is a consultant, Allan R. Lichtenberger, formerly director of research in the Nebraska State Department of Education.

For Title X the aids and guides for developing State plans have already been written. To help the States develop the plans they want, the State Schools Systems Section is scheduling a series of seminars throughout the country at which Office represen-

tatives can meet representatives of State departments of education. In addition, a conference of experts on the gathering and disseminating of educational data is being called in the Office to answer two questions: What are the criteria of a good State plan? What can the Office do to help the States develop a strong program? Conclusions reached at this conference will be made available to all State educational agencies.

HIGHER EDUCATION

Under the general direction of Lloyd E. Bauch, Assistant Commissioner for Higher Education, the Division of Higher Education has established the Financial Aid Branch. Directed by Homer D. Babbidge, Jr., formerly assistant to the Secretary of Health, Education, and Welfare. The Branch has 4 sections, one each for Titles II, Title IV, Part B of Title V, and Title VI.

LOAN SECTION

Title II is being administered in the Student Loan Section, under the direction of Peter Muirhead, who is on loan from his position as chief of the Bureau of Examinations and Tests, New York State Department of Education, where he was responsible for the administration of the New York State scholarship program and instrumental in the establishment of the New York State Higher Education Assistance Corporation. He is being assisted by J. Harold Goldthorpe, the Office of Education specialist for accreditation. This section also has a financial loan officer—Kendric N. Marshall, who directed the Government's student loan program during World War II and who comes to this new post from UNESCO, which he served as chief of the technical-assistance mission in Thailand.

Tentative plans in the Student Loan Section are these: All the basic information necessary for participation in the program, together with individual application forms, will be sent to college and university presidents by the last of November; on the basis of applications submitted to the Office, the Commissioner will have the money allotted to the institution for use in the second semester, i. e., by the latter

part of January or the first of February 1959.

Title IV will be administered by the Graduate Fellowships Section, which will be headed by J. P. Elder, on leave from his position as dean of the Graduate School of Arts and Sciences at Harvard University. Ward Stewart, specialist for business and public administration in the Division of Higher Education and formerly with the President's Committee for Education Beyond the High School is on detail to this section.

Part B of Title IV which provides for institutes to train counselors and other guidance specialists is assigned to the Counseling and Guidance Section. Ralph C. Bedell, Office specialist for Higher Education Programs, is on detail to this section. Dr. Bedell was recently secretary-general of the South Pacific Commission and was previously in charge of counselor education in the University of Nebraska.

LANGUAGE SECTION

Title VI—both parts—is the responsibility of the Section for Language development. Here the work is being directed by Kenneth W. Mildenberger, consultant on leave from the Modern Language Association, where he is associate secretary and director of the association's foreign language program.

STATISTICS AND RESEARCH

Title VII, which provides for research and experimentation in the educational uses of new communications media, has been assigned to the Division of Statistics and Research Services under the general direction of Assistant Commissioner Roy M. Hall. To carry out the several details involved, a new Communications Media Research Branch has been established within the division.

Development of the new Communications Media Research Program is under the direction of Kenneth D. Norberg, who is on temporary assignment to the Office of Education as a consultant. Dr. Norberg is on leave from his position at Sacramento State College where he is professor of education and coordinator of audiovisual services. Also assigned to the Communications Media Program as

consultant is C. Walter Stone, who is on leave from his position as professor of library science and specialist in audio-visual and adult education at the University of Illinois. Dr. Stone will be especially concerned with those responsibilities specified in Title VII which relate to dissemination. Anna L. Hyer, executive secretary of the Division of Audio-Visual Instruction of the National Education Association, has just completed a temporary assignment as consultant to the new program.

Within the branch at present are three sections: Audio-Visual, Radio and TV, and Research and Experimentation. The first two have been transferred to the new branch from the Division of State and Local School Systems and are headed respectively by Seerley Reid and Franklin Dunham. Staffing of the third section is in process at the time of this writing.

The procedural details for application under the Title are now being outlined; and, until they are completed, application for research grants or contracts may be made by letter or in a form similar to that used by the Cooperative Research Program. Applications should be addressed to the Communications Media Research Branch, Office of Education, Department of Health, Education, and Welfare, Washington 25, D. C.

VOCATIONAL EDUCATION

For Title VIII a new Branch—the Area Vocational Education Branch—has been set up in the Division of Vocational Education, under the direction of Assistant Commissioner James H. Pearson. Three consultants have come to Washington to assist Mr. Pearson: Drs. Arnold, Emerson, and Wilson, all identified under the foregoing discussion of Title VIII.

The regulations for Title VIII have been written and, by the time this issue is off the press, will be in the hands of State educational leaders. To help the States amend their vocational education plans to include the training of highly skilled technicians called for in the Title, the Office has sent State executive officers and directors a suggested guide for this purpose to help States as they develop their programs under this Title.

CHRONOLOGY OF CONSULTATION

on the

NATIONAL DEFENSE EDUCATION ACT

Excerpts From
Office of Education Calendar

SEPTEMBER 4-6

Preliminary conference with chief State school officers, to prepare for major conference of such officers 2 weeks later

E. ALLEN BATEMAN, superintendent of public instruction, Utah

OWEN B. KIERNAN, commissioner of education, Massachusetts

G. E. WATSON, superintendent of public instruction, Wisconsin

E. E. HOLT, superintendent of public instruction, Ohio

J. C. WRIGHT, superintendent of public instruction, Iowa

A. W. FORD, commissioner of education, Arkansas

OLIVER HODGE, superintendent of public instruction, Oklahoma

ROY E. SIMPSON, superintendent of public instruction, California

JAMES E. ALLEN, Jr., commissioner of education, New York

J. W. EDGAR, commissioner of education, Texas

THOMAS G. PULLEN, Jr., superintendent of schools, Maryland

EDGAR FULLER, executive secretary, Council of Chief State School Officers

FINIS E. ENGLEMAN, executive secretary, American Association of School Administrators

SEPTEMBER 12

Conference of experts to discuss program of loans to college students

RONALD M. BROWN, coordinator of scholarships, University of Colorado

JOHN DOZIER, executive secretary, scholarship committee, Duke University

FRANCIS P. KING, research officer, Teachers Insurance and Annuity Association of America

JOHN U. MONRO, director, Financial Aid Center, Harvard College

REXFORD G. MOON, Jr., director, College Scholarship Service

GEORGE RISTY, Office of the Dean of Students, University of Minnesota

IRVIN YOUNGBERG, executive secretary, Endowment Association, University of Kansas.

SEPTEMBER 15-16

Conference on counseling and guidance institutes

ELLA S. BARRETT, supervisor, guidance services, North Carolina Department of Public Instruction

DOUGLAS DILLENBECK, director of guidance, North Shore High School, Long Island

MITCHELL DREESE, dean in the office of the president, George Washington University

WILLIS DUGAN, professor of education, University of Minnesota

CLIFFORD P. FROELICH, professor of education, University of California

MARTIN JENKINS, president, Morgan State College

WALTER F. JOHNSON, professor of education, Michigan State University

PAUL POLMANTIER, professor of education, University of Missouri

EDWARD C. ROEBER, professor of education, University of Michigan

BRUCE SHEAR, chief, Bureau of Educational Guidance, New York State Department of Education

HOWARD SPAULDING, principal, A. B. Davis High School, Mount Vernon, N. Y.

ROBERT O. STRIPLING, head, Department of Personnel Services, College of Education

WILLIAM WILKINS, professor of education, New York University

E. G. WILLIAMSON, dean of students, University of Minnesota

SEPTEMBER 19

Conference of graduate deans, fellowships program

LEONARD BEACH, Vanderbilt University

JOHN O. RIEDL, Marquette University

WALTER E. LOEHWING, State University of Iowa

HERMAN E. SPIVEY, University of Kentucky

J. P. ELDER, Harvard University

CARL J. REES, University of Delaware

ROBERT M. LUMIANSKY, Tulane University of Louisiana

RALPH M. SAWYER, University of Michigan

ROBERT LESTER, Southern Fellowship Fund

LEWIS M. HAMMOND, University of Virginia

ROBERT W. MACVICAR, Oklahoma State University of Agriculture and Applied Science

HARRY ALPERT, University of Oregon

Conference with Chief State school officers or their representatives

Alabama. A. R. MEADOWS, superintendent of education.

Arizona. M. L. BROOKS, superintendent of public instruction.

Arkansas. A. W. FORD, commission of education.

California. ROY E. SIMPSON, superintendent of public instruction.

Colorado. LEO P. BLACK, assistant commissioner for instructional services

Connecticut. WILLIAM J. SANDERS, commissioner of education.

Delaware. R. L. HERBST, assistant superintendent in charge of business administration

Florida. THOMAS D. BAILEY, superintendent of public instruction.

Georgia. CLAUDE L. PURCELL, staff member

Idaho. ALTON B. JONES, superintendent of public instruction

Illinois. ERICK H. JOHNSON, first assistant superintendent

Indiana. WILBUR YOUNG, superintendent of public instruction.

Iowa. PAUL JOHNSTON, assistant superintendent of public instruction.

Kansas. ADEL F. THROCKMORTON, superintendent of public instruction.

Kentucky. ROBERT R. MARTIN, superintendent of public instruction
TED C. GILBERT, head, Bureau of Administration and Finance

Louisiana. SHELBY M. JACKSON, superintendent of public education

Maine. KERMIT NICKERSON, deputy commissioner

Maryland. THOMAS G. PULLEN, Jr., superintendent of schools

Massachusetts. OWEN B. KIERNAN, commissioner of education

Michigan. LYNN M. BARTLETT, superintendent of public instruction

Minnesota. FARLEY BRIGHT, assistant commissioner in charge of instruction

Mississippi. J. M. TUBB, superintendent of public education
R. W. GRIFFITH, assistant superintendent

Missouri. HUBERT WHEELER, commissioner of education.

Montana. HARRIET MILLER, superintendent of public instruction

Nebraska. W. A. SCHINDLER, consultant in school administration

CECIL STANLEY, assistant commissioner for vocational education

Nevada. BYRON F. STETLER, superintendent of public instruction

New Hampshire. PAUL E. FARNUM, acting commissioner of education

New Jersey. FRANK B. STOVER, assistant commissioner

New Mexico. GEORGIA L. LUSK, superintendent of public instruction

CLARENCE HILL, staff member
New York. E. B. NYQUIST, deputy commissioner

North Carolina. CHARLES F. CARROLL, superintendent of public instruction

North Dakota. M. F. PETERSON, superintendent of public instruction

Ohio. E. E. HOLT, superintendent of public instruction

Oklahoma. OLIVER HODGE, superintendent of public instruction

Oregon. REX PUTMAN, superintendent of public instruction

Pennsylvania. CHARLES H. BOEHM, superintendent of public instruction

Rhode Island. MICHAEL F. WALSH, commissioner of education

South Carolina. JESSE T. ANDERSON, superintendent of education

J. C. HOLLER, director of instruction
P. H. BOMAR, chief finance officer

South Dakota. ERVIN PEREGRINE, consultant, school law, finance, and accounts

Tennessee. JOE MORGAN, commissioner of education

JAMES W. WHITLOCK, director of equalization

Texas. J. W. EDGAR, commissioner of education

Utah. E. ALLEN BATEMAN, superintendent of public instruction.

Vermont. A. JOHN HOLDEN, Jr., commissioner of education

Virginia. R. CLAUDE GRAHAM, assistant superintendent

Washington. LLOYD J. ANDREWS, superintendent of public instruction

LLEWELLYN GRIFFITH, supervisor, elementary education

West Virginia. R. VIRGIL ROHRBOUGH, superintendent of schools

REX M. SMITH, assistant superintendent, administration

Wisconsin. G. E. WATSON, superintendent of public instruction

Wyoming. VELMA LINFORD, superintendent of public instruction

Alaska. DON M. DAFOE, commissioner of education

District of Columbia. CARL F. HANSEN, superintendent of schools

Hawaii. WILLIAM H. COULTER, assistant superintendent

Puerto Rico. SAMUEL B. CULPEPPER, technical assistant

Virgin Islands. ANDREW C. PRESTON, commissioner of education.

OCTOBER 3

Conference on language and area centers (Title VI, Part A)

PARTICIPANTS

RONALD S. ANDERSON, associate professor of education, University of Michigan

HARLAN CLEVELAND, dean, Maxwell

School of Citizenship and Public Affairs, Syracuse University

J. MILTON COWAN, director, Division of Foreign Languages, Cornell University

ARCHIBALD A. HILL, Department of English, University of Texas

ALBERT MARCKWARDT, English Department, University of Michigan

NORMAN A. McQUOWN, Department of Anthropology, University of Chicago

WILLIAM R. PARKER, Department of English, Indiana University

HOWARD E. SOLLENBERGER, dean, School of Languages, Foreign Service Institute, Department of State

CLEON SWAYZEE, Ford Foundation

OBSERVERS

ROBERT BYRNES, Department of History, Indiana University

CHARLES P. O'DONNELL, Foreign Service Institute, Department of State

OCTOBER 10

Conference on language institutes (Title VI, Part B)

THEODORE ANDERSSON, professor of Romance languages, University of Texas

EMMA BIRKMAIER, chairman, Department of Foreign Languages, University High School, University of Minnesota

CLAUDE BOURCIER, dean, The French School, Middlebury College

NELSON BROOKS, associate professor of French, Yale University

JOHN H. FISHER, superintendent, Baltimore City Schools

BRUCE GAARDER, Department of Modern Language, Louisiana State University

ARCHIBALD MACALLISTER, Department of Modern Languages, Princeton University

RUTH MULHAUSER, Department of French, Western Reserve University

HOWARD NOSTRAND, professor of romance languages, University of Washington

JOSEPH COLLINS ORR, assistant professor of modern languages, Purdue University

ALFRED SENN, Department of Modern Languages, University of Pennsylvania

OCTOBER 20-21

Conference on educational uses of new media

ARTHUR S. ADAMS, American Council on Education

WILLIAM H. ALLEN, System Development Corporation

LYLE W. ASHBY, National Education Association

SAMUEL BECKER, National Association of Educational Broadcasters

HOWARD BOOZER, American Council on Education

EARLE BROCKMAN, American Council of Learned Societies

C. RAY CARPENTER, Pennsylvania State University
 WILLIAM G. CARR, National Education Association
 BLANCHE CRIPPEN, Council of Chief State School Officers
 LEE J. CRONBACK, University of Illinois
 C. W. de KIEWIET, University of Rochester
 W. J. DUNN, National Catholic Educational Association
 WILLIAM ENGBRETSON, associate secretary, American Association of Colleges for Teacher Education
 ARTHUR W. FOSHAY, executive officer, Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University
 HAROLD GORES, Educational Facilities Laboratories
 KENNETH HARWOOD, director, telecommunications, University of Southern California
 CHARLES F. HOBAN, project director, Institute for Cooperative Research, University of Pennsylvania
 ELTON HOCKING, chairman, Department of Modern Languages, Purdue University
 VICTOR O. HORNBOSTEL, associate director, Research Division, National Education Association
 RICHARD HULL, director of radio-television, Ohio State University
 JOHN E. IVEY, executive vice-president, New York University
 FRANCIS KEPPEL, dean, Graduate School of Education, Harvard University
 KUMATA, HIDEYA, Communications Research Center, Michigan State University
 JOHN R. MAYOR, director of education, American Association for the Advancement of Science
 WESLEY C. MEIERHENRY, professor of education, University of Nebraska
 JOHN MERCER, University of Southern Illinois
 FORREST J. MOORE, regional consultant chairman, AV committee, Iowa State Department of Public Instruction
 RALPH NAFZIGER, director of School of Journalism, University of Wisconsin
 CHARLES B. PARK, Department of Special Studies, Central Michigan College
 E. DEALTON PARTRIDGE, president, New Jersey State Teachers College
 C. R. PHELPS, program assistant in special projects in education in the sciences, National Science Foundation
 CHARLES F. SCHULLER, director of the Audio-Visual Center, Michigan State University
 JAMES D. SECREST, executive vice-president, Electronic Industries Association
 DOROTHY SMITH, secretary, television committee, American Council on Education
 DALLAS W. SMYTHE, acting director, Institute of Communications Research, UNIRALPH STEETLE, executive director, School of Education, Pennsylvania State University

A. W. VANDERMEER, associate dean, School of Education, Pennsylvania State University
 RANDALL WHALEY, Advisory Board on Education, National Academy of Sciences, National Research Council
 DON WHITE, executive vice-president, National Audio-Visual Association
 JOHN F. WHITE, president, Educational Television and Radio Center
 WALTER A. WITTICH, professor of education, University of Wisconsin

OCTOBER 27

Secretary Fleming's Conference with members and consultants of Committee on Relationships of Higher Education to the Federal Government (American Council on Education):

MEMBERS

HURST R. ANDERSON, president, American University
 CONRAD BERGENDOFF, president, Augustana College
 JOHN T. CALDWELL, president, University of Arkansas
 CARTER DAVIDSON, president, Union College
 JOHN A. HANNAH, president, Michigan State University
 HEROLD C. HUNT, Eliot professor of education, Graduate School of Education, Harvard University
 KATHARINE E. McBRIDE, Bryn Mawr College
 DEANE W. MALOTT, president, Cornell University
 JOHN F. MECK, treasurer-vice president, Dartmouth College
 TOM L. POPEJOY, president, University of New Mexico
 EDWARD B. ROONEY, president, Jesuit Educational Association
 R. F. THOMASON, dean of admissions, University of Tennessee
 ROBERT W. VAN HOUTEN, president, Newark College of Engineering
 J. B. YOUNG, president, Jones County Junior College
 ARTHUR S. ADAMS, *ex officio* president, American Council on Education
 RAYMOND F. HOWES, senior consultant, American Council on Education
 CHARLES G. DOBBINS, secretary, American Council on Education

CONSULTANTS

HELEN D. BRAGDON, director, American Association of University Women
 LEONARD CARMICHAEL, secretary, Smithsonian Institute

W. LEIGHTON COLLINS, secretary, American Society for Engineering Education
 THEODORE A. DISTLER, executive director, Association of American Colleges
 WILLIAM P. FIDLER, general secretary, American Association of University Professors
 ROBERT P. FISCHER, secretary, American Pharmaceutical Association
 EDMUND J. GLEAZER, Jr., executive secretary, American Association of Junior Colleges
 ALFRED T. HILL, executive secretary, Council for Advancement of Small Colleges
 FREDERICK G. HOCHWALT, executive secretary, National Catholic Educational Association
 WALTER JOHNSON, president, American Personnel and Guidance Association
 WILLARD JOHNSON, education affairs vice president, United States National Student Association
 W. NOEL JOHNSTON, American College Public Relations Association
 EVRON M. KIRKPATRICK, executive director, American Political Science Association
 JAMES McCASKILL, director, Division of Legislation and Federal Relations, NEA
 CHARLES P. McCURDY, Jr., executive secretary, State Universities Association
 M. D. MOBLEY, executive secretary, American Vocational Association
 HUBERT C. NOBLE, general director, National Council of the Churches of Christ
 WILLIAM R. PARKER, Modern Foreign Language Association
 WILLIAM K. SELDEN, executive secretary, National Commission on Accrediting
 G. KERRY SMITH, secretary, Association for Higher Education, NEA
 HERMAN E. SPIVEY, dean, University of Kentucky
 ERNEST T. STEWART, Jr., executive secretary, American Alumni Council
 GEORGE W. STONE, Jr., secretary, Modern Language Association
 RUSSELL I. THACKREY, executive secretary, American Association of Land-Grant Colleges
 M. H. TRYTTEN, director, National Research Council
 FRED H. TURNER, president, National Association of Student Personnel Administrators
 J. FLETCHER WELLEMAYER, executive associate, American Council of Learned Societies
 DAEL WOLFLE, executive officer, American Association for the Advancement of Science

OCTOBER 28

Conference with representative chief

State school officers to advise further on Title III and Title V

THOMAS D. DAILEY, superintendent of public instruction, Florida

E. ALLEN BATEMAN, superintendent of public instruction, Utah

CHARLES F. CARROLL, superintendent of public instruction, North Carolina

OWEN B. KIERNAN, commissioner of education, Massachusetts

A. JOHN HOLDEN, commissioner of education, Vermont

E. E. HOLT, superintendent of public instruction, Ohio

A. W. FORD, commissioner of education, Arkansas

OLIVER HODGE, superintendent of public instruction, Oklahoma

ROY E. SIMPSON, superintendent of public instruction, California

JAMES E. ALLEN, Jr., commissioner of education, New York

J. W. EDGAR, commissioner of education, Texas

THOMAS P. PULLEN, Jr., superintendent of schools, Maryland

G. E. WATSON, superintendent of public instruction, Wisconsin

J. C. WRIGHT, superintendent of public instruction, Iowa

The meeting was also attended by—

EDGAR FULLER, executive secretary, Council of Chief State School Officers

FINIS E. ENGLEMAN, executive secretary, American Association of School Administrators

OCTOBER 30

Conference with representatives of science and mathematics organizations

ALDEN H. EMERY, secretary, American Chemical Society.

JOHN MCLAIN, secretary, Council for Elementary Science International

GEORGE E. HOLBROOK, president, American Institute of Chemical Engineers

W. LEIGHTON COLLINS, secretary, American Society for Engineering Education

PAUL V. WEBSTER, secretary, National Association of Biology Teachers

E. P. CULLINAN, secretary, American Institute of Biological Sciences

FRANK VERBRUGGE, secretary, American Association of Physics Teachers

PAUL E. ELICKER, executive secretary, National Association of Secondary School Principals

THOMAS P. FRASER, president, National Association for Research in Science Teaching

ALAN WATERMAN, director, National Science Foundation

ROBERT CARLETON, executive secretary, National Science Teachers Association

WILLIAM G. POLLARD, executive director, Oak Ridge Institute of Nuclear Studies

HOWARD L. BEVIS, chairman, The President's Committee on Scientists and Engineers

REUBEN G. GUSTAVSON, president, Resources for the Future, Inc.

HOWARD A. MEYERHOFF, executive director, Scientific Manpower Commission

THOMAS H. SOUTHARD, president, Society for Industrial and Applied Mathematics

ELMER HUTCHISSON, director, American Institute of Physics

J. W. GREEN, executive secretary, American Mathematical Society

G. B. PRICE, president, Mathematical Association of America

M. H. AHRENDT, executive secretary, National Council of Teachers of Mathematics

FINIS E. ENGLEMAN, executive secretary, American Association of School Administrators

ROBERT W. EAVES, executive secretary, Department of Elementary School Principals, National Education Association

DAEL WOLFLE, secretary, American Association for the Advancement of Science

E. PAUL LANGE, secretary, Engineers Joint Council

S. L. TYLER, secretary, Engineers Council for Professional Development

H. M. TRYTTEN, director, Office of Scientific Personnel, National Academy of Sciences

NOVEMBER 5

Secretary Flemming met with organizations concerned with higher education. These organizations were invited to send representatives:

American Alumni Council

American Anthropological Association

American Association for the Advancement of Science

American Association of College Business Officers

American Association of Colleges for Teacher Education

American Association of Colleges of Pharmacy

American Association of Collegiate Registrars and Admissions Officers

American Association of Collegiate Schools of Business

American Association of Dental Schools

American Association of Junior Colleges

American Association of Land-Grant Colleges and State Universities

American Association of University Professors

American Association of University Women
American Chemical Society

American College Public Relations

American Council of Learned Societies

American Council on Education

American Historical Association

American Institute of Biological Sciences

American Library Association

American Mathematical Society

American Medical Association

American Nurses Association, Inc.

American Physical Society

American Political Science Association

American Psychological Association

American Society for Engineering Education

American Sociological Society

American Textbook Publishers Institute

Association for Education in Journalism

Association for Higher Education

Association of American Colleges

Association of American Law Schools

Association of American Medical Colleges

Association of American Universities

Association of College and Research Libraries

Association of Collegiate Schools of Architecture

Association of Governing Boards of State Universities and Allied Institutions

Association of Graduate Schools in the Association of American Universities

Association of Schools and Colleges of Optometry

Association of Schools of Public Health

Broadcasting Foundation of America Council for the Advancement of Small Colleges

Council for the Advancement of Small Colleges

Council for Financial Aid to Education, Inc.

Council on Library Resources, Inc.

Council on Social Work Education, Inc.

Educational Television and Radio Center

English Speaking Union

Federation of American Societies of Experimental Biology

Institute for Education by Radio-Television

Institute of International Education, Inc.

Joint Council on Educational Television

Mathematical Association of America

Modern Language Association of America

National Academy of Sciences

National Research Council

National Association of Broadcasters

National Association of Educational Broadcasters

National Association of Foreign Student Advisers
 National Association of State Directors of Teacher Education and Certification
 National Association of State Universities
 National Association of Student Personnel Administrators
 National Association of Women Deans and Counselors
 National Commission Teacher Education and Professional Standards
 National Council for Geographic Education
 National Council of Teachers of English
 National League for Nursing
 National Social Welfare Assembly, Inc.
 New England Board of Higher Education
 Social Science Research Council
 Society of American Foresters
 Southern Regional Education Board
 State Universities Association
 United Chapter of Phi Beta Kappa
 Western Interstate Commission for Higher Education

American Association of School Administrators
 American Educational Research Association
 American Farm Bureau Federation
 American Federation of Labor and Congress of Industrial Organizations
 American Federation of Teachers
 American Foundation for the Blind
 American Hearing Society
 American Home Economics Association
 American Jewish Committee
 American Legion
 American National Red Cross
 American Parents Committee, Inc.
 American Personnel and Guidance Association
 American Speech and Hearing Association
 American Veterans Committee
 American Vocational Association
 Association for Childhood Education International
 Association of Junior Leagues of America, Inc.
 Association of School Business Officials of the United States and Canada
 Association for Supervision and Curriculum Development
 Boy Scouts of America
 Chamber of Commerce of the United States
 Child Study Association of America, Inc.
 Conference of Executives of American Schools for the Deaf
 Conservation Education Association
 Convention of American Instructors of the Deaf

Cooperative League of the U. S. A.
 Cooperative Study of Secondary School Standards
 Council for Basic Education
 Council for Exceptional Children
 Council of Administrators of Special Education in Local School Systems
 Council of Chief State School Officers
 Department of Audio-Visual Instruction, Michigan State University
 Department of Classroom Teachers, National Education Association
 Educational Policies Commission, National Education Association
 Education Writers Association
 Emergency Committee for the National Defense Education Bill
 General Federation of Women's Clubs
 Girl Scouts of the United States of America
 Music Educators National Conference
 National Association for Retarded Children, Inc.
 National Association of Colored Women
 National Association of Social Workers
 National Association of State Directors of Special Education
 National Catholic Educational Association
 National Child Labor Committee
 National Citizens Council for Better Schools
 National Congress of Colored Parents and Teachers
 National Congress of Parents and Teachers
 National Council of Churches of Christ in the U. S. A.
 National Council of Independent Schools
 National Council of Jewish Women
 National Council of Negro Women
 National Council of State Consultants in Elementary Education
 National Council of Young Men's Christian Associations
 National Department of Elementary School Principals
 National Farmers Union
 National Education Association
 National Health Council
 National Jewish Welfare Board
 National Safety Council
 National School Boards Association
 National School Public Relations Association
 National Science Teachers
 National Society for the Prevention of Blindness
 National Urban League
 United Auto Workers
 United Church Women
 Young Women's Christian Association of the U. S. A.
 American Association of University Women

DECEMBER 1

Secretary Flemming will meet with organizations concerned with elementary and secondary education. These organizations are planning to send representation:

Adult Education Association of the U. S. A.
 American Association for Gifted Children, Inc.
 American Association on Mental Deficiency

This is a special issue of *School Life* devoted entirely to the National Defense Education Act of 1958. To keep *School Life* coming to you every month, with information on activities for education at the Federal level, use the blank below to subscribe.

Superintendent of Documents U. S. Government Printing Office
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 State: _____

American Education Week, 1958

★ ★ ★

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA A PROCLAMATION

WHEREAS our system of free and universal public education is a foundation stone of American democracy; and

WHEREAS we, as a people, must today bear responsibilities and solve problems more difficult and more demanding than have ever before confronted us; and

WHEREAS we face these problems head on, confident that the most formidable obstacles to national progress and world peace can be surmounted by an educated citizenry, trained up in freedom and self-discipline from their earliest years:

NOW, THEREFORE, I, DWIGHT D. EISENHOWER, President of the United States of America, do hereby designate the period from November 9 through November 15, 1958, as American Education Week; and I urge citizens in their schools and throughout their communities to participate actively in the observance of that week.

Let us show the world and remind our children of our faith in the power of education by giving our intelligent and wholehearted support to every constructive measure designed to strengthen our schools and colleges across the land. And let us furthermore express our constant gratitude to our Nation's teachers, those dedicated men and women whose objective it is to advance the benefits of education among our citizens, in the promise of a fuller life for each and a better life for all.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the United States of America to be affixed.

DONE at the City of Washington this twenty-ninth day of October in the year of our Lord nineteen hundred and fifty-eight, and of the Independence of the United States of America the one hundred and eighty-third.



Dwight D. Eisenhower

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GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
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EDUCATION ON THE AGING, by *Betty Arnett Ward*. 1958. 145 pp. 60 cents. (Bul. 1958, No. 11).

HOMEMAKING EDUCATION PROGRAMS FOR ADULTS, prepared by Home Economics Education Branch. 1958. 62 pp. 25 cents. (Voc. Div. Bul. No. 268).

JUNIOR YEAR SCIENCE AND MATHEMATICS STUDENTS BY MAJOR FIELDS OF STUDY, FALL 1957, by *M. Clemens Johnson* and *Hazel C. Poole*. 1958. 56 pp. 45 cents. (Cir. No. 520).

SCHOOL PLANT COURSES OFFERED BY COLLEGES AND UNIVERSITIES IN THE UNITED STATES, 1956-59, by *Ray L. Hamon*. 1958. 32 pp. 25 cents. (Cir. No. 534).

STATISTICS OF HIGHER EDUCATION: 1955-56. FACULTY, STUDENTS, AND DEGREES, by *Henry G. Badger* and *M. Clemens Johnson*. 1958. 152 pp. 60 cents. Biennial Survey of Education in the United States—1954-56: Ch. 4, Sec. 1.

SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION, Supplement No. 11. 1958. 86 pp. 35 cents. (Voc. Div. Bul. No. 272).

TRAINING OPPORTUNITIES IN OUTSIDE SELLING, prepared

by *Ben Franklin Bills*. 1958. 13 pp. 15 cents. (Voc. Div. Bul. No. 270).

TRAINING PROGRAMS IN OUTSIDE SELLING, prepared by Distributive Education Branch. 1958. 15 pp. 15 cents. (Voc. Div. Bul. No. 269).

FREE

(Request single copies from Publications Inquiry Unit, U. S. Office of Education, Washington 25, D. C.)

CURRICULUM GUIDES DEALING WITH EARLY ELEMENTARY EDUCATION—KINDERGARTEN, prepared by *Lillian L. Gore*. July 1958. 17 pp. (Sel. Ref. No. 11).

HOME ECONOMICS IN DEGREE-GRANTING INSTITUTIONS—1957-58, prepared by *Virginia F. Thomas*. 38 pp. July 1958. (Misc. 2557, Rev. 1958).

THE NATIONAL DEFENSE GRADUATE FELLOWSHIP PROGRAM AUTHORIZED BY THE NATIONAL DEFENSE EDUCATION ACT OF 1958. 1958. 4-page leaflet.

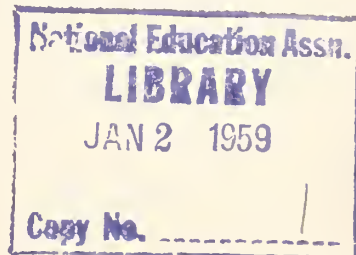
THE NATIONAL DEFENSE STUDENT LOAN PROGRAM AUTHORIZED BY THE NATIONAL DEFENSE EDUCATION ACT OF 1958. 1958. 6-page leaflet.

STATISTICS OF PUBLIC LIBRARY SYSTEMS IN CITIES WITH POPULATIONS OF 35,000 TO 49,000: FISCAL YEAR 1957, by *Rose Vainstein*, *Mary M. Willhoite*, and *Doris C. Holladay*, July 1958. 4 pp. (Cir. No. 536).

SCHOOL LIFE

OFFICIAL JOURNAL OF THE ★ ★ ★ ★ ★ ★ ★ ★

OFFICE OF EDUCATION



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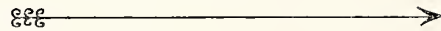
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December 1958

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TO TEACHERS EVERYWHERE



WE NEED to develop strong teachers in *all* fields of study to hold our own in this age of fierce intellectual competition. Because of the nature of the age, we are especially concerned with several areas of critical need, and Congress has just enacted new legislation which will help us to meet the requirements of these areas.

The new Act (National Defense Education Act of 1958) offers tremendous opportunity and challenge to teachers to seek out and help all students to make the most of their abilities. And I want to stress *all* students. Much has been written and said about helping the bright student to get the maximum out of every school day, and certainly we need to make the most of our indispensable resource—the brains and talents of the most gifted.

The American system of education, however, is founded on the principle that all of the children of all of the people have the right to all of the education they can use. I would urge teachers, therefore, not to think of the new legislation as designed to advance opportunity merely for the gifted but for all levels of ability. And to teachers everywhere in these troubled times I would like to say: Try to find all the talent there is in every child and then magnify his strengths rather than his weaknesses, remembering that it is what's right, not what's wrong, with him that counts.



From dedication address given at the Rhode Island College of Education, Providence, R. I., October 26, 1958

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . ARTHUR S. FLEMMING, <i>Secretary</i>	
OFFICE OF EDUCATION LAWRENCE G. DERTHICK, <i>Commissioner</i>	
CARROLL B. HANSON <i>Director</i> <i>Publications Services</i> <hr/> SCHOOL LIFE December 1958 Vol. 41 No. 3 JOHN H. LLOYD <i>Managing Editor</i> THEODORA E. CARLSON <i>Editor</i> CATHERINE P. WILLIAMS <i>Assistant to the Editor</i>	EDITORIAL BOARD Lane C. Ash Emery M. Foster Andrew H. Gibbs . . Kathryn G. Heath Clayton D. Hutchins . . Arno Jewett Jennings B. Sanders <hr/> <i>School Life</i> reports Office planning and action and publishes articles by members of Office staff; presents statistical information of national interest; reports legislation and Federal activities
and programs affecting education. Published monthly, September through May. Printing approved, Bureau of the Budget, July 28, 1958. Contents not copyrighted. Subscription: Domestic, \$1 per year; foreign, \$1.50; 1-, 2-, and 3-year subscriptions available. Single copies, 15 cents. Send check or money order (no stamps) to the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.	

Brief * * * * *
EDUCATION AND GOVERNMENT
Reports * * * * *

U. S. S. R. visitors

A TEAM of nine U. S. S. R. educators arrived in Washington, D. C., November 16 to spend five weeks in the United States observing American education. They are returning a visit made to their country last spring by a group of U. S. educators, headed by Commissioner Dertthick. Both visits are the result of an agreement made by the U. S. S. R. and the U. S. A. in January 1958.

At the request of the U. S. S. R. mission, the Office of Education has arranged a program of visits to educational institutions at all levels, both public and private, in Boston, Chicago, Detroit, Lansing, Nashville, San Angelo, San Francisco, Portland, Salt Lake City, Milwaukee, and the vicinity of Washington, D. C.

At the head of the delegation is A. I. Markushevich, first assistant minister of education for the Russian Soviet Republic and vice president of the Russian Academy of Pedagogical Sciences. Other members of the team are K. R. Rashidov, assistant minister of education in the Uzbek Soviet Republic; S. S. Sagindykov, member of the Ministry of Education for the Kazakh Soviet Republic; A. A. Smirnov, vice president of the Russian Academy of Pedagogical Sciences; D. N. Tapytkov, chief of the Division of International Relations in the Russian Ministry of Education; S. G. Shapovalenko, director of the Scientific-Research Institute on Teaching Methods of the Academy; N. V. Mos-

tovets, member of the Russian Ministry of Education; S. K. Kartsev, a Moscow school teacher; and A. S. Makhov, scientific collaborator, in the Academy of Pedagogical Sciences.

Youth conference

ENTHUSIASM is running high for the 1960 White House Conference on Children and Youth. President Eisenhower, leading the way, has named national committee members; and many State and Territorial governors have appointed committees.

Mrs. Rollin Brown, immediate past president of the National Congress of Parents and Teachers, was named by the President as conference chairman; and Katherine B. Oettinger, chief of the Children's Bureau, Department of Health, Education, and Welfare, as conference secretary. Other appointments are these:

Hurst Anderson, president, The American University

Mrs. James Blue, president, National Association of Governing Boards of State Universities and Allied Institutions

Robert E. Bondy, director, National Social Welfare Assembly

Erwin D. Canham, editor, *Christian Science Monitor*

Donald D. David, chairman, Executive Committee, Ford Foundation
Raymond J. Gallagher, assistant director, Catholic Charities, Diocese of Cleveland

Mrs. Frank Gannett, board chair-

man, Gannett Newspaperboy Scholarships, Inc.

Edward D. Greenwood, coordinator of training, Child Psychiatry, Menninger Foundation

Daryl P. Harvey, staff physician, Howard Clinic (Glasgow, Ky.)

Donald S. Howard, chairman, National Council of State Committees for Children and Youth

Marc H. Tanenbaum, executive-director, Synagogue Council of America

William J. Villaume, executive-director, Department of Social Welfare, National Council of Churches of Christ

The conference staff has prepared a pamphlet for use by educators, social works, and citizen groups. It has sent copies to all State and Territorial committees.

Assistant commissioner named

BECAUSE legislative matters have grown in importance in the Office of Education, Commissioner Dertthick has raised the position of the director of the Legislative Services Branch, held by Ralph C. M. Flynt, to that of assistant commissioner for legislative services. The advancement raises the number of assistant commissioners in the Office to six.

Assistant Commissioner Flynt has been with the Office since 1934. Previous to his work with legislative services he has served in the Division of

Special Education Services, the Student War Loans Program, the Controlled Materials Program, and the Division of Higher Education.

Current events forum

EVERY year more and more student groups come to Washington, D. C., to observe the Federal Government at work. And every year Washington's Greater National Capital Committee looks for more and more ways to offer them educational experiences.

A new program added by the Committee this fall is a current events forum conducted by the Department of State on the third Wednesday of each month. In an informal atmosphere a global briefing officer discusses with the students current international events and United States foreign policy and its background. The forums last about 1½ hours and attendance is by appointment.

The current events forum program supplements the Executive Departments program already available to student groups. Through the latter, students visit 10 cabinet-rank departments, the U.S. Information Agency, and the Civil Service Commission for building tours and brief lectures on the functions of each agency. For this program the Department of State arranges talks by specialists on particular geographic or political areas, selected in advance by the student group when it makes an appointment for a tour.

To attend a current events forum, take an executive department tour, or obtain information on the Nation's capital, students and classes should write the School Service Department, Greater National Capital Committee, 1616 K Street N. W., Washington 6, D. C. Appointments for the current events forums only may be made with the Department of State.

Educator honored

THIRTY years of devoted service to the cause of education in the State of Minnesota made Maria L. Sanford "the best known and best

loved woman in Minnesota." To her memory Minnesota paid a signal honor November 12, 1958, when it presented her statue to the U. S. Capitol's Hall of Statuary as the second of the two statues it may place there.

In selecting Maria Sanford to represent it, Minnesota honors a woman who was a leader in the education of negroes, Indians, and the gifted, an advocate of land beautification, and a firm supporter of women's rights.

All of Minnesota's Congressmen were present when the Honorable Orville L. Freeman, Governor of the State, presented the statue. Senator Edward J. Thye accepted for the Congress. The presentation was part of Minnesota's 100th anniversary commemoration celebration.

Maria L. Sanford is the second woman represented in the Hall.

Highway safety courses

TO MEET the important need for information on education available in traffic control and highway safety, the National Education Association and the Office of Education have issued a booklet called *Courses in Highway Safety and Highway Traffic, A Directory of College and University Offerings, 1956-57*, the result of a joint research project.

Researchers found that more than 300 colleges and universities of the 1,886 questioned offered 975 courses in highway safety and traffic control in 1956-57. Over three-fourths of these courses were regular offerings, while 12 percent were short courses, conferences, or special projects.

Courses in Highway Safety and Highway Traffic sells for \$1.00 a copy, as does its companion publication, *Careers in Highway Traffic Safety*. Both can be obtained from the National Commission on Safety Education, National Education Association, 1201 16th Street N. W., Washington 6, D. C.

Job guide

THE Department of Labor from time to time issues a *Job Guide for Young Workers*, a publication

prepared to help beginning workers "get off to a good start" in the world of work. The 1958-59 edition is now out—66 pages of information of special interest to the high school senior and his counselor or guidance worker. It lists over 100 entry occupations, together with descriptions of the duties and characteristics of these jobs, the qualifications they require, the advancement they offer, and how the younger worker may enter them. Its introductory section gives many tips helpful in finding a job and keeping it. The book stresses the need for additional training to qualify for better positions. One of its most important features is its "Job Outlook" for the coming year, a survey of the labor market.

Information in *Job Guide for Young Workers . . . 1958-59 Edition* was compiled by the Bureau of Employment Security of the Department of Labor in cooperation with State employment security agencies. Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at 40 cents a copy.

Training for U. S. workers

FEDERAL Government agencies now have Congressional permission to train civil service employees for the performance of official duties. The 85th Congress in passing Public Law 85-507—the Government Employees Training Act—recognized on-job training as part of efficient operation and granted Government agencies authority to conduct in-service training programs for members of their staff.

Under the new law, heads of departments and agencies can pay an employee's salary and expenses for up to one year while he is training. The employee, on his part, must agree to stay with the agency at least three years after he completes his program. The law permits employees to attend non-Government institutions if Federal facilities are not available. An agency may have no more than 1 percent of its employees in training programs in any one year.

Effects of CLOSED SCHOOLS

Statement by ARTHUR S. FLEMMING, *Secretary of Health, Education, and Welfare,*
at news conference, Washington, D. C., December 1, 1958

LAST September an unprecedented thing happened in America. Teachers were ready to teach, young people were ready to learn, classrooms, books, and other facilities were all ready—but in four communities 13 schools did not open.

This was a tragic new circumstance in a Nation which has proudly pioneered in providing free public education for all.

Today, the schools are still closed—4 schools in Little Rock, 6 in Norfolk, 2 in Charlottesville, and 1 in Warren County, Va. No one can predict when they will reopen.

At a news conference two weeks ago I was asked for an evaluation of the effects of closing these schools. I feel that this is an appropriate time to make such an evaluation in view of the fact that this week the closed schools are passing the deadline when it is impossible for them to complete the recognized minimum school year of approximately 180 days by June 30. Any effort to complete the school year during the summer months would involve, of course, the payment of additional salaries to teachers and members of the school staff and would undoubtedly be very difficult to arrange.

A precise evaluation, of course, is impossible. There are some measurable factors such as days of schooling lost. There are reasonable surmises as to obstacles the young people may face in the future. But no one can foresee all the significant social, economic, and psychological effects—on the children, on teachers, on the community—of closing the doors of public schools to our young people.

THE DAYS LOST

I am indebted to the Southern Education Reporting Service for statistical data on the number of regular schooldays lost and the emergency arrangements which have been made for many students. A summary of the situation in each community is attached.

Since the normal date for opening school, about 16,400 young people already have missed 54 to 63 days of learn-

ing in their regular public schools—a total of nearly 1 million pupil-days.

Of these 16,400 students, approximately 6,500 are attending improvised emergency classes in homes or makeshift quarters, many of them without laboratory equipment, libraries, or other needed facilities. About 3,000 are traveling varying distances to public schools in other communities. A little over 1,500 are attending newly established private schools set up especially for this emergency—schools which also often lack laboratories, libraries, and other needed facilities. Approximately 250 to 300 are attending regular private schools. Others are attending special night classes in nearby public schools, or getting part-time education by mail or through other special courses.

It is clear that many parents, teachers, and students have improvised to meet the situation, in an effort to carry forward some type of educational program. There is little question, however, that many young people in these improvised classes are not receiving the same quality of well-rounded education they would have received in regular public schools.

And all these emergency arrangements still leave about 3,400 young people apparently deprived of any schooling whatsoever.

EFFECTS ON TEACHERS

There were about 720 teachers in the closed schools. About 405 apparently are tutoring in improvised classes while 315 evidently are not teaching. Virtually all are continuing to be paid—this year—under their contracts.

It seems logical to conclude that many of these teachers will not be interested in continuing their professional careers under the conditions that now confront them in these communities. They will have no difficulty in obtaining employment elsewhere in view of the fact that we are confronted with a national shortage of approximately 132,000 teachers.

I was impressed by the following testimony in Federal court by Mrs. Mary Johnson, a Norfolk teacher for 36 years, as quoted in the press:

"They (teachers) have put their whole lives in public schools—they see what they have spent all their lives building up falling apart—I can't really describe to you the feeling of insecurity."

Norfolk School Superintendent J. J. Brewbaker was quoted as testifying that school closings were having a demoralizing effect on teachers, and that the State of Virginia as well as Norfolk would have a hard time obtaining instructors next year.

EFFECTS ON YOUNG PEOPLE

While educational losses to the young people involved cannot be measured precisely, there are many reasons for grave concern. Following are some of these reasons:

Some of the young people who are out of school now may never return. During prolonged absences from school some young people develop other interests and lose their motivation or desire to return to school or go on to college.

Some of those who return to school may not do as well in their subjects. Extended absence frequently causes young people to lose interest in regular, intensive study. Desirable habits are broken. Further, because of the long void since they last attended regular classes, many students will have to spend more time reviewing earlier studies before they will be well prepared to move ahead into new ground.

Students who return to school after taking part-time courses this year, or only one or two classes, will have difficulty finding their place in the normal sequence of the school program. Because of the wide variations in education received by students during the period the regular schools are closed, the schools themselves will have difficulty reestablishing well coordinated classes and curriculums.

Students who miss long periods of regular education lose much more

than formal schooling in the basic academic subjects. They lose the benefits of many other regular activities which are a part of the ordinary schoolday. They miss the exposure to good literature, magazines, and reference books in school libraries. They lose opportunities to acquire an appreciation of outstanding music and art. They lose the values of such facilities as science laboratories, machine shops, gymnasiums. Some pupils who are not in school may find some of these opportunities in the home, church, or elsewhere in the community, but such opportunities often are quite limited.

Many of the 2,360 seniors in the closed schools, who had planned to go to college next year and still want to do so, will find serious obstacles in their way. For example, for some, failure to complete a school year of 180 days will create problems when it comes to acceptance of credits for entrance into college. Some students may be able to overcome such handicaps through individual effort, or by taking special tests; but many students who miss all or part of their regular senior classes may have difficulty meeting college entrance requirements.

There are other effects of closing public schools which may be less immediate but which are significant in the long run. For example, sporadic or insufficient schooling can seriously lessen a young person's future earning power and productivity. Also, many young people need the sense of purpose—the moral and social guidance—provided by regular attendance in school. There is little doubt that the lack of regular, constructive activities in school can contribute to delinquency. Further, children who are suddenly unable to attend their regular school may develop a sense of insecurity, a fear that they will not be able to advance in competition with others who are receiving a normal education.

Finally, prolonged and enforced absence from school can affect the development of a young person for future citizenship. Throughout the his-

tory of this country, we have increasingly come to understand that our free society can prosper only on the base of an educated and informed citizenry, achieved through free public education for all.

When young people in America are denied the opportunity of attending school, we risk a loss of their faith in one of America's highest ideals.

I am confident that as the losses flowing from the closing of public schools become more and more evident, the citizens of these communities are going to insist on decisions being made that will result in the schools being opened, under policies that will be in harmony with decisions of the courts.

Data by communities on student days missed and emergency arrangements

NORFOLK.—9,950 students have missed 59 days in their regular schools. About 1,620 are attending regular public schools in other communities; 948 are in special night classes in south Norfolk; about 4,200 are in special tutoring classes taught by public school teachers; about 100 are in regular private schools, and 250 are in newly improvised private schools. This leaves about 2,525 apparently not in school at all.

LITTLE ROCK.—About 3,700 students have missed 60 days in their regular schools. About 1,300 are in full-time private schools; 1,268 are in public schools in other communities; 527 are getting part-time education by mail or in special private classes. Apparently about 604 are not in school at all.

CHARLOTTESVILLE.—1,735 students have missed 63 days in their regular schools. About 1,485 students apparently are in private emergency classes taught by public school teachers; 50 to 100 are in regular private schools; a few are in public schools in other communities. Apparently 90 to 140 are not in school at all.

WARREN COUNTY.—1,044 students have missed 54 days in their regular schools. About 780 are in emergency private classes; 90 to 100 are in regular private or public schools in other communities. Apparently about 160 are not in school at all.

CUTTING COSTS IN SCHOOL PLANT CONSTRUCTION

R. N. FINCHUM, *specialist in planning State school plant programs, Office of Education*

DURING the past decade the Nation has conducted the greatest school building program in its history without meeting its school plant needs. Expanding enrollments, replacement of obsolete buildings, population mobility, school district reorganization, and lack of funds are some of the factors keeping State and local school authorities from achieving the goal of housing every child in suitable educational facilities.

Need very great . . .

The Office of Education estimates that between school year 1955-56 and the end of school year 1957-58, the Nation's public schools added 202,000 new classrooms (continental U. S. only): 62,000 in 1955-56; 69,000 in 1956-57; and 70,500 in 1957-58. An estimated shortage of 142,300 classrooms existed in the fall of 1957; and advance estimates for 1958-59 indicate that, even if 70,500 classrooms were built in 1957-58, increased need still leaves a shortage of approximately 132,800 classrooms, a drop of only 9,500 from the 1957 estimate.

. . . Cost very high

The problem of providing more classrooms is compounded by the high cost of building them. Capital outlay expenditures covering the cost of public school facilities have increased enormously since school year 1946-47, when the total national expenditure for this purpose was \$412 million. Ten years later the national expenditure for this purpose had jumped to an estimated \$2.9 billion and in the next year to \$3 billion.

Planners study costs . . .

Securing full dollar value in school plant construction is an important part of meeting classroom needs. In recognition of this importance, the



Mr. Finchum brought 30 years of experience in education to the Office of Education when he joined its staff August 25. He has been an elementary school teacher, a high school principal, a school superintendent, and a college instructor. His last position was with the Tennessee State Department of Education as director of school plant services.

Interstate School Building Service, an organization of personnel responsible for Statewide planning and management of school plants, devoted a 3-day session, August 18-20, 1958, on the campus of George Peabody College for Teachers, Nashville, Tenn., to a study of "Costs and Economies in School Plant Construction." Findings of the meeting bring to light several ways school systems can cut school building expenses appreciably.

To provide accurate data for the study, Allen C. Smith, president of the Service, and the program committee, assisted by Nelson E. Viles, associate chief of the School Housing Section, Office of Education, prepared and submitted three forms to each delegate to complete and bring to the conference. Completed forms gave (1) a breakdown of contract award costs for 10 recently constructed school buildings, or buildings under construction, in each of the States represented; (2) an analysis of cost elements for 3 school buildings in each

State; and (3) a summary of economies through *planning, design, materials selection, and administration.*

Delegates from 9 States—Florida, Georgia, Kansas, Mississippi, Missouri, South Carolina, Tennessee, Texas, and Virginia—submitted complete and comparable data for 69 public school buildings having 1,458 classrooms and 133 large units,* with a gross area of 3,358,260 square feet and whose contract award costs total \$34,563,037.

All schools were classified as either high schools (including building housing grades 1-12 or any combination of elementary and high school grades) or elementary schools (buildings housing grades 1-8, or any combination of elementary grades). For type of construction, all buildings were classified as either fire-resistive, semi-fire-resistive, or combustible.**

TABLE 1, page 8, summarizes the data reported on 34 new high school buildings—15, fire-resistive; 17, semi-fire-resistive; and 2, combustible. Together, these buildings have 920 classrooms and 88 large units, with a total gross floor area of 2,332,314 square feet, or an average of 2,535 square feet, including all related areas, for each classroom. The total construction cost was \$24,733,801, or an average of \$10.61 a square foot, or \$26,885 a classroom. The total construction cost breaks down, by percent, to—

★ general construction, 74.9.

*Large units are specific areas within school plants, such as gymnasiums, auditoriums, cafeterias, and multi-purpose rooms, adapted to use by large groups.

** Fire-resistive buildings, commonly known as "fireproof" structures, are of incombustible materials; semi-fire-resistive buildings are mainly of incombustible materials, with some sections, such as floors and roof deck, of combustible materials; combustible buildings are almost wholly of inflammable materials.

Table 1.—Cost Breakdown for 34 High Schools

Type and number of buildings	Number of—		CONTRACT COSTS					Average gross building area per classroom ¹ (sq. ft.)	Unit costs	
			Total	Percentage Breakdown						
	Class-rooms	Large units		General construction	Heat and ventilation	Plumbing	Electric		Per classroom ¹	Per sq. ft.
Fire-Resistive (15)	302	38	\$7,359,920	76.8	10.7	5.1	7.4	2,587	\$24,370	\$9.15
Semi-Fire-Resistive (17)	578	47	16,462,001	73.5	13.0	6.0	7.5	2,538	28,481	11.21
Combustible (2)	40	3	911,880	74.5	8.0	9.0	8.5	2,097	22,797	10.87
Totals and Averages . . .	920	88	24,733,801	74.9	10.6	6.7	7.8	2,535	26,885	10.61

¹ Including all related space areas.

- ★ heat and ventilation, 10.6.
- ★ electrical work, 7.8.
- ★ plumbing, 6.7.

TABLE 2, below, summarizes the data reported on 35 new elementary school buildings—19, fire-resistive; 14, semi-fire-resistive; and 2, combustible—having 538 classrooms and 45 large units, with a total gross floor area of 1,025,946 square feet, or an average of 1,907 square feet, including related areas, for each classroom. Total cost for all buildings was \$9,829,236, or an average of \$18,270 for each classroom. Total construction costs break down, by percent, to—

- ★ general construction, 73.6.
- ★ heat and ventilation, 10.9.

- ★ electrical work, 7.8
- ★ plumbing, 7.7.

From the standpoint of maintenance and insurance costs, it is interesting to note that fire-resistive high school buildings cost less than semi-fire-resistive and combustible structures. Semi-fire-resistive buildings cost \$1.72 more a square foot; combustible buildings, \$2.06. But fire-resistive elementary buildings cost an average of 22 cents more a square foot than semi-fire-resistive buildings and 59 cents more a square foot than structures of combustible materials. In the case of high schools, however, both the semi-fire-resistive and the combustible buildings contain more large units in relation to the number

of classrooms than the fire-resistive buildings.

. . . and ways to cut them

To hold the average cost to only \$10.21 a square foot for the 69 buildings reported on in this study, school officials made certain school plant construction economies through *planning, design, materials selection, and administration.*

PLANNING

Some of the economies effected through planning resulted from—

- ▶ Building one general use area, such as a gymnasium, an auditorium, or a cafeteria, for a larger number of

Continued on page 17

Table 2.—Cost Breakdown for 35 Elementary Schools

Type and number of buildings	Number of—		CONTRACT COSTS					Average gross building area per classroom ¹ (sq. ft.)	Unit costs	
			Total	Percentage Breakdown						
	Class-rooms	Large units		General construction	Heat and ventilation	Plumbing	Electric		Per classroom ¹	Per sq. ft.
Fire-Resistive (19)	273	27	\$5,069,848	73.4	11.5	7.9	7.0	1,914	\$18,572	\$9.70
Semi-Fire-Resistive (14)	242	17	4,451,867	72.3	12.1	7.8	7.8	1,941	18,369	9.48
Combustible (2)	23	1	307,521	75.0	9.0	7.5	8.5	1,467	13,370	9.11
Totals and Averages . . .	538	45	9,829,236	73.6	10.9	7.7	7.8	1,907	18,270	9.58

¹ Including all related space areas.

EARMARKED FOR THE ELDERLY

Through the public library, our senior citizens are finding enrichment for their lives

ROSE VAINSTEIN

TODAY'S public library recognizes no age barrier. Its services and resources are equally available to children, teen-agers, and adults of all ages. In planning activities the library takes cognizance of the particular needs and problems of each age group. The special needs of readers past middle age are among the factors it considers in choosing a site, selecting and arranging books, planning programs, and purchasing equipment.

BOOKLISTS

One way the public library informs the elderly person or his family about books of interest to him is through booklists. Some lists are for entertainment only; others cite books that may help the older person adjust to his state in life or to a physical disability.

Because a big problem in reading for many older people is that of poor vision, the American Library Association has published a useful book selection aid titled *Books for Tired Eyes*, now undergoing its fifth revision.* This aid lists current books printed in at least 12-point type and gives size of type, subject interest, and the usual bibliographic information. Another publication recognizing the problem of vision is *Easy on the Eyes*, by the Cleveland Public Library. It is typical of the special and shorter booklists prepared by individual public libraries highlighting recent books in large print.

Typical of the many booklists prepared especially for the elderly reader by public libraries are these—

AFTER RETIREMENT—WHAT? BOOKS TO HELP SOLVE YOUR

*Charlotte Matson and Lola Larson, *Books for Tired Eyes*, 4th ed. Chicago, American Library Association, 1951, \$1 a copy.

Miss Vainstein is public library specialist, Office of Education. One of her responsibilities is to provide consultant and advisory service on the role of the public library in serving the aging and those who work with them.

PROBLEMS (Atlanta Public Library)

BIRTHDAYS DON'T COUNT (Albany Public Library)

THE GOLDEN AGE, BOOKS OF INTEREST TO OLDER READERS (Public Library, District of Columbia)

AGING SUCCESSFULLY and HOBBIES FOR OLDER PEOPLE (Newark Public Library)

THE DIVIDEND YEARS (Peoria Public Library)

FOR SUCCESSFUL RETIREMENT (St. Paul Public Library)

Public libraries also prepare booklists for those who work with the elderly. For example, the Wisconsin Free Library Commission, through its Traveling Library and Extension Department, has prepared and distributed widely *The Advancing Years*, a reading list of significant books, pamphlets, reports, and surveys to assist the professional and volunteer in his work with older people. Another example is *Let's Read Aloud*, prepared by the Milwaukee Public Library for readers to the aged.

SERVICE TO SHUT-INS

Preparation of booklists and guidance in book selection are traditional library activities. But many librarians are not content to wait for readers to come to them requesting books and services. Through community study and contacts they are aware that many older persons are homebound or un-

der institutional care. To these people the library offers special service.

Perhaps the best known library program for shut-ins is that of the Cleveland Public Library. Through its Hospital and Institutions Department, it offers a free and highly individualized service directly to the shut-in, made possible by the Judd Fund, established "to extend facilities to persons unable to come to the main library or any of its branches because of illness or incapacity." The service enables a librarian to visit regularly each shut-in with a selection of specially chosen reading materials at his residence, whether it be his family home, a nursing home, or an institution for the aged and chronically ill. Requests and suggestions come from many sources—shut-ins themselves, their families or friends, clergymen, visiting nurses, or social agencies. Cleveland Public Library's brochure describing the Judd Fund aptly states the objective of this service: "So those who cannot run may read."

With the aid of other community agencies many public libraries offer services to shut-ins—

★ THE CHICAGO PUBLIC LIBRARY provides books by mail, borrower paying return postage.

★ THE NEW ROCHELLE (N. Y.) PUBLIC LIBRARY cooperates in the home-visiting and shut-in service of community agencies.

★ THE DAYTON AND MONTGOMERY COUNTY (OHIO) PUBLIC LIBRARY has books delivered and returned through the Volunteer Services Bureau.

★ THE HUNTINGTON (W. VA.) PUBLIC LIBRARY provides telephone service and free mailing of books.

★ THE PARSONS (KANS.) PUBLIC LIBRARY provides library services to nursing homes in its area, with the help of the Unitarian Study Club.

★ SCHENECTADY COUNTY (N. Y.)

PUBLIC LIBRARY delivers books to shut-ins with the cooperation of the National Council of Jewish Women.

★ THE SCARSDALE (N. Y.) PUBLIC LIBRARY offers Bookcase Service twice a month through its Friends of the Public Library and the Scarsdale Junior League.

★ THE WHITE PLAINS (N. Y.) PUBLIC LIBRARY sends books and phonograph records weekly to shut-ins in institutions or at home through its Friends of the Library.

ADULT EDUCATION

Public librarians across the nation have long planned and participated in programs of special interest to the adult community because they are convinced that such programs offer means of extending intellectual horizons, meeting new people, learning about critical issues, and using time constructively. Many interesting programs have arisen from this belief.

THE ATLANTA (GA.) PUBLIC LIBRARY conducted a "Job Clinic for Senior Citizens." Its panel of experts included staff members from the State employment office, the Social Security Administration, and several local employment agencies.

THE MIAMI (FLA.) PUBLIC LIBRARY, cooperating with the Mental Health Society of Greater Miami, presented a series of film and lecture programs titled "Living Can Be Fun with Good Mental Health." Though planned for adults of all ages, several sessions concerned retirement, housing, and other subjects having special meaning for the aged.

THE QUEENS BOROUGH (N. Y.) PUBLIC LIBRARY sponsored a "Forum for Progressive Living," for citizens of Queens wanting to look ahead and prepare for living longer and liking it. At each of the five sessions, community authorities led discussions of such topics as "Making the Most of Your Health," "Your Retirement—Who Finances it," "Queens at Your Service—Your Community Resources," and "Where to Live When You Retire."



Leaflets such as these, prepared by our public libraries, are helpful to the aged and the aging, and to those who work with them.

THE WEST GEORGIA REGIONAL LIBRARY (CARROLLTON, GA.) sponsored a weekly morning "Armchair Travel" series, complete with passport and visas for countries visited. Requisites for entering each country were an open mind, a keen interest, and background on the country through reading and through the viewing of educational films.

Size and location of community is no criteria or barrier to the formation and success of senior citizen clubs in public libraries of the United States.

Library-sponsored groups flourish everywhere with names as varied as their purpose and programs. At the Boston Public Library it's the "Never Too Late Group." Brooklynites go to their Senior Citizens Center at the Flatbush Branch Library. In Cincinnati, it's "Memory, Ink." Cleveland has a "Live Long and Like It Library Club." In Detroit it's a "Senior Citizens' Club." In Sacramento the library sponsors a "Golden Autumn Book Review and Discussion Club." The Stamford (N. Y.) Library offers "Senior Citizens' Book-Film Programs." In Toledo the library sponsors a "Senior Citizens' Group." In Westerly, R. I., the older people have a "Senior Citizens' Club."

EQUIPMENT

Proper reading equipment can often alleviate certain handicaps for some of the aged. Magnifying equipment, ceiling projectors, and special books for the blind are among the devices libraries use to extend their services to disabled people.

The Optometric Association's

Women's Auxiliary presented the Cleveland Public Library with a projection magnifier. Completely portable, the projector magnifies five times and enables bed patients to read newspapers, books, and magazines.

The Racine, Wis., public library is one of many providing ceiling book projectors to bedridden persons. With the mere push of a button by a finger or even the chin the machine projects easy-to-read print on the ceiling. The classics, historical novels, the Bible—these are typical materials available on film.

For the blind, public libraries are an important contact and information agency on the location and resources of the 28 regional distributing centers providing books in Braille as well as Talking Books (the official name for special, long-playing phonograph records of contemporary and classical literature for use by the blind in a program administered by the Library of Congress and supported by Federal funds) and the machines that go with them. Many regional centers are located in public libraries. One of these is in the Free Library of Philadelphia, serving eastern Pennsylvania, New Jersey, and Delaware. Another is in the New York Public Library with services to Greater New York City, Long Island, Connecticut, Puerto Rico, and the Virgin Islands.

Perhaps the special service to the older person is part of building design. Few citizens of Montclair, N. J., appreciate their new public library more than its older patrons, who like its easy street level entrance and its self-service elevator, accommodating a wheel chair. Another feature they love—one open to all ages—is the music listening area where groups or individuals, up to eight in number, may listen to the library's collection of records by earphone.

In increasing numbers local public libraries, in communities both large and small, are taking the opportunity to highlight and help meet the needs of the elderly, serving them as effectively as they have served the rest of their community over the years.

FOREIGN POLICY PUBLICATIONS

THROUGH the publications of the United States Department of State, events in United States foreign relations become recorded history almost as fast as they happen. Because State Department's periodicals, leaflets, and pamphlets are timely and accurate accounts of international relations, they are particularly useful to teachers and students as references on current events in foreign policy.

Periodicals

The Department of State Bulletin is the official weekly record of United States foreign policy. Its forty-odd pages provide a current, accurate, indexed record of all significant official documents and statements relating to United States foreign policy. It regularly publishes such information as—

- ▶ Department of State press releases, transcripts of the Secretary of State's news conferences and testimony before congressional committees, and addresses by key departmental officials.
- ▶ White House press releases relating to foreign policy—statements, messages, addresses, proclamations, and exchanges of correspondence by the President and other governments.
- ▶ Major press releases of the United States mission to the United Nations and selected releases of the Department of Commerce, the Export-Import Bank, and other Federal agencies having foreign-relations activities.
- ▶ Original articles, many on subjects seldom covered elsewhere, by State Department officials.
- ▶ Text of treaties, significant diplomatic correspondence, and joint Government statements.
- ▶ List of current treaty actions; congressional documents on foreign policy; State Department publications; and UN documents.

▶ A monthly calendar of international meetings attended by United States representatives and official reports of United States conference delegations.

Foreign Policy Briefs, State's other periodical, comes out every 2 weeks. Half the width of a newspaper sheet in size, it condenses the most significant policy statements and developments of the previous fortnight and reports on the foreign policy statements of the 40 or more executive agencies having foreign policy responsibilities—a unique service among United States Government publications.

Briefs, in addition to its regular 26 issues a year, publishes occasional supplements on subjects of major international concern. Such supplements have included condensations of Senate committee reports on the mutual security program and résumés of Department of Commerce pamphlets on foreign trade. From time to time, an entire regular issue of *Briefs* may be devoted to a particularly significant international development. In the fall of 1956 when the Hungarian revolt and the invasion of Egypt took place almost together, two issues of *Briefs* carried detailed chronology of the events.

Another special feature of *Briefs* is a listing of Government publications or foreign policy available on request from the Department of State or for sale by the Superintendent of Documents.

For the serious student of foreign affairs *Briefs* provides a convenient checklist of latest developments; for the general reader it is an easy and rapid means of keeping informed on foreign policy.

"Backgrounders"

Other publications of the Department cover virtually all aspects of foreign relations. Perhaps the most widely known are the pamphlets in the

Background series, studies written in a popular vein, usually about individual foreign countries or geographic areas. Now and then, however, there is a "backgrounder" on certain foreign policy issues.

Because they provide data on the geography, history, government, economy, and social conditions of a country as they relate to foreign policy, *Background* pamphlets are of special interest to students in the social sciences. Illustrated, running 15 to 20 pages, these pamphlets sell for 20 or 25 cents from the Superintendent of Documents, Government Printing Office. One of the recent titles is "The Role of the United States in World Affairs."

Other Publications

The variety of subjects covered indicate the scope of the Department's publications program. Recent representative titles include "Guatemala" and "Japan—Free World Ally" (more complete national studies than the *Background* series); "Together We Are Strong" (facts about technological interdependence); and "The Seal of the United States" (a history and description of our official seal).

Other Department publications include the *Question and Answer* series on urgent world issues; and texts of messages and addresses by the President and the Secretary of State.

The Public Services Division, Department of State, Washington 25, D. C., welcomes inquiries about departmental publications or materials on United States foreign policy.

Obtain subscriptions to *The Department of State Bulletin* and *Foreign Policy Briefs* from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., at \$8.50 (\$12.25, foreign) and \$1.00 (\$2.00, foreign) a year respectively.

THE FOREIGN LANGUAGE LABORATORY

THE Office of Education, cooperating with the Modern Language Association, sent out a questionnaire in the fall of 1957 to all colleges, universities, and secondary schools in the United States known to have language laboratories. It asked about the cost of installation and maintenance, kinds of equipment, languages taught, and the effectiveness of the laboratory as a teaching tool. According to the replies, there were language laboratories in 240 colleges and universities in 41 States, the District of Columbia, Hawaii, and Puerto Rico, and in 64 secondary schools in 23 States and the District of Columbia. Nearly 100 other schools expected to have laboratories installed in the fall of 1958.

This month the Office issued its study of the replies in the form of a bulletin—*Foreign Language Laboratories in Schools and Colleges*, by Marjorie C. Johnston, specialist for foreign languages, and Catharine C. Seerley, research assistant. It is particularly timely, since now school systems across the Nation are making plans to expand their language teaching with funds available to them under the National Defense Education Act of 1958. Many will find the language laboratory bulletin helpful in developing their own laboratories.

On these pages, *School Life* has reproduced illustrations from the bulletin and quotes significant passages from the text:

Purpose

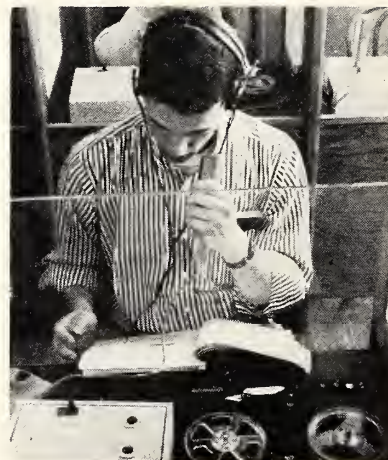
The basic purpose of the language laboratory . . . is to provide regular practice in listening to good models of the foreign speech and a large amount of imitation and repetitive oral drill. Listening practice is intended to lead progressively toward the ability to understand the spoken language, that is, conversation at normal speed, newscasts, lectures, movies, plays, group discussions, telephone messages, and other types of standard speech. Oral drill is aimed toward acquisition of the fluent speaking ability needed to express one's thoughts in sustained conversation with pronunciation, intonation, and use of grammatical forms acceptable to the educated native speaker.

Organization

There are basically two types of laboratory installations. The first comprises one or more centrally controlled re-



TULANE UNIVERSITY



UNIVERSITY OF MASSACHUSETTS

In his own booth the student listens to good models as part of learning to understand the spoken language

coding and playback machines from which the sound is wired to each student position. If there are several machines, the student has a choice of channels to which he may listen. The second type contains in each booth a



GEORGETOWN UNIVERSITY



STANFORD UNIVERSITY

Reading clockwise
from left: *Tape
library, individual
booth, library
equipped for listening,
monitors at
their controls*



STANFORD UNIVERSITY

recorder-player controlled by the student himself. Both types of installation are found in the institutions covered by the survey, although the majority have a central control panel rather than individual recorders in each booth. Some laboratories combine the two types of installation.

Types of equipment

Various combinations of . . . types of equipment are found in language laboratories: Tape recorders (single track and dual track), tape playback machines, wire recorders, magnetic disc recorders, turntables and amplifiers, phonographs, headsets, microphones, film and slide projectors, projection screens, shortwave radios, and television sets. The type of electronic equipment used in many laboratories is still in the developmental stage, but is constantly being improved.

Technique

An important adjunct of the teacher's art is the full cooperation of the students . . . Students need to understand fully what they are trying to accomplish and how the method or material used is going to further their purpose. They need to see progress commensurate with the time and effort expended. At the same time they must realize that language learning has a beginning but no end, that only by progressing through many stages of advancement may they expect to gain in the foreign language "mastery" comparable to their command of the mother tongue.



TULANE UNIVERSITY

Evaluation

There appears to be no question about the worth of the language laboratory in the judgment of teachers who are actually using it. All of the schools and colleges participating in the survey have reported that the educational results justify the continuance or further development of language laboratory facilities. The value most frequently noted was that it provides favorable conditions for developing aural-oral skills—regular practice, good models to follow, opportunity for self-evaluation and individual advancement.

Foreign Language Laboratories in Schools and Colleges is available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 35 cents a copy.

EDUCATION

In the Soviet Zone of Germany

PAUL S. BODENMAN, *assistant to the director, Teacher Exchange Section,
Division of International Education, Office of Education*

WHEN World War II ended in Europe on May 8, 1945, education in Germany was at a standstill. Each of the occupation powers took immediate steps to reorganize and rebuild the educational system within its area of control. The Potsdam Agreement stated that German education should "be so controlled . . . as to make possible the successful development of democratic ideals." Each of the three Western powers—France, Great Britain, and the United States—based its planning on the principle that education and culture are the responsibility of each state.

Although the Soviet Military Government expressed adherence to the same principle, it at once created a German Central Administration for its Zone. Order No. 40, issued by Marshal Zhukov on August 25, 1945, reestablished education in the Soviet Zone. Although it was not very different from directives issued by the other powers, the order did abolish all private schools, a step not taken in the West. It provided for the reopening of elementary, secondary, and vocational schools, the preparation of courses of study and new textbooks, the elimination of Nazi textbooks, and the screening of all teachers to weed out fascists and to find those competent to teach "democratic principles." To the director of the Department of Education of the Soviet Military Administration it assigned supervision and enforcement of the order.

In May and June of 1946 the five States of the Soviet Zone each issued the identical "Law for the Democratization of the German School," which fixed the basic pattern of education in

At the invitation of the government of the Federal Republic of Germany, Mr. Bodenman spent one month in Germany this past summer as a member of a delegation of 12 university professors to observe recent developments in German educational and cultural life. During the visit, Mr. Bodenman collected materials for a bulletin on Education in the Soviet Zone, which the Office of Education expects to publish next spring. This article is a résumé of the forthcoming study.

the Soviet Zone. A long series of laws, decrees, and instructions have moulded the present system from this "Law."

OBJECTIVES

The Politburo of the Central Committee of the Socialist Unity Party, known as the SED, summarized educational objectives for the Zone in a resolution dated July 29, 1952:

The German democratic school has . . . to educate patriots, who in loyal devotion to their homeland, the people, the working classes, and the Government, will . . . achieve the unity of freedom-loving, independent, democratic Germany, will maintain eternal friendship with the Soviet Union . . . and with all people who fight for freedom and progress, will consider creative work as a matter of honor and distinction, will increase and protect the socialistic property, will contribute with all their powers to the securing of the peoples' democratic

foundations of the Government, and are filled with love for and confidence in our peoples' army.

GENERAL EDUCATION

The chart on page 15 shows the pattern of education in the Soviet Zone. General education below the university consists of a 12-year program of elementary, middle, and secondary schools. The Ministry of Public Education directs general education, assisted by the Central Institute of Education and the Central Institute for Instructional Materials.

In *structure*, the educational system of East Germany resembles more closely the United States system than that of the German Federal Republic or of any other Western European nation. Schools for general education form an 8-4 or an 8-2-2-pattern, a radical departure from the tradition of Western and Central European countries, where schools are "double-tracked," i. e., the elementary and secondary schools overlap and parallel each other for several years. (The former lead to the "practical" trades through apprenticeship and part-time vocational education; the latter to the university and the "higher" professions.)

Polytechnic education is a key concept in the development of the general educational system in the Zone. Under this concept, developed by Marx, Engels, and Lenin, all pupils learn the foundations of production in a technical society. Heavy emphasis falls on mathematics, science, and economics, considerable practical training, close relationships between all schools and industry, and the development of an understanding of

modern production methods. The "Fifth Paedagogic Conference," held in 1956, devoted much of its discussion and report to the problems of *polytechnic education*; and recent pleas for the improvement of education emphasize it as the key to fundamental school reform.

VARIOUS LEVELS

Pre-School Education is an integral part of the total educational system, directed and controlled by the Ministry of Public Education. It includes kindergartens for children aged 3-6 and homes for children aged 3-12. Children of working mothers have preference in the kindergartens and are exclusively eligible for the homes. Instruction beyond age 6 in the homes corresponds to the elementary school program. Special provisions are made for children with physical or mental handicaps. Even at this early age the child is introduced to Soviet culture.

The Elementary School offers an 8-year compulsory program for all children. The first 4 years are called the *primary*; the second 4, the *intermediate level*. The school gives industrial arts training throughout the 8-year period, but emphasizes it at the intermediate level. At this level, also, the "subject matter" teacher replaces the classroom teacher of the primary level.

The school week consists of 18 class periods (45 minutes each) in the first grade and increases to 30-33 periods in grades 5-8. Beginning with the fifth grade, Russian, taught 4 hours a week, is compulsory. Mathematics is taught 5-6 hours a week for 8 years, biology begins in grade 5, physics in grade 6, chemistry in grade 7. All curriculums and textbooks emphasize Soviet culture and achievements. Western culture is pushed into the background or interpreted from an Eastern viewpoint.

Graduates of the eighth grade may enter the middle school, the secondary school, part-time vocational schools, or training institutes for primary teachers. Part-time vocational

education is compulsory for three years unless the student enrolls in another school.

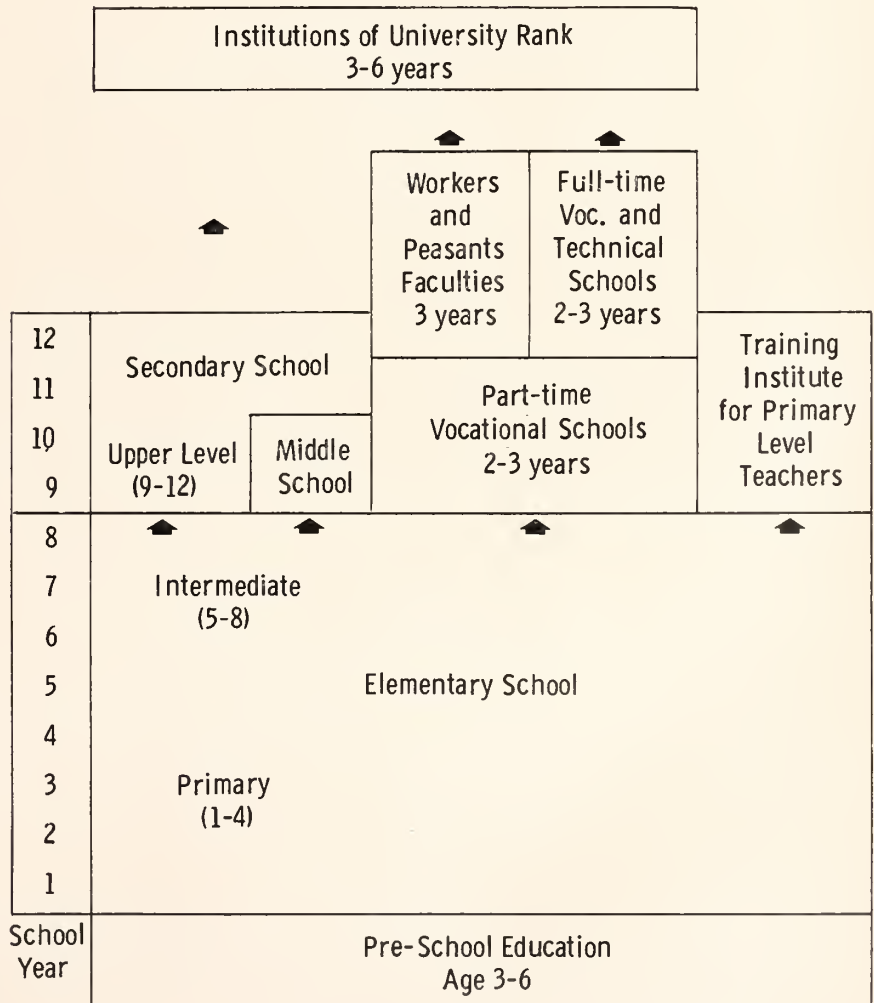
The elementary school ends with a final, comprehensive examination. In 1955 the authorities initiated "consecration festivals" coinciding with the completion of the elementary school to indoctrinate youth in Soviet materialistic philosophy. About 25 percent of graduates took part in 1957. The goal for 1958 was 80 percent attendance. The central committee in charge of these ceremonies states that they are a factor of "socialistic education" and in the struggle against "irresponsible religious superstition." Participation is usually op-

tional, but failure to attend throws suspicion on a student and his family and may adversely affect his opportunity for more education.

The Soviet authorities give high priority to eliminating 1-room schools and building central elementary schools. Between 1946 and 1957, the number of 1-room schools shrank from 4,114 to 23, while 1,500 new central schools appeared.

The Middle School, introduced in 1951, is a 2-year extension of the elementary school. Ordinarily, the director of this school is also the director of the preceding elementary school, so that in theory he heads a 10-year school. An order of May

EDUCATION IN THE SOVIET ZONE OF GERMANY



1955 specified that on September 1, 1955, all incomplete secondary schools should be transformed into 10-year schools, and that in cities with several secondary schools, some should be made into middle schools, so that in school year 1955-56, 60 percent of elementary school graduates would be admitted to secondary. 40 percent to middle schools. The Third Party Congress of the SED on March 24, 1956, decreed that by the end of 1960, 40 percent of all students shall have attended the middle school and after 1965, the middle school shall be compulsory for all.

The aim of the middle school is to train a "middle cadre" for industry, trade, agriculture, the peoples' police, and other fields. The curriculum continues the subjects of the elementary school, with Russian as the only foreign language. Only one subject is added—mechanical drawing. The school week has 32-33 class hours. Graduates may enter the 11th year of the secondary school, part-time and certain full-time vocational and technical schools, or teacher training institutes.

The Secondary School, consisting of grades 9-12, represents the upper level of general education. Three general types, called A, B, and C, have been established. They correspond roughly to the three types of secondary schools in the German Federal Republic:

Type A—modern language.

Type B—mathematics/natural science.

Type C—classical.

Much of the curriculum is identical in the three types. Major differences occur in foreign language, mathematics, and science requirements. All require Russian—4 hours a week in the first 2 years, and 3 hours in the last 2. In type A, a second modern language—usually English or French—begins in grade 9; Latin in grade 11. There is indication that Polish or another Eastern language may enter the curriculum. Type B has no other foreign language re-

quirement, but is characterized by intensive work in mathematics and science—

MATHEMATICS	-----	5 hours	grades 9-12
PHYSICS	-----	3 hours	grades 9-12
CHEMISTRY	-----	2 hours	grade 9
		3 hours	grades 10-12
BIOLOGY	-----	3 hours	grades 9-12

In type C, Latin begins in grade 9 and Greek in grade 11. The total course load varies from 32 to 35 hours a week.

Although the constitution of the Soviet Zone guarantees free secondary education and textbooks, this privilege is *completely* available *only* to students with "good social activity" whose attendance is in the "general public interest" and to students with several brothers and sisters. A variety of scholarships and stipends for living costs assist students in accordance with the objectives of Zonal authorities.

Vocational education is directed by the Ministry of Labor and Vocational Education, in close cooperation with all other technical ministries. Plans issued in January 1957 specify training in 970 trades and skills. Of these, 590 can be offered only in connection with "peoples" establishments, 286 in either "peoples" or private establishments, and only 94 exclusively in private establishments. Some vocational training courses require graduation from the middle or the secondary school but the majority can be entered on completion of the elementary school. Courses are usually 2, 2½, or 3 years in length. General, commercial, agricultural, and trade and industrial vocational schools have also been developed.

A growing trend is the establishment of complete vocational schools within individual industrial plants under the supervision of the plant manager, who is responsible to the Ministry of Trade and Vocational Education. Graduates of the vocational school may enter a full-time vocational or technical school or a "workers and peasants faculty." Both lead to the university.

Higher Education is offered in over 40 institutions in East Germany. These include 6 general universities, an institute of technology, a school of mining, the Potsdam College of Education, and a large number of narrowly specialized institutions—teacher training institutes and colleges of architecture, building construction, transportation, electro-technology, heavy machinery construction, physical culture, economics, public administration, foreign trade, chemistry, agriculture, music, and the plastic arts. Originally controlled by a department in the Ministry of Public Education, all institutions except those for music, art, and teacher training are now under a State Secretariat for Higher Education.

The traditional autonomy of the European university has almost disappeared. The university senate still elects the rector (president), but the State Secretariat appoints four vice-rectors and a business manager. The vice-rectors are responsible respectively for (1) fundamental social science, Russian language and literature, German language and literature; (2) research, correspondence study, and evening classes; (3) scientific aspirants (development of young faculty members); and (4) student affairs and regulations, and practical training. Since 1953, the Secretariat has been either directly involved or has the final power of approval in almost all personnel actions.

Political factors are decisive in the admission of students. A Secretariat decree for the academic year 1957-58 specifies that the admission of workers' and peasants' children must correspond to the social structure of the Zone (60 percent of the total population). Other requirements indicate that a student's participation in the life of the socialist state, more than any other factor, will determine his admission to higher education. A prerequisite added this year makes one year of service in agriculture or industry obligatory for admission.

Workers and Peasants Faculties, an innovation in higher education, were established in 1949 at most universities and some specialized institutions. These faculties are 3-year, pre-university courses conducted by the university to enable workers' and peasants' children who have not completed the secondary school to meet university entrance requirements. Admission is limited to students 17 to 30 years of age who have completed the eighth grade. Most have completed a part-time vocational school and have recommendations from directors of "peoples" industries or local political organizations. Universities also have the power to admit directly students without secondary education who can pass special maturity examinations. On January 1, 1957, tuition charges were abolished at all higher education institutions, and there is an extensive system of stipends to cover living costs.

SUMMARY AND CONCLUSIONS

The Soviet Zone of Germany has established a "single-tracked" school system differing from the traditional pattern of Western European education. Advancement from the elementary level to the university, either through the secondary school, vocational and technical schools, or "Workers and Peasants Faculties," appears to have greatly expanded educational opportunities. Children of workers and peasants, only 4 percent of university enrollments in 1946, constituted well over 40 percent of the student body in 1956. An extensive system of stipends for study as well as living costs have made education free for large numbers of students, from the elementary school through the university. There is some evidence that many aspects of the Soviet educational program have much popular support.

On the other hand, educational opportunities are severely limited for members of former middle and upper classes and are, for all practical purposes, completely eliminated for anyone who is unwilling to take part ac-

tively in the development of the socialistic state. The entire system is centrally and minutely controlled by a small communist minority, functioning through the SED and the entire governmental apparatus, to insure absolute conformity to the will of the ruling group. Education in the sense of free and unlimited inquiry has disappeared. The primary objective of the educational system is to create a generation steeped in Soviet language and political philosophy, subservient to the "socialist State."

CUTTING COSTS IN SCHOOL PLANT CONSTRUCTION

Continued from page 8
pupils rather than building one or more facilities at two or more smaller schools.

- ▶ Providing for high utilization of all space and holding little-used space to a minimum.
- ▶ Planning multiple-use areas, such as auditorium-gymnasium, auditorium-cafeteria, library-study hall, and cafeteria-library, wherever practicable or possible.
- ▶ Planning all-purpose home economics and science rooms for use both as laboratories and as regular classrooms.
- ▶ Writing exact specifications for bidders to avoid doubt over meaning of contract.

DESIGN

Some design economies came about through—

- ▶ Careful attention to the shape of the building to reduce its perimeter and corridor space.
- ▶ Use of flat roof to eliminate parapet walls and to reduce cubage. Combining roof deck and ceiling to reduce labor and material costs.

▶ Use of modular coordination and repetitive framing designs to speed construction.

▶ Installing concrete floors over porous fill on earth to eliminate expensive flooring and floor joist materials.

MATERIAL SELECTION

Careful selection of material brought about some cost cutting through—

- ▶ Use of stock materials—windows, doors, and millwork—to eliminate custom manufacturing.
- ▶ Installation of structural tile or light aggregate concrete blocks with glazed finish up to wainscot height in corridors in lieu of more expensive ceramic tile.
- ▶ Elimination of all plaster under all chalk and bulletin boards.
- ▶ Use of standardized plumbing, lighting, hardware, and other fixtures.
- ▶ Minimum use of expensive automatic mechanical devices.

ADMINISTRATION

From the standpoint of administration, some economies resulted from—

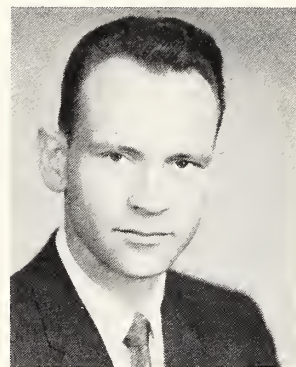
- ▶ Choosing the best season of the year to advertise bids and to make contract awards.
- ▶ Acquiring sites with soil conditions and topography needing little or no site preparation.
- ▶ Allowing contractors sufficient time to obtain dependable bids from subcontractors and suppliers.
- ▶ Stipulating a minimum number of alternates in bid documents.
- ▶ Allowing a reasonable amount of time for contractors to complete the project to avoid "cushioning" of bids for the contractor's protection.

THESE methods of cutting costs in school plant construction are not all-inclusive, but they point out some of the ways by which good school buildings can be secured at a minimum cost.

Merit and Responsibility Factors In Teachers' Salaries

JOHN F. STAEHLE, specialist, employed school personnel administration, Office of Education

OF ALL THE QUESTIONS that have been raised in the controversy over merit rating, some have won more attention than others. For example: Can merit be objectively measured? If so, how? Will a merit salary plan attract good teachers, be an incentive to good teaching? But there are other questions, too, and some of them are raised here.



Mr. Staehle has joined the staff of the Office of Education from Montana State University, where, as an associate professor of education, he was an instructor in school administration.

NEARLY every time we discuss "merit rating" as a way of recognizing and rewarding good teaching, we seem to proceed from three assumptions:

1. The only way to reward teachers for their work is to increase their salaries.

2. All teachers have about the same responsibilities.

3. Merit and responsibility have no connection with each other in determining teachers' salaries.

Any discussion of "merit rating" must, therefore, examine these assumptions to see whether or not they are justified and if they exhaust all the possible factors in teacher salary scales.

Money only reward?

When someone has done a good job we think of rewarding him, and we often think that his reward should be in money or materials. The premise that money or materials are rewards for work well done underlies all arguments for "merit rating." But is money the only reward?

E. Wight Bakke, through his extensive research on what makes the industrial worker tick, has found that not all rewards are material. For him, the "reward and penalty process" which operates in any organization includes many kinds of rewards and penalties and their effects on both individual workers and the organization employing them. Among nonmaterial rewards he lists "enlargement of functions," "freedom," and "personal advancement."¹

Another authority on administration in business and industry, Chester I. Barnard, believes that after material rewards reach a certain level they are relatively ineffective unless some of the nonmaterial rewards go along with them.² But many of these non-

material rewards are associated with increased responsibility. We need, therefore, to examine our assumptions about the equality of teachers' responsibilities.

Are responsibilities equal?

We rarely challenge the assumption that teachers have equal responsibilities. We assume that a teacher with 1 year's experience and a salary of \$4,000 has about as much responsibility as a teacher with 15 years of experience and a salary of \$8,000. Yet a study of teachers' activities in a school may show that the teacher of 1 year has more work and responsibility than the teacher with a decade or more of teaching to his credit. Most school systems do not recognize differences in responsibility in determining teachers' salaries. Increased responsibilities are recognized only by "promoting" teachers out of teaching.

The typical salary schedule is based on training and experience. Most proposals for basing teachers' salaries on "merit rating" also recognize training and experience, but *not* differences in responsibilities. These proposals give a salary increase to the teacher through (1) *acceleration* on the *training and experience* schedule, (2) *an award above the maximum* on the *training and experience* schedule, or (3) *selection for continuation* on the *training and experience* schedule.³ In other words, *training*

¹ *Bonds of Organization*. New York, Harper and Bros., 1959, p. 122-133.

² *The Functions of the Executive*. Cambridge, Harvard University Press, 1945, p. 145.

³ *Special Memo*, "Quality-of-Service Recognition in Teachers' Salary Schedules." National Education Association, Research Division, July 1956, 36 p.

and *experience* are combined with *merit* in determining salary differentials. With or without "merit," salary scales for our teachers attempt to determine the socially (including organizationally) approved limits of teachers' salaries at a *single level of responsibility*.

A study of teachers' activities very likely would show that teachers' responsibilities, especially to the school and the profession, do vary and should be recognized. The New England School Development Council recommends that salary recognition be given to teachers as they qualify for, first, the "classroom role," second, the "school role," and, finally, the "professional role."⁴ Because both the "school role" and the "professional role" call for increased contributions outside the teacher's own classroom, these roles could be considered as carrying increased responsibilities, for they would scarcely be possible without some assignment of duties and extension of opportunities by school authorities.

Of course, the assignment of increased responsibilities to teachers is not a new idea. In some school systems teachers have the responsibility for the development of learning opportunities as well as their regular duties. They serve as helping teachers, consultants, or "buddies" for new teachers. And many of them receive special assignments on curriculum development projects or classroom experiments.

Recently "utilization of staff" experiments in some schools have given teachers the responsibility for organizing and coordinating the work of other teachers and sub-professional assistants. These experiments aim at developing new roles and responsibilities, such as those required by "team instruction," to help selected experienced teachers function as key personnel in organizing the work of less experienced and less talented teachers and assistants.⁵

In his study of an English factory, Elliott Jaques defines responsibility in terms of the "time span of discre-

tion," that is, the extent to which an individual must plan and execute his own work and the amount of time within which he is permitted to exercise discretion without review by his superiors. Using this definition, he devised measures of "level of work" and "size of job" for determining the amount of discretion or responsibility each employee had. He found that both workers and managers preferred to have their salaries and wages based on these measures. Of course, all salary and wage increases presupposed merit, but employees were more likely to accept a fellow worker's salary increase if they knew that additional responsibility went with the pay raise. Disputes arose when they did not know about the increased responsibility accompanying a pay raise.⁶

Are they separable?

Whether or not we can apply Jaques' definition of responsibility to the work of teachers depends on our concepts of teaching and school organization. Compared with personnel in other types of jobs, teachers have considerable discretion. But

⁴ David V. Tiedeman (director and editor), *Teacher Competence and Its Relation to Salary*. Cambridge, Mass., New England School Development Council, 1956, p. 85-90.

⁵ See Paul Woodring, *New Directions in Teacher Education*, New York, The Fund for the Advancement of Education, 1957, p. 71-79; *The School and University Program for Research and Development (SUPRAD)*, Harvard University, November 21, 1958, 32 p.; Clyde M. Hill, *Yale-Fairchild Study of Elementary Teaching, Report for 1954-55* (abridged edition), New York, 1956, 141 p.; Charles B. Park (director), *Cooperative Study for the Better Utilization of Teacher Competencies* (2nd report, 1955; 3rd report, 1957), Mount Pleasant, Central Michigan College, 32 p. each; J. Lloyd Trump, *New Horizons for Secondary School Teachers*, Urbana, Ill., Commission on the Experimental Study of the Utilization of the Staff in the Secondary School, 35 p.

⁶ *Measurement of Responsibility, A Study of Work, Payment, and Individual Capacity*. London, Tavistock Publications, or Cambridge, Harvard University Press, 1956, p. 64-66.

do some teachers have more responsibilities than others—and should they be paid accordingly? School authorities who decide that some teachers do have more responsibilities than others can weigh the additional responsibilities in setting salaries. Furthermore, they can assign additional responsibility and correspondingly higher salaries to individual teachers both to reward them and to make better use of their competencies. The possibility of using responsibility this way raises these questions: Can a school system justify rewards for "superior" teachers without considering how it may use their talents more effectively? What roles or assignments for these teachers would be generally accepted as carrying increased responsibility?

What rewards?

We are brought back, then, to the question of what are rewards for the teacher. No matter how much we know about teachers, no matter how we evaluate them or their work, we still have to decide what rewards will be best for the individual teacher and for students, instructional programs, and staff organization of the school. Should we depend entirely on salary increases or should these increases go hand-in-hand with responsibility?

Certainly, the work of teaching personnel cannot be organized just to accommodate certain approaches to salary determination. Actually, every school system must consider both its work and its personnel practices at the same time. It must evaluate new patterns of staff utilization for both their effects on children and their ability to secure and develop the teachers it needs. It must evaluate new patterns of salary determination for their effect on the school organization and its ability to meet its need for capable teachers, as well as for the effect of these patterns on the total instruction program.

Perhaps, as Bakke and Argyris suggest, any real change in an organization's manual will come a kit of mate-

Continued on page 23

COOPERATIVE RESEARCH PROGRAM

23 new projects approved

THE Office of Education's cooperative research program has grown three ways since *School Life's* September report: The Office has signed 11 new contracts with colleges, universities, and State departments of education; the research advisory committee has recommended 23 new projects for contract; and the number of projects completed and reported on has reached a total of 21. To support all cooperative research in fiscal year 1959, the Congress has authorized \$2.7 million.

The New Contracts

The 11 new contracts bring the number of projects completed or under way to 144. Federal funds to support the 11 contracts, from beginning to end, will total nearly half a million dollars. Among the newly approved projects is one with the Territorial College of Guam—a project on behalf of the native children of the island—the first such contract with any agency or institution in that far Pacific island.

Juvenile delinquency

STATE UNIVERSITY OF IOWA, *Sociopsychological study of conformity and deviation among adolescents*, 1 year, Albert J. Reiss, Jr., director; Federal funds, \$16,497.

Language teaching

THE TERRITORIAL COLLEGE OF GUAM, *Teaching language arts to the non-English speaking children of Guam*, 3 years, James G. Cooper, director; Federal funds, \$26,910.

Mental retardation

THE STATE OF CALIFORNIA (for and on behalf of San Francisco State College), *Effect of special day training classes for the severely mentally retarded*, 1 year, Leo F. Cain, director; Federal funds, \$69,903.

In the September issue, *School Life* reported that Jerome S. Bruner, professor of psychology, Harvard University, was one of three new members on the Research Advisory Committee. Since that time, Dr. Bruner has found it necessary to decline the appointment. The third new member on the committee is Dewey B. Stuit, dean, College of Liberal Arts, State University of Iowa. Dr. Stuit attended the October meeting.

Retention of students

UNIVERSITY OF CALIFORNIA (Berkeley), *Influence of different types of public higher institutions on college attendance from varying socio-economic and ability levels*, 1 year, T. R. McConnell, director; Federal funds, \$37,263.

UNIVERSITY OF WISCONSIN, *Factors influencing decisions of youth about education beyond the high school: followup studies*, 1 year, J. Kenneth Little, director; Federal funds, \$14,789.

Special abilities

ATLANTA UNIVERSITY, *Factors involved in the identification and encouragement of unusual academic talent among underprivileged populations*, 2 years, Horace M. Bond, director; Federal funds, \$31,384.

UNIVERSITY OF CHICAGO, *Relationships between achievement in high school, college, and occupation: a followup study*, 3 years, Allison Davis, director; Federal funds, \$89,010.

Staffing

UNIVERSITY OF ARKANSAS, *Analysis of some necessary qualities of effective teachers*, 2 years, John Schmid, director; Federal funds, \$24,725.

Teacher needs

UNIVERSITY OF UTAH, *Measured needs of teachers and their behavior in the*

classroom, 3 years, Robert M. W. Travers, director; Federal funds, \$57,892.

Miscellaneous

INDIANA UNIVERSITY, *Survey of educational research and an appraisal by scientists from other fields*, 15 months, Nicholas A. Fattu, director; Federal funds, \$42,550.

RUTGERS UNIVERSITY, *Effectiveness of centralized library service in elementary schools (Phase I)*, 18 months, Mary V. Gaver, director; Federal funds, \$25,535.

The Latest Recommendations

The Research Advisory Committee met on October 16 and 17 in the Office of Education to consider 78 new proposals for cooperative research. Of these, it recommended 23 to the Commissioner of Education for approval. If all are signed into contract, the Federal Government will contribute approximately \$1 million toward their total cost.

Four of the 23 proposals recommended by the committee are for study on special abilities; 3 on staffing our schools and colleges; 3 on physically handicapped children; and 2 each on school organization and juvenile delinquency. The remaining 9 are for study in as many other areas.

FLORIDA STATE UNIVERSITY, *Late school entrance, social acceptance, and children's school achievement*.

GRAMBLING COLLEGE (Louisiana), *Comparative study of the speech responses and social quotients of two selected groups of educable mental retardates*.

HARVARD UNIVERSITY: (1) *Teaching high school students a critical approach to contemporary national issues*; (2) *Use of lay readers to assist high school English teachers in grading compositions*.

INDIANA UNIVERSITY: (1) *Language used by elementary school children and its relationships to the language of reading textbooks and the quality of children's reading skill*; (2) *Survey of educational research and appraisal by scientists from other fields.*

MICHIGAN STATE UNIVERSITY, *How State legislators view the problem of school needs.*

PURDUE UNIVERSITY, *Assessment of behavioral and academic implications of hearing loss among school children.*

RUTGERS UNIVERSITY, *Status with schoolmates and teachers as factors orienting the adolescent boy toward delinquent or law-abiding friends.*

SYRACUSE UNIVERSITY, *Pedagogical significance of unconscious factors in career motivation for teaching.*

THE PENNSYLVANIA STATE UNIVERSITY, *Expressed needs of children with speech and hearing handicaps.*

UNIVERSITY OF CALIFORNIA (Berkeley), *Significant differences in the substrata factor patterns underlying reading ability in known groups at the high school level.*

UNIVERSITY OF CHICAGO: (1) *Organizational climate of schools*; (2) *Relationships between achievement in high school and college and occupation: a followup study.*

UNIVERSITY OF ILLINOIS, *Use of test results.*

UNIVERSITY OF IOWA, *Socio-psychological study of conformity and deviation among adolescents.*

UNIVERSITY OF MINNESOTA, *Present and prospective women faculty members: their job motivations, characteristic activities, and perceived satisfaction.*

UNIVERSITY OF OKLAHOMA, *Effects and interactions of auditory and visual cues utilized in oral communication.*

UNIVERSITY OF PITTSBURGH, *Identification, development, and utilization of human talents.*

UNIVERSITY OF SOUTHERN CALIFORNIA, *Education of the aurally handicapped: a psycholinguistic analysis of visual communication.*

UNIVERSITY OF WISCONSIN, *Perception of music symbols in music reading*

by normal and musically gifted children.

WESLEYAN UNIVERSITY, *College student images of a selected group of professions and occupations.*

WESTERN MICHIGAN UNIVERSITY, *Analysis of the factors related to the motivation and achievement of students in science courses in junior and senior high school.*



SCHOOL LIFE has reported to its readers on 8 of the 21 cooperative research projects now complete (December 1957; January, February, April, and September 1958). To bring our reporting up to date on completed projects, *School Life* here lists projects 9 through 21 by title, institution, and director. Brief summaries of the final reports on these projects may be had by writing to the Cooperative Research Program, Office of Education, Department of Health, Education, and Welfare, Washington 25, D. C.

Social behavior of mentally retarded children in public schools and institution environments, Syracuse University, R. J. Capobianco, director.

Investigation of the reasoning methods and ability in mentally retarded children, Syracuse University, R. J. Capobianco, director.

Evaluation of supervised correspondence study as a means of helping relieve the teacher shortage, The George Washington University, Blake S. Root, director.

Unconscious factors in career motivation of teaching, Syracuse University, George G. Stern, director.

Study of dropouts in Iowa high schools, State University of Iowa (with the Iowa State Department of Education), L. A. Van Dyke and K. B. Hoyt, directors.

Attitudes of high school students as related to success in school, University of California (Berkeley), T. Bentley Edwards, director.

Quantitative and qualitative analyses of endogenous and exogenous children in some reading processes, Syracuse University, R. J. Capobianco, director.

Comparative study of some characteristics in better and poorer learners among children with retarded mental development, Syracuse University, L. M. DiCarlo.

Effectiveness of a modified counseling procedure in promoting learning among bright underachieving adolescents, Regis College, Sister Mary Viterbo, director.

Florida study of teacher education: an evaluation of the preservice program, University of Florida, J. B. White, director.

Description and evaluation of longitudinal development among elementary children at Ferndale, Mich., University of Michigan, Warren A. Ketcham, director.

Investigation of the professional preparation and performance of students graduating from teacher training institutions in Indiana, Indiana University, L. S. Standlee, director.

Socio-psychological study of conformity and deviation among adolescents, Vanderbilt University, A. J. Reiss, Jr., director.

ADVISORY COMMITTEE
FOR TITLE VII

MERIT RATINGS

Continued from page 19

TO assist him in carrying out Title VII of the National Defense Education Act, Commissioner Derthick has appointed 12 members to the Advisory Committee on New Educational Media, choosing them from the four groups specified in the Act:

1. *Individuals identified with sciences, liberal arts, or modern foreign languages in institutions of higher education:* Howard Nostrand, executive officer, department of languages and literature, University of Washington; Glenn T. Seaborg, chancellor, University of California, Berkeley; Robert J. Slavin, president, Providence College.

2. *Individuals engaged in teaching or supervision in elementary or secondary schools:* Elizabeth Golterman, public schools, St. Louis, Mo.; Austin Meadows, superintendent of education for Alabama; Wanda Mitchell, Evans-ton Township High School, Ill.

3. *Individuals of demonstrated ability in educational use of TV, radio, motion pictures, and related media.* Scott Fletcher, president, The Fund For Adult Education; Richard B. Hull, director, radio and TV broadcasting, The Ohio State University; L. C. Larson, director, audio-visual center, Indiana University.

4. *Laymen who have shown interest in the problems of communications media:* Leland Hazard, Pittsburgh Plate Glass Co.; Ralph McGill, *The Atlanta Constitution*; Clayton Brace, Aladdin Broadcasting Corporation.

Dr. Derthick and Harry C. Kelly, an assistant director of the National Science Foundation, are *ex officio* members.

tion" throughout the organization.⁷ Perhaps a school organization will have to make more than salary adjustments if it is to make any real change in its system of rewarding personnel. Many proposals for improving one aspect of educational organization may be lost unless other features of the organization change.

Research needed

The "merit rating" controversy points to the need for research. Our schools must know many things about the teacher and rewards before they can set up systems of rewards that are rewards. They particularly need to know how to get a description of each teacher's performance, how to evaluate the description, and how to translate the evaluation into administrative action. They need to find answers to such urgent questions related to "merit rating" as: What types of action can we take toward both individuals and school organization to accommodate or utilize differences among teachers? How should responsibility be defined and recognized? What kinds of recognition do teachers find rewarding? What are the cumulative effects on teachers of various systems of rewards and patterns of organization?

Until we find the answers to these questions—and others—the worth of "merit rating" will remain undetermined.

⁷E. Wight Bakke and Chris Argyris, *Organizational Theory and Dynamics*, New Haven, Conn., Labor and Management Center, Yale University, 1954, p. 9.



Robert W. Eaves, executive secretary, Department of Elementary School Principals, National Education Association, hard at work solving the problems of a school principal.

persons likely to become good school administrators.

The project staff plans to prepare a manual for general distribution to researchers in the field, to school systems, schools of education, and others having a need for it. With the manual will come a kit of materials for use as—

A tool for further research on the problems of school administration

A means of evaluating the effectiveness of courses in educational administration

A help to graduate schools of education in selecting candidates for advanced work in educational administration

A device to help large city school systems select candidates for advancement to principalships and other administrative posts.

This project was begun in May 1957, and will not be completed until June 1960. The Office of Education is supporting it through its Cooperative Research Program. Dr. Griffiths directs the project at Teachers College, Columbia University, New York City, in cooperation with the Educational Testing Service, Princeton, N. J.

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CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: LARGE CITIES, 1956-57, by *Lester B. Herlihy*. 1959. 35 pp. 30 cents. (Cir. No. 537).

EDUCATION DIRECTORY 1958-1959, PART 2, COUNTIES AND CITIES, by *Ruby Ballard*. 1958. 99 pp. 45 cents.

MATHEMATICS AND SCIENCE EDUCATION IN U. S. PUBLIC SCHOOLS (REPORT OF CONFERENCE), by *J. Dan Hull, Seerley Reid, Paul E. Blackwood, Kenneth Brown, and Ellsworth S. Obourn*. 1958. 97 pp. 65 cents. (Cir. No. 533).

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ORGANIZING DISTRICTS FOR BETTER SCHOOLS, by *C. O. Fitzwater*. 1958. 49 pp. 35 cents. (Bul. 1958, No. 9).

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VOCATIONAL-TECHNICAL EDUCATION FOR AMERICAN INDUSTRY, OCCUPATIONS, SELECTED REFERENCES, EDUCATIONAL PROGRAMS, by *Lynn A. Emerson*. 1958. 25 cents. 25 pp. (Cir. No. 530).

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(Request single copies from Publications Inquiry Unit, U. S. Office of Education, Washington 25, D. C.)

AREA VOCATIONAL EDUCATION PROGRAMS. 11 pp. (Misc. 3560).

CURRICULUM GUIDES DEALING WITH EARLY ELEMENTARY EDUCATION, PRIMARY GRADES, by *Lillian L. Gore*. July 1958. 25 pp. (Sel. Ref. No. 12).

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SCHOOL RETENTION: SELECTED LIST OF REFERENCES, by *Bettina Weary*. July 1958. 16 pp.

SPECIAL EDUCATION PERSONNEL IN STATE EDUCATION DEPARTMENTS, by *Romaine P. Mackie*. September 1958. 9 pp.

STUDIES IN COMPARATIVE EDUCATION, BIBLIOGRAPHY: 1957 PUBLICATIONS, by *Kathryn G. Heath*. 1958. 47 pp.

SCHOOL LIFE

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OFFICE OF EDUCATION

AMONG THE CONTENTS

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January-
February 1959

TRIBUTE TO TEACHERS

Translation of a greeting given in Washington, D.C., December 15, 1958, by A. I. Markushevich, head of a visiting team of Soviet educators

DEAR FRIENDS, here, in this hall, are gathered leading educators of the United States. Here, too, are representatives of the educators of the Soviet Union.

To me, as one who has spent over 30 years working in the cause of education and science, it seems that the teacher's profession is a difficult one, an extremely responsible one, but at the same time the noblest profession that a man may choose. For it is we—the teachers—who are responsible for the future of our countries before our own respective peoples and before humanity.

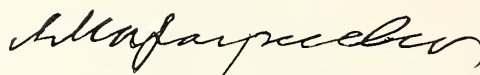
Is it not we in fact who bring up and teach our children; is it not to us that the influence over their feelings, their thoughts, and actions is entrusted?

We may be assured that the future citizens of the United States and the Soviet Union will be the people that we—the teachers—train them to be. They will have the feelings, the thoughts, which we put into their hearts and minds.

Therefore, let us devote ourselves to the end that the teachers of our countries may sacredly carry out their difficult and honorable duties. Let us so dedicate ourselves that we may instill in our charges from the most tender age only humane feelings and only noble thoughts.

We shall so give of ourselves that our children may learn to love and respect people of other countries and nations, regardless of differences in language, faith, convictions, and customs; that they may cherish peace as the greatest good on earth and know that any misunderstanding, any argument or conflict between people, can and should be solved peacefully.

It is to all this, dear friends, that I ask you to join together with me now.



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . ARTHUR S. FLEMMING, *Secretary*
OFFICE OF EDUCATION LAWRENCE G. DERTHICK, *Commissioner*

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Brief * * * * *
EDUCATION AND GOVERNMENT
Reports * * * * *

To honor Mr. Lincoln

ONE way high school students can honor our 16th President during 1959—the Lincoln Sesquicentennial Year—is by taking part in the program sponsored by the Lincoln Sesquicentennial Committee for High School Observance, which invites them to submit to it not later than June 1 original works inspired by Lincoln. The Committee will accept any material that can be reproduced, but good photographs of fragile or unmovable objects should be sent rather than originals. The Committee's program is not a contest but is designed to give the student an educational experience centered on Lincoln. However, the entries it considers the best will appear in a 200-page book next fall under the title *Abraham Lincoln Through the Eyes of High School Youth*.

To stimulate interest in the program the Committee has sent to the Nation's 28,600 high school principals 2 copies of the Lincoln Sesquicentennial Commission's booklet *Lincoln Sesquicentennial 1809-1959, Handbook of Information*, and 3 copies of its own booklet *Programming the Lincoln Sesquicentennial in American High Schools*. The former furnishes background on the Commission and Lincoln and gives suggestions for observances. The latter is directed to the high school, giving suggestions on planning year-long events and information on its original works program.

Congress established the Lincoln Sesquicentennial Commission in 1957. Senator John Sherman Cooper of Kentucky is its chairman. The President of the United States, the President of the Senate, and the Speaker of the House are *ex officio* members. The Commission, in turn, requested the National Education Association to direct the observance in the Nation's high schools, which it is doing through the Lincoln Sesquicentennial Committee for High School Observance.

Americans all

GEOGRAPHY alone cannot unite the peoples of the Western Hemisphere, but understanding can. One force for understanding among the nations of North and South America is the Pan American Union, which will celebrate its 69th birthday April 14. As tribute to the friendship among the nations of the Americas, the 21 members of the Pan American Union, of which the USA is one, will join in annual Pan American Day and Pan American Week celebrations, April 14 and April 14-20, respectively.

As the secretariat of the Organization of American States, the Pan American Union acts as a center for exchange of information and for inter-American cooperation in many fields. The Organization of American States works for peace between nations, hemispheric defense, and social, economic, and cultural cooperation among its members.

President Eisenhower has issued a proclamation asking U.S. citizens to join with their neighbors in the other American republics in Pan American Day and Pan American Week celebrations. Schools, particularly, have a rich opportunity to celebrate the occasion with programs, projects, and studies. The Pan American Union, Washington 6, D.C., has prepared a free kit of materials on Pan American Day and Week to help in the planning of special observances.

Civil service

SOCIAL studies classes will find in the new U.S. Civil Service Commission publication, *Civil Service and The Citizen*, a source book on the Federal Government as an employer. The Commission prepared the 33-page booklet not only as a career-guidance and recruitment aid, but as an information piece for all citizens. It gives a history of the service, descriptions of the merit system and career opportunities, and an explanation of the function of Federal agencies in the citizen's daily life.

Before preparing the booklet the Commission asked the advice of the National Association of Secondary School Principals, the National Council for Social Studies, the American Personnel and Guidance Association, and the Office of Education. These agencies agreed that the role of civil service is neglected in many social studies textbooks and that students and teachers need more information on this phase of government.

As soon as *Civil Service and The Citizen* was issued, the Civil Service Commission sent out over 46,000 copies to administrators of secondary school systems. The publication is now for sale for 35 cents from the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

Foreign seminar

TWENTY U.S. school administrators will complete a 7-week seminar on comparative education—the first of its kind—in France and the Netherlands March 24. Chosen by the Board of Foreign Scholarships from more than 500 applicants, the administrators have received Fulbright grants for travel and tuition. In making its selection the Board gave preference to applicants with graduate degrees in educational administration or supervision and to applicants with 5 years' experience as full-time administrators or supervisors.

The sponsors of the program—the International Educational Exchange Program, Department of State, and the Office of Education—are planning other such seminars abroad for school administrators. By June or July of this year plans for the next seminar should be ready. At that time, interested school administrators should write to the Educational Exchange and Training Branch, Office of Education, Washington 25, D.C., for information.

The 20 administrators at the first seminar are from 18 States, the District of Columbia, and Puerto Rico.

"Praise . . . your school"

AMERICAN Education Week 1959, November 8-14, will be the 39th annual salute to America education sponsored by the American Legion, the National Congress of Parents and Teachers, the National Education Association, and the Office of Education. In keeping with the goal of American Education Week—to pay tribute to the accomplishments of our schools and to seek ways of

improving education—the sponsors this year have chosen as the general theme "Praise and appraise your school." To each day they have assigned a topic, this year focusing on the people who *make* the school.

Sunday—The child: What does education mean to him?

Monday—The parents: How can they work for better schools?

Tuesday—The teachers: What is a teacher?

Wednesday—The people next door: Who are they?

Thursday—The schoolboard member: What are his responsibilities?

Friday—The adult citizens: How can the schools serve them?

Saturday—The voter: How does he make decisions on education?

Early announcement gives educators and laymen time to plan programs that will "praise and appraise" their schools and to enlist the help of all citizens toward making AEW 1959 a success and its effects lasting.

Thrift and peace

SCHOOL children of the USA save over \$20 million a year through U.S. Savings Stamps programs in their schools. Teachers find the Savings Stamps program an aid to the teaching of thrift, finance, and civic responsibility. With the purchase of his first stamp the student becomes a member of the Lone Ranger Peace Patrol, which the U.S. Treasury sponsors. As a member of the Patrol he pledges to *learn*—because learning promotes understanding among people—and to *save*—because the purchase of Savings Stamps helps to keep America strong.

Though the student may buy Savings Stamps at a post office or bank, he receives the fullest benefit of his thrift when he saves through school programs designed to teach him to know the value of money, to set a financial goal, and to help defend his country through the regular purchase of Savings Stamps.

No school need be without a U.S. Treasury Savings Stamps program. The Treasury has developed aids—booklets, posters, and films for free use—for teachers and school authorities. For information about the program, write to your State Savings Bonds Director or to the Savings Bonds Division, U.S. Treasury Department, Washington 25, D.C.

Yardstick for programs

THE President's Committee on Scientists and Engineers, before its services ended last December, issued a brochure prepared for it by the American Association for the Advancement of Science to help high schools measure their science and mathematics programs. Titled *A Yardstick for Measuring Your Science and Mathematics Programs*, the brochure recommends programs and practices, such as homogeneous grouping of students in grades 7-12, but emphasizes there is no hard and fast answer to the question of what is an ideal program.

Copies of the brochure may be had by writing the Office of Civil and Defense Mobilization, Washington 25, D.C., which has taken over some of the functions of the Committee for the time being. Supply is limited.

For the exceptional child

LEADERS from 23 national organizations concerned with special groups of children—the blind, the gifted, the deaf, the crippled, and many others—came together in the Office of Education on January 27-28 under the chairmanship of Romaine P. Mackie, chief, Exceptional Children and Youth Section.

Although the organizations differ in many ways, even in some of their basic purposes, they all have an interest in education. and during the 2-day meeting their representatives concentrated on a common purpose: to find what they could do, working together, to build good educational programs for exceptional children.



FEDERAL RESPONSIBILITIES IN EDUCATION

In two messages to the first session of the Eighty-sixth Congress—the State-of-the-Union Message on January 19 and the Budget Message on January 29—the President points to urgent needs in education and among them names the need for a goal.

From the STATE-OF-THE-UNION MESSAGE

NEXT year we will be spending increased amounts on . . . Federal assistance to science and education. It is an additional outlay made necessary by the surging growth of America. . . .

As I said in the beginning, the basic question facing us today is more than mere survival—the military defense of national life and territory. It is the preservation of a way of life.

We must meet the world challenge and at the same time permit no stagnation in America.

Unless we progress, we regress.

We can successfully sustain security and remain true to our heritage of freedom if we clearly visualize the tasks ahead and set out to perform them with resolution and vigor. We must first define these tasks and then understand what we must do to perform them.

If progress is to be steady, we must have long-term guides extending far ahead, certainly 5, possibly even 10 years. They must reflect the knowledge that before the end of 5 years we will have a population of more than 190 million. They must be goals that stand high, and so inspire every citizen to climb always toward mounting levels of moral, intellectual, and material strength. Every advance toward them cannot do other than serve to stir pride in individual and national achievements.

To define these goals, I intend to mobilize help from every available source.

We need more than politically ordained national objectives if we are to challenge the best efforts of free men and women. A group of selfless, able and devoted individuals, outside of Government, could effectively participate in making the necessary appraisal of the potentials of our future.

The result would be the establishment of national goals that would not only spur us on to our finest efforts, but also would meet the stern test of practicality.

The Committee I plan will comprise educators and representatives of labor, management, finance, the professions, and every other kind of useful activity.

Such a study would update and supplement, in the light of continuous changes in our society and its economy, the monumental work of the Committee on Recent Social Trends which was appointed in 1931 by President Hoover. Its report has stood the test of time and has had a beneficial influence on national development.

The new Committee would be concerned, among other things, with the living standards of our people, their health and education, their better assurance of life and liberty, and their greater opportunities. It would also be concerned with methods to meet such goals and what levels of government—local, State, or Federal—might or should be particularly concerned.

As one example, consider our schools, operated under the authority of local communities and States. In their capacity and in their quality they conform to no recognizable standards. In some places facilities are ample, in others meager. Pay of teachers ranges between wide limits, from the adequate to the shameful. As would be expected, quality of teaching varies just as widely. But to our teachers we commit the most valuable possession of the Nation and of the family—our children.

We must have teachers of competence. To obtain and hold them we need standards. We need a national goal. Once established I am certain that public opinion would compel steady progress toward its accomplishment.

Such studies would be helpful, I believe, to government at all levels and to all individuals. The goals so established could help us see our current problems in perspective. They will spur progress. . . .

The image of America abroad is not improved when schoolchildren, through closing of some of our schools and through no fault of their own, are deprived of their opportunity for an education.

The government of a free people has no purpose more noble than to work for the maximum realization of equality of opportunity under law. That is the concept under which our founding papers were written. This is not the sole responsibility of any one branch of our Government. The judicial arm, which has the ultimate authority for interpreting the Constitution, has held that certain State laws and practices discriminate upon racial grounds and are unconstitutional. Whenever the supremacy of the Constitution of the United States is challenged, I shall continue to take every proper action necessary to uphold it.

From the BUDGET MESSAGE

IN the field of education, primarily in science and mathematics, this budget provides for increased expenditures by the National Science Foundation and the Department of Health, Education, and Welfare for programs initiated or enlarged in fiscal 1959.

The National Science Foundation programs are carried out through fellowships to individuals and grants to institutions of higher learning. They are chiefly directed toward providing encouragement and opportunity for capable students to undertake careers in science, improving courses of instruction in sciences, and providing advanced training for scientists and science teachers. For example, in 1960, 23,000 teachers—including one out of every 6 science and mathematics teachers in our high schools—will have the opportunity to attend institutes devoted to the improvement of teaching in these fields. Expenditures for the science education programs of the Foundation in the fiscal year 1960 are estimated at \$60 million, an increase of \$9 million above the 1959 level, and four times the expenditures in 1958.

The Department of Health, Education, and Welfare, under the National Defense Education Act of 1958, is initiating a program of repayable contributions to loan funds for college students and of grants-in-aid to States. The grants, which will run for 4 years, will help pay for the testing and counseling of high school students, the equipping of laboratories in the secondary schools, and related activities. The budget includes a supplemental appropriation for 1959 of \$75 million to augment the \$40 million already available in fiscal 1959 for the defense education program and provides \$150 million in new obligational authority for fiscal year 1960 pending further experience with the program.

Schools in federally affected areas: Although education is primarily a responsibility of State and local governments, the Federal Government has an obligation to assist communities where large numbers of children of persons engaged in Federal activities impose an extraordinary burden on local school districts.

Programs to provide financial assistance to districts thus affected have been extended and liberalized several times since they were first started in 1959, despite the fact that they should be modified to assure greater and more equitable local responsibility. The Federal Government's responsibility is clear for those children whose parents both work and live on Federal property, and do not, therefore, pay local property taxes. On the other hand, it is only proper for the communities to bear the cost of educating children of those Federal personnel who, like all other residents, pay local taxes directly or indirectly for the support of public schools. In accordance with these principles, legislation will be recommended to place these aid programs on a more sound and equitable basis.

This budget includes appropriations of \$131 million for these programs for the fiscal year 1960, the same amount as the appropriations provided by the Congress for fiscal 1959.

THE 1960 BUDGET and the OFFICE OF EDUCATION

THE PRESIDENT'S BUDGET for fiscal year 1960 would provide funds for something like 150 different educational programs administered by approximately a dozen Federal agencies. Listed here are the amounts asked for programs administered by the Office of Education, which, as part of the Department of Health, Education, and Welfare, is largely responsible for making the Department the second largest administrator,

in terms of dollars, of Federal funds for education (the Veterans Administration is larger). The amounts asked are shown with the sums actually spent in 1958 and the sums estimated to be spent in 1959:

LAND-GRANT COLLEGES	
1958 (actual).....	\$5,051,000
1959 (estimated).....	\$5,051,000
1960 (estimated).....	\$5,051,000

These funds are earmarked for resident instruction in the 68 land-grant colleges of the United States (other Federal funds for these colleges are reserved for research and extension teaching and are administered by the Department of Agriculture). Of the funds administered by the Office of Education, \$2,550,000 is a continuing, or "permanent," appropriation; \$2,501,500 requires an annual appropriation.

ESTIMATED BUDGET, NATIONAL DEFENSE EDUCATION ACT, FISCAL YEARS 1959 and 1960

(Does not include the expense to the Office of Education for administering the Act)

TITLE	1959			1960	
	Already appropriated	Proposed supplement	Total estimate	Total estimate	Increase over 1959
I. General provisions ¹					
II. Student loans.....	\$6,000,000	\$25,000,000	\$31,000,000	\$31,000,000	
III. Strengthening instruction.....	20,350,000	37,000,000	57,350,000	64,000,000	\$6,650,000
IV. Fellowships.....	800,000	4,500,000	5,300,000	13,450,000	8,150,000
V. Guidance and testing.....	7,400,000	3,000,000	10,400,000	20,000,000	9,600,000
VI. Language development.....	800,000	4,200,000	5,000,000	10,050,000	5,050,000
VII. Communications media.....	500,000	1,000,000	1,500,000	3,000,000	1,500,000
VIII. Area vocational education.....	3,750,000		3,750,000	7,000,000	3,250,000
IX. Science information.....	(2)	(2)	(2)	(2)	(2)
X. Statistical services.....	400,000	600,000	1,000,000	1,500,000	500,000

¹ Title I, which states policy and defines terms, provides for no funds.

² Funds for Title IX are not administered by the Office of Education but by the National Science Foundation.

VOCATIONAL EDUCATION

1958 (actual)..... \$40,888,412
 1959 (estimated)..... \$40,888,412
 1960 (estimated)..... \$39,740,000

These funds are for vocational education of less-than-college grade in agriculture, home economics, trades and industry, distributive occupations, practical nursing, and commercial fisheries, and for the training of teachers in these fields. They do not include funds for "area vocational education programs," which provide the highly technical kind of training called for in the National Defense Education Act. The total asked for 1960 is something short of the 1959 figure but it is expected to be made up by funds not used in 1959, which, if made available, would give 1960 the same amount as 1959.

FEDERALLY AFFECTED AREAS

1958 (actual)..... \$225,650,000
 1959 (estimated).... \$180,800,000
 1960 (estimated).... \$180,800,000

Although the budget asks no change for 1960 in what the Federal Government would spend to help certain school districts build and operate schools for the children of people connected with Federal activity, it does propose a change in the way the funds would be distributed. That is, it proposes to shift \$12,300,000 from the building funds to the operating funds, resulting in \$142,-

300,000 for operating and \$38,500,000 for building.

LIBRARY SERVICES

1958 (actual)..... \$5,000,000
 1959 (estimated)..... \$6,000,000
 1960 (estimated)..... \$5,150,000

These funds are authorized by the Library Services Act, passed in 1956 to bring public library services to rural areas. The budget proposes a cut of \$850,000; actually, however, \$850,000 of unobligated funds from 1959 will be carried into 1960, thus giving both years the same amounts.

NDEA

1959 (estimated).... \$115,300,000
 1960 (estimated).... \$150,000,000

These funds are for the several programs under the National Defense Education Act, i.e., for those administered by the Office of Education (one is administered by the National Science Foundation). The budget asks for 30 percent more than the 1959 figure. Thus far for 1959 only \$40 million has been appropriated, but the Office of Education has requested a supplemental appropriation of \$75,300,000 to carry the Act to the end of the fiscal year. For the budget breakdown in both 1959 and 1960 see the table above.

TEACHING MENTALLY RETARDED CHILDREN

1959..... No funds appropriated
 1960 (estimated)..... \$1,000,000

This million dollars, if appropriated,

will be the first money available under Public Law 85-296, passed last fall to help train teachers of mentally retarded children. The proposed funds would be spent (1) as grants to institutions of higher learning and to State educational agencies and (2) as traineeships for individuals—an average of two to each State.

THE OFFICE ITSELF

1958 (actual)..... \$7,185,192
 1959 (estimated)..... \$9,853,000
 1960 (estimated)..... \$12,800,000

The increased budget for the Office of Education—29.9 percent above 1959—would strengthen the Office in several ways:

First, it would raise by \$500,000 the funds for the Cooperative Educational Research Program. This program, now in its third year, has had these sums: \$1,020,000 in 1957, \$2,300,000 in 1958, and \$2,700,000 in 1959. For 1960 the President asks \$3,200,000.

The rest of the increase—\$2,446,500—is mostly for administering the National Defense Education Act through its second year; and for such improvements as more statistics for planning. (The cost of administering NDEA through its first year is estimated at \$1,300,000; the initial appropriation was \$750,000, and a supplement of \$550,000 has been asked for.) The number of Office positions budgeted for 1959 is 931; for 1960 it is 1,022.

THROUGH SOVIET EYES

This report is made without interpretation. No doubt each United States reader will have his moments of wishing that he could have an opportunity to answer in behalf of his country's goals and methods; but he can hardly escape either the spirit of good will with which the Soviet representatives spoke or the implicit argument that wherever men meet in that spirit they move closer to an understanding of each other.



THE WASHINGTON POST

Aleksei I. Markushevich, chairman of the team of Soviet educators

ON DECEMBER 12-13, just as they were bringing to a close their month's tour of USA schools, a team of 9 educators from the USSR stopped in Washington, D.C. In those 2 days they held a press conference, visited the National Education Association headquarters, and did a little sightseeing; but they put most of their time into sessions with Commissioner of Education Derthick and staff members of the Office of Education, which had sponsored the visit as the second half of an exchange that last spring sent 10 USA educators to the USSR.

Both at their press conference and in the daylong discussions in the Office of Education, the visitors told some of their impressions of American schools, although they emphasized that they had not yet had time to synthesize their impressions and crystallize their opinions, and that they would formally prepare a more thoughtful report when they had returned home. But they informally and frankly spoke of the similarities and dissimilarities they had noted be-

tween our educational effort and theirs, of the things they had liked and the things they hadn't. To the extent that space here permits, their comments are given as they were repeated by the interpreters; but many of the paragraphs here are "composites" of statements made by more than one person or of answers to several questions. Chairman Markushevich made the main report, but it was supplemented by brief talks from all the other members.

About the American system

Our impression of the American system of education is not something we can set forth in a few words. However, the American system does seem to us to be much more unified than it did at a distance. In its great scope and in its effect in raising the educational level of all the people, it shows itself to be based on goals akin to ours; for we, too, wish to make education available to everyone. And everywhere we have found two trends: First, a widespread public interest in education, and a general de-

sire to raise the level of education; second, an increasingly critical point of view toward many educational practices that hitherto have been accepted as sound. Both of these trends seem to us to be positive factors because only through critical appraisal of our performance can we hope to improve.

About what they were shown

Quite naturally, our American colleagues have shown us what they think best—the schools and developments of which they're most proud. We've seen many admirable things—fine school buildings, equipment, and shops; dedicated teachers and enthusiastic children. In general, we've seen fine large schools, with 2,000 or 3,000 students apiece. But whenever we've asked to see something that may have been considered less than top bracket our American hosts have always been quick to gratify us. Yesterday, for instance, outside Milwaukee, we were taken to see a 1-room school—at our request. There we saw

one energetic young woman working with 30 children in all 8 grades. It was clearly a hard job, but she was clearly doing the best she could. Yes, we have 1-room schools in the Soviet Union, too, but never for more than the first 4 grades.

About practical training

We were impressed by the way in which some of your schools give students an opportunity to get a realistic combination of theory and practice. We noted it especially in home economics, automation, and hotel and restaurant management; and we found the training in the building trades especially reflective of the high level of education in the United States. The work experience programs you have for preparing technicians—we saw them in action at General Motors and Allis-Chalmers—impressed us a great deal.

In some cases, however, it seemed to us that practical training was really available only to those who were willing to stop studying and start working. In our own country we aim at combining practical education and study for everyone. We do it—and this point we want to stress—not only for practical results in our labor force but for what we consider sound educational reasons: it is part of our pedagogical faith that productive labor is part of education, that practical work contributes just as much to the education of a person as the theoretical training he gets in a classroom. The reforms we contemplate to make shortly in our own system are designed chiefly to accomplish a more rational combination of school instruction and practical work, and will in no way reduce the amount of academic education a student gets.

About TV

In our opinion TV has a great future in teaching, both directly and

through extension; and here, in the United States, we have found many ideas for using it, as well as other media, as an educational tool.

About ability groupings

Segregation of children by ability is one of the distinctive features of the American schools. Of course we noted many interesting variations of it—in Chicago and San Angelo, for instance—but in one form or another it seems to prevail generally. This is one point on which our two countries definitely differ. In the Soviet Union, where we do not consider

ability groupings significant, we mix the children in school just as they must mix with each other in life.

Then, of course, as a concomitant of ability grouping, you make much use of psychological tests—intelligence tests, aptitude tests, and achievement tests. We, however, don't use such tests at all; we tried them for 20 years and came to the conclusion that they do not measure adequately. We have other means of measuring ability; and because we don't go in for segregating by ability, our need to measure is not so great.

We evaluate our students by the work they do, the interests they show; we have a whole series of extracurricular institutions where students can develop their talents. For instance, we have training programs outside the school system and we have the technical stations—some for the budding chemists, some for the naturalists, and so on—where students can explore problems and set up projects; and from which they carry their work to a national exposition for display. We have also music and art clubs for children whose talents run in that direction.

About mathematics

I must say [*this is the chairman's statement: he is a mathematician and was the principal spokesman on the subject*] that in the classes I observed the teachers presented their subjects with skill and knowledge and the students were enthusiastic. But when I compared the tempo of instruction here with the tempo in the Soviet Union, it seemed as if I was watching a slow motion movie. Your usual training in mathematics seems to present students only with standard problems; if the problems are changed in any way, the students are lost.

In the elementary schools the pupils are hampered by an unnecessary

USSR Team

THE MEMBERS of the USSR team of educators were—

A. I. Markushevich (chairman of the team), first deputy minister of education, Russian Socialist Federated Soviet Republic.

S. K. Kartsev, director of training programs of the Labor Reserves of the USSR.

A. S. Makhov, scientific collaborator in the Academy of Pedagogical Sciences, RSFSR.

N. V. Mostovets, inspector of the Ministry of Education, RSFSR.

K. R. Rashidov, assistant minister of education, Uzbek Republic.

S. S. Sagindykov, member of the board of the Ministry of Education, Kazakh Republic.

S. G. Shapovalenko, corresponding member of the Academy of Pedagogical Sciences.

A. A. Smirnov, vice president of the Academy of Pedagogical Sciences and director of its Scientific Research Institute of Psychology.

D. N. Tapytkov, chief of the Division of International Relations, Ministry of Education, RSFSR.

Their tour began in Washington on November 16 and continued to Princeton, Boston, Detroit, Dearborn, Ann Arbor, Lansing, Chicago, San Angelo, El Paso, San Francisco, Berkeley, Salt Lake City, Milwaukee, Mapleton (Wis.), Washington, and New York City. On December 18 they flew back to Moscow.

difficulty: They have to translate all measurements into the English system. In the Soviet Union, before the Revolution, we had the same problem, with three systems of weights and measures—the old Russian system, the English system, and the metric system. Believe me, it was a great relief to the children when they were relieved of the first two!

About science and math curriculums

One big difference between our two countries is that in the USSR we require all our students to take both science and mathematics for several years, whereas you permit them to choose how much if any.

In the United States chemistry is usually taught in the 11th grade, for 1 year; but in the Soviet Union it begins in the 7th grade and continues for 4 years. [*In the USSR, secondary education begins with the 5th grade and ends with the 10th, but Soviet children go to school 6 days a week.*] In the United States physics is taught only in the 11th or 12th grade; but in the Soviet Union it begins in the 6th grade and continues for 5 years. As for mathematics, all secondary school graduates complete a full course, including plane and solid geometry, more algebra than the algebra 1 and 2 given here, and trigonometry.

The freedom of your students to elect subjects results in your having many graduates who know nothing of science and mathematics. From data that's been given to us, only 10 percent know trigonometry and solid geometry, and a similarly small proportion know physics and chemistry.

The Soviet system proceeds from the position that a high knowledge of science and mathematics is an attribute of an educated person. I [*the chairman*] have a hard time conceiving of an educated person who doesn't

know science and mathematics. I don't mean that he must necessarily put those subjects to practical use in his work. I'm talking about the ideological thinking, discipline, and intensive training that such subjects give.

About the American people

We have seen nothing of the iron curtain that is said by some unknown evil spirit to hang between our two countries. We remember the warm reception we have been given everywhere. We have come to feel that Americans are close relatives of the Russian people.

About peace

Teachers here, like teachers in the Soviet Union, are bringing up children in the spirit of peace. And the American people, too, are working for peace.

In a small school in Salt Lake City we saw a colored film that had been prepared for the parents and told all about the activities of the school. In it were some of the drawings the children had made—drawings that portrayed some of their real wishes. One of these showed the USA and the USSR as two land masses, side by side, joined with a kind of line. And along this line were written three words we can't forget: Understanding, Friendship, Peace.

Aesthetic education

We were favorably impressed by the musical education provided in the secondary schools; in fact, we were favorably impressed with the aesthetic education generally. We'll never forget a wonderful concert for children in Chicago—a concert that combined a music appreciation lesson with a symphony concert, for the conductor was not only a fine conductor but a fine teacher.

[*One of the team, however, had a word of advice about art in our schools.*] America has a great history in the arts and has produced many great painters and other artists; we have seen and admired their works in your museums. But in one school we visited we saw an exhibit of 8th grade art. I personally could not understand a single piece, for they were all made up of lines and dots meaningless to me. I asked the teacher what these drawings meant. "I don't know," she said, "you'll have to ask the children." And as the children had gone, I was never enlightened. In a country such as yours, with so great a tradition in the arts, children should be discouraged from abstract art.

About belles-lettres

From what we observed, we are inclined to think United States education in world literature casual and incomplete.

When I [*the chairman*] looked over the collections in high school libraries, I usually missed many of the works that I think should be available to high school students. I'm not talking about Russian literature—that would be immodest—but I'm talking about Stendhal, Flaubert, Anatole France, Balzac. And the American students I talked to seemed less interested in and knew less about foreign literature than Soviet children of the same age. In San Angelo I talked to one of the outstanding students and learned that he knew of no French writer in the 19th century; an 11th grader in Boston who impressed me with his intelligence knew of not one single Russian writer. When I asked him if he knew of any French writers of the 19th century, he could mention only Hugo.

Continued on page 23

Evelyn Day Mullen, library extension specialist, Office of Education, is consultant on the Library Services Act to 16 States, the Virgin Islands, and Puerto Rico. Last fall she made her first tour of the Virgin Islands, and here she gives an account of library services there.



LIBRARIES to Leeward.....

*Virgin Islands,
St. Croix Bookmobile.
Free Public Library Service.
We take the library
To our people.*

THE LINES were like a chant, and the children at the Christiansted school sang them in unison, making background music for an exhibit visit last November 20 of the Virgin Island's new and only bookmobile. The words of their "song" were painted on both sides of the bright red-white-and-blue bookmobile visiting them at the request of their principal. Because it was there only for exhibit, the bookmobile was lending no books, but the children made known the types of reading matter they would like to borrow when it came back on its first scheduled trip in December. Requests for humorous stories and books on birds, animals, space travel, and rockets ran high. One fifth-grade boy was entranced by a junior edition of the *World We Live In*. Adult requests ranged from "a book on mechanics" to *Dr. Zhivago*.

The visit of the St. Croix bookmobile to the Christiansted school fell on an anniversary: just 1 year earlier the Virgin Islands had qualified for funds under the Library Services Act (P.L. 597, 84th Cong.). With this aid, public libraries of the is-

IN 1917 the United States bought from Denmark for \$25 million the 50 islands and cays known as the Virgin Islands. They lie 40 miles east of Puerto Rico and 1,400 miles southeast of New York. Only half a dozen are habitable; only three have any size—St. Thomas, St. John, and St. Croix. Charlotte Amalie, on St. Thomas, is the capital. St. John lies 3 miles east of St. Thomas; St. Croix, 40 miles to the south. Together the 3 have only 134 square miles. Of their 26,665 inhabitants, 15,196 qualify for services under the Library Services Act because they live in areas with populations of less than 10,000.

lands will bring reading matter to about 1,000 people previously without book service and will increase the amount of reading matter available to 14,000 others living outside Charlotte Amalie, Christiansted, and Frederiksted.

The Bureau of Libraries and Museums of the Department of Education, located in the Charlotte Amalie public library building, administers and finances the three public libraries at Charlotte Amalie, Christiansted, and Frederiksted, supervises school libraries and archives, and conducts the Library Services Act programs. Its budget for fiscal year 1959 is \$42,000, plus a special appropriation of \$5,000 for rural library extension.

The Bureau is applying about 60 percent of its budget (\$25,560) and the special \$5,000 as matching funds for the Federal allotment of \$10,782 under the Library Services Act. Enid M. Baa, a trained and experienced librarian, as chief of the Bureau, directs the Library Services Act programs.

The Bureau has a photostatic service and will soon use microfilm to preserve valuable historic papers and extend their use. It keeps a union catalog of all public library holdings, which Frederiksted's library is now copying.

Public libraries on the islands began in 1920, when the American Library Association organized the Charlotte Amalie, Christiansted, and Frederiksted libraries. A grant from the Carnegie Corporation made reorganization and further development possible between 1930 and 1933. And now the Library Services Act is helping the islands' library system to extend rural services.

Though they receive no aid through the Library Services Act, school library services in the islands also are growing. The consolidated schools at Charlotte Amalie and Christiansted have attractive, well-appointed, and centrally located library rooms in new buildings—and both are busy places. The new and beautiful King's Hill School and the Claude Markoe School at Frederiksted both have well-

planned and well-furnished rooms awaiting books and librarians. So far, only the schools at Charlotte Amalie and Christiansted have trained full-time school librarians. The Department of Education is developing standards for school librarians.

The islands as yet have no college, but students can earn college credits without leaving the islands by using the extension service of Hampton Institute of Virginia.

According to the map

Geography is always a challenge to those who would bring books to the islands' rural communities, and makes for a different pattern of service in each of the islands. The islands themselves are peaks of volcanic mountains rising sharply from the sea to heights of 1,000 to 1,500 feet. On St. Thomas and St. John these mountains drop steeply to the sea on all sides and leave only small pockets of cultivable land.

St. Croix, however, slopes gradually to the south for 5 miles; and only on this island do the roads permit use of a bookmobile for library extension. But ship and jeep and enthusiasm keep the people of St. John and the rural areas of St. Thomas supplied with reading material.

Library Services Act programs also follow different patterns according to the needs of each island. Planning for rural service includes the goal of integrating library programs with educational programs. Because the Library Services Act prohibits the use of its funds for any purpose other than public library programs, none of the rural library programs are for schools as such. Where the school is the center of community life, as it is in many rural areas, rural library extension programs have their outlets in school buildings. But they never supplant the school's library service or substitute for it.

On St. Thomas, "Treasure Chests"

Traveling library collections called "Treasure Chests" bring books to the outlying areas of St. Thomas. These "chests" look like footlockers standing on end. They are hinged in 2 equal parts and have 2 shelves, filled with books, on both their inner sides. Boat and plane carry them between the islands, shift them from place to place, and return them to headquarters in Charlotte Amalie for new materials and the withdrawal of "read-out" matter. In each community, residents serve as custodians of the chests and arrange for circulation of their contents. A request to headquarters brings new reading matter. Collections are varied and reflect the special needs of each area.

For 700 on St. John

Completely rural, St. John's 700 residents soon will have several new services through the Library Services Act. Before long, the new municipal building at Cruz Bay will house a small branch library; and at Coral Bay, on the opposite side of the island, the community building, next to the small school, also will have a book collection, probably under the custody of the school principal. The community of John's Folly, a few miles east, will receive its own "Treasure Chests," which will be in the charge of the teacher of the one-room school.

The scattered communities of St. John have no high school, and its boys and girls go to St. Thomas to continue their studies. Here they must room and board, for commuting is not practical. The Department of Education offers some financial aid.

In St. Croix, a complication

St. Croix, the largest island, is less troubled by geography but has the

problem of meeting the reading needs of a special group of residents—the Puerto Rican immigrants, whose number is increasing every day. For them the library must provide Spanish language material.

New paint, new furniture, new quarters, and more books are giving the public libraries at Fredericksted and Christiansted new life. Fredericksted's library will soon move from the old fort, where it now battles termites, to remodeled quarters in the former high school in the center of town. Here St. Croix's bookmobile will have its headquarters.

Before long St. Croix's bookmobile will be a familiar sight along the highways and byways of the island. When it leaves Fredericksted, it enters paved Center-Line Road between Fredericksted and Christiansted. But soon it branches off to visit communities lying 2 or 3 miles off the main road. As it goes, it stops at places with enticing and startling names, many of them inherited from old sugar plantations—Upper Love, Lower Love, Envy, Jealousy, Whim, Judith's Fancy, and Slob! Wherever it goes, children greet it with delight and their elders smile.

"Libraries to leeward," might well be the cry of Christopher Columbus were he now rediscovering the Virgin Islands. For almost every ship from New York City brings books and library furnishings. The "tooling up" period is over, the bookmobile is on the road, and the library programs of the Bureau of Library and Museums—its own as well as those it sponsors with the help of the Library Services Act—look toward the day when even the remotest reader will have library services, a goal in keeping with the purposes of the Act—"to promote the further extension by the several States of Public Library Services to rural areas without such service or with inadequate service."



THE *Flag* OF THE UNITED STATES OF AMERICA

*"I pledge allegiance to the flag of the United States
of America and to the Republic for which it stands, one
Nation under God, indivisible, with liberty and justice for all."*

ON Independence Day 1959 the star of the new State of Alaska joins its 48 sisters in our flag's blue canton to proclaim that the United States of America now is 49 States united in one Nation. The stars of the new flag are in 7 staggered rows of 7, but, by a tradition unbroken since 1818, the field of 13 alternate

red and white stripes remains unchanged.

Before we became a Nation the land that comprises United States territory knew many flags. A thousand years ago the Norsemen probed our coastal waters, sailing under the banner of the black raven. Columbus carried a Spanish flag across the

seas. The *Mayflower* flew the flag of the United Kingdom of Great Britain. The Dutch colonists brought their striped flag to New Amsterdam. The French explored the continent under the royal fleur-de-lis. Each native Indian tribe had its own totem and insignia. And though they sought a new allegiance, immi-

Based on a historical sketch issued by the White House on January 3, 1959, on the date Alaska was proclaimed a State.

grants of every race and nationality brought symbols of their homeland loyalties to our shores.

The growth of the flag

During our Revolution the not-yet-united colonies used various banners. A flag with a green pine tree and the motto "An Appeal to Heaven" was popular with our young Navy. Aroused colonists along the Atlantic Seaboard displayed a flag with a rattlesnake's warning, "Don't Tread on Me." The Moultrie "Liberty" flag, a large blue banner with a white crescent in the upper corner, rallied the defenders of Charleston, S. C., in 1776. The defenders of Bunker Hill carried a blue banner with a white canton

filled with a red cross and a small green pine. The maritime colony of Rhode Island had a flag that bore a blue anchor under the word "Hope." The Green Mountain Boys of Vermont at the Battle of Bennington on August 16, 1777, carried a flag whose stars and stripes made it strikingly similar to the flag that eventually became the national insignia.

When Washington took command of the Continental Army at Cambridge, Mass., in 1776, he stood under "The Grand Union Flag," whose canton with its crosses of St. George (England) and St. Andrew (Scotland) reflected the continuing relationship between the colonies and Great Britain.

The first Stars and Stripes was created by the Continental Congress on June 14, 1777, and the Nation now observes that date each year as Flag Day.

In the early flags the 13 stars, representing a constellation, were arranged in a variety of designs. The most popular of these flags—one having the stars in a circle so that no State could claim precedence over another—is known as the Betsy Ross Flag, in honor of the seamstress who is supposed to have sewn the first one.

By 1792 the infant nation had added 2 more States to the original 13 and the flag accordingly had added 2 stars and 2 stripes. The

The 49 States and the dates of their entry into the Union

Alabama (22)	Dec. 14, 1819	Nevada (36)	Oct. 31, 1864
Alaska (49)	Jan. 3, 1959	New Hampshire (9)	June 21, 1788
Arizona (48)	Feb. 14, 1912	New Jersey (3)	Dec. 18, 1787
Arkansas (25)	June 15, 1836	New Mexico (47)	Jan. 6, 1912
California (31)	Sept. 9, 1850	New York (11)	July 26, 1788
Colorado (38)	Aug. 1, 1876	North Carolina (12)	Nov. 21, 1789
Connecticut (5)	Jan. 9, 1788	North Dakota (39*)	Nov. 2, 1889
Delaware (1)	Dec. 7, 1787	Ohio (17)	Mar. 1, 1803
Florida (27)	Mar. 3, 1845	Oklahoma (46)	Nov. 16, 1907
Georgia (4)	Jan. 2, 1788	Oregon (33)	Feb. 14, 1859
Idaho (43)	July 3, 1890	Pennsylvania (2)	Dec. 12, 1787
Illinois (21)	Dec. 3, 1818	Rhode Island (13)	May 29, 1790
Indiana (19)	Dec. 11, 1816	South Carolina (8)	May 23, 1788
Iowa (29)	Dec. 28, 1846	South Dakota (40*)	Nov. 2, 1889
Kansas (34)	Jan. 29, 1861	Tennessee (16)	June 1, 1796
Kentucky (15)	June 1, 1792	Texas (28)	Dec. 29, 1845
Louisiana (18)	Apr. 30, 1812	Utah (45)	Jan. 4, 1896
Maine (23)	Mar. 15, 1820	Vermont (14)	Mar. 4, 1791
Maryland (7)	Apr. 28, 1788	Virginia (10)	June 25, 1788
Massachusetts (6)	Feb. 6, 1788	Washington (42)	Nov. 11, 1889
Michigan (26)	Jan. 26, 1837	West Virginia (35)	June 20, 1863
Minnesota (32)	May 11, 1858	Wisconsin (30)	May 29, 1848
Mississippi (20)	Dec. 10, 1817	Wyoming (44)	July 10, 1890
Missouri (24)	Aug. 10, 1821		
Montana (41)	Nov. 8, 1889		
Nebraska (37)	Mar. 1, 1867		

*Since North Dakota and South Dakota became States on the same day, either may be regarded as 39th or 40th.



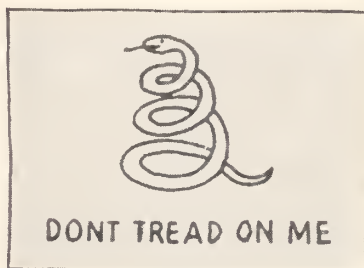
In the United States there have been, and are, many flags, many allegiances; but one flag and one allegiance blends and surmounts them all.

Over the years, our flag has changed as new States joined the Union. The adding of Alaska's star to the blue canton on July 4, 1959, will be the first change in "Old Glory" in almost half a century.

line drawings by U.S. Army



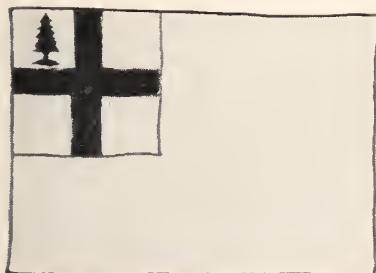
U. S. Navy



Rattlesnake



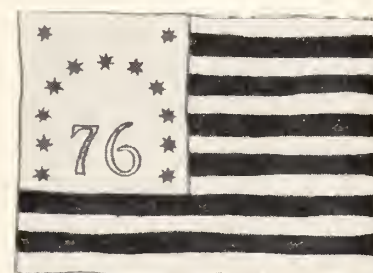
Moultrie (South Carolina)



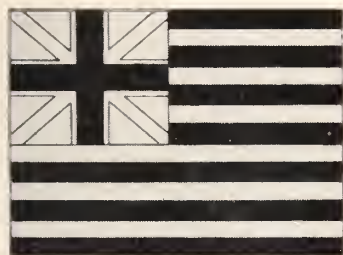
Bunker Hill



Rhode Island



Green Mountain Boys (Vermont)



Grand Union



Betsy Ross Flag



Star Spangled Banner

canton of the flag changed from a circle of stars to 5 rows of staggered stars. It was this flag that waved through enemy bombardment at Fort McHenry, Md., September 13-14, 1814, and inspired Francis Scott Key to write "The Star Spangled Banner."

By the end of 1818, another 5 States were in the Union and more and more pioneers were streaming westward to open up new territory.

Each State wanted its place in the banner. The Congress, feeling that more stripes would blur the design, returned to the original 13 red and white stripes, leaving the stars to grow in number as new States were added. The growing pattern of stars can be said to reflect the growing dimensions of America's responsibilities, as the unchanging 13 stripes reflect the constant strength of our country's traditions.

A symbol of the Nation

Laws have been written to govern the display of the flag and to insure a proper respect for it. Custom has decreed other observances for its use. As a symbol of the Nation, standing for our heritage of liberty and justice, the flag is naturally held in highest honor by all citizens.

In recent years the Congress of the United States of America has

drawn together "the existing rules and customs pertaining to the display and use of the flag." These can be found in three laws: Public Law 829 (77th Cong.) and Public Laws 107 and 396 (83d Cong.). The Superintendent of Documents, Government Printing Office, Washington 25, D. C., sells copies of these laws for 5 cents each.

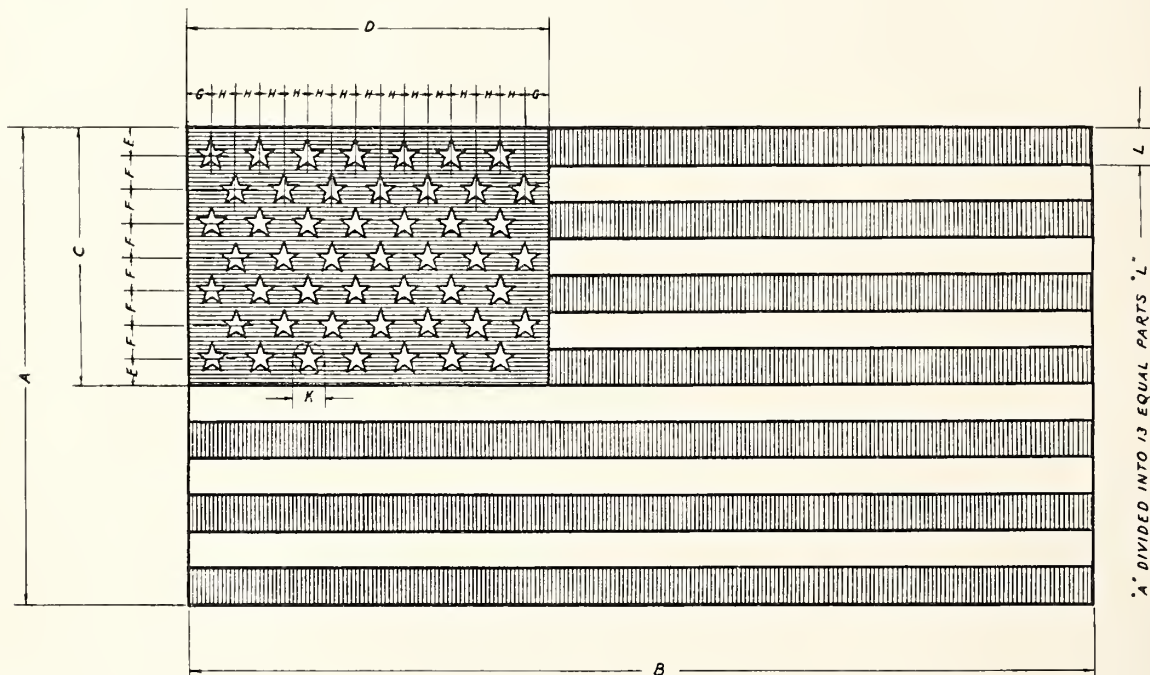
Use of new flag

By law, the new 49-star national flag becomes official July 4, 1959, the birthday of the Nation. Before

that day the new flag should not be displayed as *the* flag of the Nation; not until then will it become the flag that can be properly saluted in the pledge of allegiance. But even before that day it is proper to display the new flag in educational or similar exhibits. On the other hand, use of the 48-star flag *after* July 4, 1959, will not be out of order. While present supplies last, agencies of the Federal Government, with a few exceptions, will continue to use the old flag. It is appropriate for all citizens to do the same.

To meet a need

Wherever there are history and civics classes, there is need for information about our flag. To meet the many requests the Government receives from teachers and students for material on the Stars and Stripes, the Office of Armed Forces Information and Education, United States Department of Defense, has prepared an illustrated booklet, *Our Flag* (DOD Pamphlet 5-6). It is sold by the Government Printing Office, Washington 25, D.C., for 15 cents.



At 1 minute past noon, January 3, 1959, President Eisenhower proclaimed the State of Alaska formally admitted to the Union "on an equal footing with the other States." At the same time he issued an executive order setting forth certain specifications for the Nation's flag—among them, the proportions that every maker of a truly proper flag will use. All of these proportions are based on the overall width, A , of the flag:

- B , the overall length, is 1.9 times A .
- C , width of the blue canton, is 0.5385, or $7/13$, times A .
- D , length of the blue canton, is 0.76 times A .
- E is 0.056 times A .
- F is 0.071 times A .

- G is 0.054 times A .
- H is 0.05 times A .
- K , the diameter of each star, is 0.0618 times A .
- L , the width of each stripe, is 0.0769, or $1/13$, times A .

LEARNING LABORATORIES for ELEMENTARY SCHOOL CHILDREN

JAMES L. TAYLOR, specialist for school plant planning, Office of Education, here sees the inflexible "traditional" classroom (right) gradually yielding to a classroom specifically planned to allow for differences among children.



IN today's elementary school the classroom has become a laboratory—a place where children work with many kinds of instructional materials and where, in a natural setting, they are stimulated into creative imagining and constructive thinking.

To build and equip such classrooms calls for a broad conception of what is needed and of what can be accomplished through cooperative effort. An analysis of pupils' needs and their program of activities is fundamental in planning and designing a functional school plant, and can be done most effectively by the people

who will use the facilities—administrators, teachers, and patrons, as well as the pupils themselves.

Today's schools are for all educable children—children with varying interests and abilities. School programs are designed to develop the whole child—his body and his social, moral, and emotional life as well as his intellect. Differences in children and the multiple ends of the school program call for flexible teaching methods. There are times in the program when all children are engaged in a similar activity, and there are other occasions when they work in

small groups, seated around a table or on chairs arranged in circles. Such changes in grouping to meet the needs of pupils mean that the modern classroom takes more space than the traditional classroom and needs flexible, easily movable furniture.

An elementary classroom teacher, if asked to name typical learning situations in her classroom, would probably include these activities on her list:¹ Making charts and maps •

¹James L. Taylor, Jack D. Herrington, Helen K. Mackintosh, and Wilhelmina Hill. *Designing Elementary Classrooms*. Office of Education, Washington 25, D.C. 1953. 55 p.



Engaging in physical education • Dramatizing stories • Making booklets • Taking part in music activities • Practicing good health habits • Writing reports, letters, stories, and poems • Collecting and exhibiting • Working with materials • Reading • Discussing • Painting and drawing • Using audio-visual aids • Gardening • Experimenting.

When we analyze these activities carefully, we find that more than 130 different items of equipment, furniture, and supplies are necessary to carry them out effectively. Many of the items take open floor space when in use, and most of them require fixed storage when not in use.

Many elementary schools also use the out-of-doors as an extension of the classroom laboratory. Convenient access to the school grounds directly through an outside exit from the classroom encourages activities in science, gardening, conservation, physical education, storytelling, etc.

Break with tradition

Looking back on the elementary classroom of a few decades ago—the “traditional” classroom of American schools for many years—it is easy to see how inadequately it would serve today’s school programs. Built for an age when reading and reciting were the principal learning methods, it neither had nor needed flexibility. In it each child was confined to his pupil station, usually a seat-desk fixed to the floor, where he stored his books, tablets, pencils, and ink. The teacher’s desk, placed in front of the class to give her a view of everything going on, was also her storage unit. If she was fortunate, she had a few bookshelves for texts and reference works. Before her, eight rows of desks occupied most of the classroom area, usually 22 feet wide. Pupils seated near the source of heat were too warm; those on the

other side of the room were cold. Those near the windows had to contend with glare; those far from them, shadows. Nor was the room likely to be attractive to the eye.

Contrast this traditional classroom with a learning laboratory in a school designed to meet the needs of the modern school system—for example, a classroom in the West Side Elementary School, Pittsburg, Kans. Bessie Sizemore, a teacher at West Side, has this to say about her room:

“Our new 30 x 33 classroom has attractive block interior walls, rubber-tiled floors, and an acoustic-tiled ceiling. Cloudy days are not dreary since the room is equipped with instant-starting artificial lights and three control switches. There are directional glass blocks, low-vision strips, and clerestory windows for natural light, with sufficient intensity well distributed over the pupil stations without disturbing glare. Attractive draw curtains are available for use of projectors.

“There are 125 cubic feet of storage space, conveniently located with compartments of various sizes resembling a modern kitchen. Chalkboards—about 20 lineal feet—are green, to fit into the color scheme and reduce

glare. Attractive display boards are plentiful.

“The room has a teacher’s filing cabinet, a sink with hot and cold water, one worktable, a drinking fountain, light, movable desk and chairs, a clock, an outside door, steel bookshelves, and a thermostat for temperature control with eight exhaust fans for ventilation. Cloakrooms have folding doors and ceiling vents to remove dampness and odors.

“Color dynamics are used effectively. Walls are salmon pink and cream; the tiled floor is grey; and the cabinets are light buff and coral.”

Purposeful planning

A classroom as functional as Mrs. Sizemore’s is not an accident. It was carefully planned in advance and it reflects the broad outlook of those who planned it. It makes possible the use of a variety of materials according to the group and individual plans of the teacher and his class. The room is functional, safe, and attractive.

The planning of such a classroom involves not only the superintendent and the principal but teachers, patrons, and pupils. It requires coordination and unity. It requires

The modern classroom is not bound by its walls. In the well-planned school it can extend into the out-of-doors to bring richness into the school program.



time, staff, and an efficient organization; but even with all this there may still be poor planning unless school administrators take the proper lead.

The many activities in the elementary classroom make it necessary that designers of school buildings have complete information on activities, equipment, and instructional supplies to be used in local situations before they draw plans. The use of the outdoors as an extended classroom makes it imperative that the site of the building and its surroundings be carefully considered to find what they can give to the instructional program; for good learning laboratories, both interior and exterior, encourage pupils and teachers to explore and do more effective work, and parents and other patrons to take increased pride in their schools.

After studying the school program and what it needs to be put into effect, educators, with the aid of interested laymen, must prepare educational specifications for school facilities as an instrument of communication between educator and architect. The specifications help the architect to understand the needs of the particular group of children to be housed and to interpret the educational program in terms of space and facilities. This does not mean that educators and interested laymen must be technicians on such problems as lighting, heating, and ventilation for classrooms, but they should know better than anyone else what educational equipment it takes to meet the needs of the children and the program. Good school architects welcome their assistance.

The people of the United States can afford to buy good school facilities for their children. Such schools are a safe and sane investment in the future of the country. Wise planning by everyone concerned with educating our children can insure that elementary schools are the learning laboratories they can and must be today.

SCHOOL PLANT COSTS

N. E. VILES, School Housing Section, Office of Education, points out that, if we are to speak clearly about school plant costs, we must either use precise terms or define the general ones

THE TERMS "school plant costs" and "school building costs" are used frequently by school officials and in professional and technical publications, but they are not always used to mean the same things. Sometimes they are used to refer only to contract or contract award costs, sometimes to construction costs, and sometimes to capital outlay expenditures. What costs each of these three levels includes is explained in *Local School Construction Programs*, Office of Education Bulletin 1957, No. 20, on p. 45, under the heading "Cautions in Estimating Costs."

Contracts or contract award costs, reported when construction contracts are signed and therefore the first costs to be reported, cover the sums of such contracts, and represent only part of the ultimate capital outlay expenditure. The percentages vary with different buildings.

Construction costs include, in addition, the costs of supervision during construction, engineering and architectural fees, and so forth.

Capital outlay expenditures include, in addition to contract and construction costs, the costs of site and equipment, and various administrative costs. This is the amount that the district pays (but does not include interest on bonds).

Clearly, each of these levels of costs is different; and persons referring to them ought either to use the specific terms or to define what they mean when they use the more general terms

"school plant costs" and "school building costs." One illustration of the use of the specific terms occurs in a summary in last month's *School Life* of some cost data developed by the Interstate School Building Service. Interstate properly limited the data to contract award costs. According to the *Local School Construction Programs* formula, these contract awards costs probably represented only about 72 percent of the total capital outlay costs.

School plant cost comparisons are also complicated by the use of various measures—the classroom, square foot, or cubic foot. There are no commonly accepted measures determining what should be counted as a classroom and until recently there were no accepted standards of floor measurement. The American Standards Association has recently established and published national standards for school building area measures (defining and describing certain inclusions and exclusions); they are available as the *American Standard Methods of Determining Areas in School Buildings*. Z65.2-1958, UDC 69.003.1.

Standard terminology for the whole field of school buildings, sites, equipment, and units of area measures also will be available soon in a handbook prepared over the past 2 years by representatives of 5 national associations in education. It will be published by the Office of Education under the title *Property Accounting for Local and State School Systems*.

SCHOOL LIBRARY MATERIALS



in Science, Mathematics, Modern

Languages, and Guidance

. . . and HOW TO USE THEM

By MARY HELEN MAHAR

*School and Children's Library
Specialist*

and GERALD B. FISHER

Project Analyst

IN the aid it offers to improve instruction in elementary and secondary schools, the National Defense Education Act has emphasized science, mathematics, modern foreign languages, and guidance. To strengthen programs in these 4 subjects there is presented here a selective bibliography of pamphlets and articles, which includes lists of school library materials as well as descriptions of methods for using those materials. Because many school libraries select teachers' materials, too, for their collections, it includes also professional books, journals, syllabi, courses of study, and resource materials.

For lists and evaluations of the latest additions to the literature in these 4 subjects, school librarians of course will want to review regularly professional journals like *Elementary School Science Bulletin*, *The Science Teacher*, *School Science and Mathematics*, *Modern Language Journal*, *The Personnel and Guidance Journal*, and *The Vocational Guidance Quarterly*.

General

Standards for Materials and Equipment for the Improvement of Instruction in Science, Mathematics, and Modern Foreign Languages. Report of a confer-

ence to develop guidelines for State educational agencies in determining standards for science, mathematics, and modern foreign language materials and equipment under Public Law 864, Title III, Sec. 303(a)(4), sponsored by the Council of Chief State School Officers with the assistance of the Educational Facilities Laboratories, Inc. Council of Chief State School Officers, 1201 16th St. NW., Washington 6, D.C., 1958.

Includes selected bibliography on science equipment and materials, illustrative lists for mathematics libraries, classroom equipment and bibliographies, and some suggested source reference for modern foreign languages.

SCIENCE

PAMPHLETS

Blough, Glenn O. *It's Time for Better Elementary School Science.* National Science Teachers Association, 1201 16th St. NW., Washington 6, D.C., 1958. \$1.

Includes a brief section on the use of library materials as well as a selected bibliography on science in the elementary school.

_____ and Blackwood, Paul E. **Professional Literature for Teachers of Elementary Science.** Selected Refs. No. 3, Office of Education, Washington 25, D.C., Feb. 1958.

An annotated list of books, State courses of study, and magazines. Many of the books listed have extensive discussions of elementary materials.

Brown, Willis C. *Bibliography of Recent Books About Jets, Rockets, and Space Exploration.* Office of Education, Washington 25, D.C., Apr. 1958.

Briefly annotated list of science books and periodicals for elementary and secondary school students. (A publication based on this bibliography, with additions, same title, is available from the National Aviation

Council, 1025 Connecticut Ave. NW., Washington 6, D.C.)

Deason, Hilary J., ed. *The AASA Science Book List*, American Association for the Advancement of Science, 1515 Massachusetts Ave. NW., Washington 5, D.C., 1959. \$1.

A selected annotated list of over 1,000 titles, arranged by subject, recommended for secondary school and public libraries.

_____. *An Inexpensive Science Library.* American Association for the Advancement of Science and the National Science Foundation, 1515 Massachusetts Ave. NW., Washington 5, D.C., 1958. 25¢.

A selected list of paperbounds arranged by subject.

_____. *The Traveling High School Science Library.* 4th ed. American Association for the Advancement of Science and the National Science Foundation, 1515 Massachusetts Ave. NW., Washington 5, D.C., 1958. 25¢.

An annotated list of science books available on loan to school libraries from the American Association for the Advancement of Science. Includes description of the loan plan and a list of science career guidance materials. Useful as a selection aid.

Growing Up With Science Books. *Library Journal*, 62 W. 45th St., New York 36, N.Y., 1958. 10¢. 100 for \$3.35.

Annotated list of science books for children of all ages, arranged by age groups and subjects.

New York State Education Department, Bureau of Secondary Curriculum Development. *General Science Bibliography: A Selected List of Science Books for Grades 7, 8, and 9.* Curriculum Leaflet No. 6. University of the State of New York Press, Albany, 1956.

An aid to selecting books in the science field for junior high school pupils.

Rockcastle, Verne N., and Gordon, Eva L., *Science Books for Children*. Cornell Rural School Leaflet, Teachers Number, Fall 1957, Vol. 51, No. 1. N.Y. State College of Agriculture, Cornell Univ., Ithaca, N.Y. 40¢.

Books on the subject of nature study, animals, plants, earth science, and physical and chemical forces. Annotated.

Schader, Freddy. *Science Books for the Elementary School*. Arkansas Library Commission, 506½ Center St., Little Rock, Ark., Mar. 1958. Minieographed.

A graded list of books to help the child understand his world.

ARTICLES

Benton, Mildred. "Earth Satellites, Guided Missiles, Rockets and Flight, a Bibliography of Books and Periodical Articles." *Wilson Bulletin*, 32: 412-419, Feb. 1958.

An annotated list for young readers, for high school age readers, and for the mature reader. Includes semitechnical and technical books and periodicals. With eight additional bibliographies.

Brown, Clyde M. "Reading in Science as a Means of Improving the Junior High School Program." *The Science Teacher*, 21: 281-283, Nov. 1954.

Methods for stimulating reading in various aspects of the science program.

Kambly, Paul E., and Ahlers, Eleanor E. "The Elementary School Science Library for 1956-57." *School Science and Mathematics*, 58: 473-489, June 1958.

The 14th yearly list of books compiled and published in School Science and Mathematics, suggesting to teachers books that supplement basic texts.

Klingholz, Johanna. "The Library Serves a Vocational School." *School Libraries*, 6: 8-9, Jan. 1957.

Includes suggestions for selection aids and sources of materials in science and technology including trade catalogs and pamphlets. Describes methods for use of materials.

Marshack, Alexander. "How Kids Get Interested in Science." *Library Journal* 83:1253-5, Apr. 15, 1958; *Junior Libraries*, 4: 13-15, Apr. 1958.

Significance of libraries in stimulating interest in science.

Van DeVenter, William Carl. "Library Resource Materials for Reading in Science." In *Conference on Reading*, 1957, pp. 186-90, University of Chicago Press, Chicago, Dec. 1957.

Comments on textbooks, reference books, periodicals, and fiction.

Weinstein, Frederic D. "Book Selec-

tion in the Sciences." *ALA Bulletin*, 52: 509-13, July-Aug. 1958.

A plea for selecting basic and reliable books rather than popularizations.

Yager, Robert E. "You Can Stimulate Tomorrow's Scientists." *Top of the News*, 15: 55-60, Dec. 1958.

Statement on the function of the school librarian in encouraging interest in science.

MATHEMATICS

PAMPHLETS

Archer, Allene. *How to Use Your Library in Mathematics*. How to Do It Series, No. 5. National Council of Teachers of Mathematics, 1201 16th St. NW., Washington 6, D.C. 1958. 40¢.

Suggests methods for use of the school library, projects for mathematics classes and clubs requiring the use of materials in mathematics, and types of materials on mathematics which should be in the school library. Includes lists of topics for historical reports, of things to make, and of great mathematicians.

Brown, Kenneth E., and Klutz, Marguerite. *Selected Bibliography of Reference and Enrichment Material for the Teaching of Mathematics*. Cir. No. 347, Office of Education, Washington 25, D.C., May 1958.

Selected titles in history, teaching, recreation, and enrichment of mathematics. Symbols beside each title indicate level of difficulty and appeal.

Hutcheson, Ruth, Mantor, Edna, and Holmberg, Marjorie B. *The Elementary School Mathematics Library, a Selected Bibliography*. Reprinted from *The Arithmetic Teacher*, Feb. 1956. Available from National Council of Teachers of Mathematics, 1201 16th St. NW., Washington 6, D.C. 20¢.

An annotated and graded bibliography to suggest to teachers books of information, enrichment, and recreation. Books are intended to stimulate further interest and activities.

Rosenbaum, Robert A., and Louise J. *Bibliography of Mathematics for Secondary School Libraries*, Dept. of School Services, Wesleyan Univ., Middletown, Conn. 1957.

Annotated list of 115 books of various levels of difficulty. Includes lists of periodicals and out-of-print books. Suggests books for first purchase.

Schaaf, William L. *The High School Mathematics Library*. Reprinted from *The Mathematics Teacher*, Feb. and Mar. 1954. Available from National Council of Teachers of Mathematics, 1201 16th St. NW., Washington 6, D.C. 20¢.

Includes books on history, biography, recreation, expository and survey mathematics, arithmetic, geometry, mathematics and science, vocational and trade mathematics, business arithmetic, consumer's mathematics, graphs and statistics, slide rule, mathematical geography, navigation, aviation, art and mathematics, fourth dimension, reasoning and logic, chance and probability, learning and teaching mathematics.

_____. *Recreational Mathematics: A Guide to the Literature*. National Council of Teachers of Mathematics, 1201 16th St. NW., Washington 6, D.C. \$1.20.

Includes over 2,000 books, pamphlets, and articles about mathematical recreations—general works, arithmetical and algebraic recreations, geometric recreations, magic squares, and others. Many entries are appropriate for high school students.

PERIODICALS

Hennig, Ruth M. E. "Library Math Carnival." *Library Journal*, 80: 2357-2359, Oct. 15, 1955; *Junior Libraries*, pp. 107-109, Oct. 15, 1955.

Description of a "carnival" in a school library to stimulate the use of materials in mathematics.

Lloyd, Daniel Boone. "Use of the Library." *Bulletin of the National Association of Secondary School Principals*, 38:144-151, May 1954.

Suggests use of books on mathematics to stimulate interest and to enrich teaching. Bibliography of history and biography, applications to other fields, and enrichment and recreation material.

Sparks, Jack N., and Taylor, Kenneth. "Building the Secondary School Mathematics Library." *School Science and Mathematics*, 58:56-60, Jan. 1958.

Lists methods of selecting books not covered in standard book selection tools; includes bibliography.

Wallen, Irvin Eugene. "Programs in Mathematics and Science Teaching." *Review of Educational Research*, 27: 414-419, Oct. 1957.

Includes information on traveling science libraries, visual aids, curriculum materials, career materials, as well as on institutes and fellowships.

MODERN FOREIGN LANGUAGES

PAMPHLETS

American Library Association, Children's Library Association (now Children's Services Division). *Foreign Children's Books Available in the United States*. American Library Association, 50 East Huron St., Chicago 11, Ill., 1954. Out of print and currently under revision, but can be consulted in libraries. (1955, 1957, 1958)

supplements, *Top of the News*, May issue of each year; 1956 supplement, *NEA Journal*, Oct. 1956).

Annotated list of books in Danish, Dutch, Finnish, French, German, Italian, Norwegian, Polish, Portuguese, Spanish, Swedish. Includes list of American book importers.

Eaton, Esther, and others. *Modern Language Instruction*. Monograph No. 3. Modern Language Dept., Garden City Senior High School, Garden City, N.Y., June 1958. Available from American Association of Teachers of French, National Information Bureau, Brooklyn College, Brooklyn 10, N.Y. \$1.25.

Outline of courses for grades 10, 11, and 12 in French, German, and Spanish (prerequisite, 2 years of languages). Includes extensive bibliographies of books in foreign languages for students, and audio-visual materials.

Foreign Languages, Grades 7-12. Curriculum Bul. Series No. V (tentative). State Dept. of Education, Hartford, Conn., Sept. 1958.

Includes suggestions for the teacher's library and periodicals.

Instructional Materials for Russian. Office of Education, Washington 25, D.C. Feb. 1959.

Lists courses on records, readers, grammars, stories, workbooks, picture books, dictionaries and reference books.

Johnston, Marjorie C. *Modern Foreign Languages in the High School.* Bul. 1958, No. 16. Office of Education, 1958. \$1. Purchase from Supt. of Documents, Govt. Printing Office, Washington 25, D.C.

Status and problems of foreign language teaching in high schools. Implications for libraries in newer trends.

_____. *References on Foreign Languages in the Elementary School.* Resources for Foreign Language Teaching, Cir. No. 495. Office of Education, Washington 25, D.C., Rev. Feb. 1959.

Significant books and articles on the philosophy of teaching, and resource materials for the teaching of French, German, and Spanish.

_____. and Seerley, Catharine C. *Foreign Language Laboratories in Schools and Colleges.* Bul. 1959, No. 3. Office of Education, 1958. 35¢. Purchase from the Supt. of Documents, Govt. Printing Office, Washington 25, D.C.

Chapter on materials and techniques for the language laboratory of concern to librarians.

Modern Language Association. Miltenberger, Kenneth, Editorial Supervisor. *Teacher's Guides for Foreign Languages in the Elementary Schools:*

1. *Beginning French in Grade 3 (First Year).* 2. *French in Grade 4 (Second Year).* 3. *Beginning Spanish in Grade 3 (First Year).* 4. *Continuing Spanish in Grade 4 (Second Year).* 5. *Beginning German in Grade 3 (First Year).* Available from the Educational Publishing Corporation, Darien, Conn. \$2.50 each.

Each guide includes introductory material on objectives and teachers' instructions, units for one year's work, music and songs, games, and references for teachers. Drawings to accompany French guides are available at 30¢ a packet from the Educational Publishing Corporation, and records to accompany Beginning French in Grade 3, Beginning Spanish in Grade 3, Beginning German in Grade 3, and French for Grade 4, are available at \$5 each from the Modern Language Association, 6 Washington Square North, New York 3, N.Y.

Modern Language Handbook. Cultural Background Materials and Suggestions for Activities. Bureau of Secondary Curriculum Development, N.Y. State Education Dept., Albany, 1957.

Lists dictionaries, periodicals, films, and resources of materials for teaching French, Spanish, Italian, and German.

Package Library of Foreign Children's Books, 69-41 Groton Street, Forest Hills, New York 75, N.Y.

Catalog of packages of books in Danish, French, Finnish, German, Italian, Polish, Spanish, and Swedish. Titles selected by the members of the American Library Association, Children's Services Division, Committee on the Selection of Foreign Children's Books. All titles may be purchased separately.

ARTICLES

"Books in Foreign Languages." *Junior Bookshelf*, 22:3, July 1958, pp. 105-116. Published at Tower Wood, Windemere (Westmoreland, England). *Annotated list of French and German children's books, the first of a series of lists of foreign children's books.*

"Foreign Language Books at Illinois State Library." *Illinois Libraries*, 38:71-78, April 1956.

List of adult books in French, German, and Italian for foreign-born Americans. For advanced students.

McIntyre, Mary Edna. "Current Materials and Events in Foreign Language Teaching." *California Journal of Secondary Education*, 29:445-454.

A presentation of some teaching problems and a bibliography of books and pamphlets of interest to teachers.

Miller, Sister Mary Catherine, O. P. "Foreign Language Classes Need the Library." *Catholic School Journal*, 50:18-19, Jan. 1950.

Suggestions for integrating use of the li-

brary with the teaching of foreign languages. Emphasis on enrichment materials.

Van Eenenaam, Evelyn. "Annotated Bibliography of Modern Language Methodology for 1957." *Modern Language Journal*, 43:34-49, Jan. 1959. *Extensive bibliography of articles including suggestions for foreign language teaching and lists of materials.*

GUIDANCE

ARTICLES

Cairol, Mary Wright. "Place of the Library in the Guidance Program." *School Activities*, 25:162-3, Jan. 1954. *Succinct statement of the role of the school library in the guidance program.*

Denman, Ruby Othella. "Vocations on File." *Library Journal*, 81:978-9; *Junior Libraries* 2:50-1, Apr. 15, 1956.

Description of the development of a collection of materials on vocations, and its use, in a high school library.

Eiseman, Fannie B. "Career Materials and Services Today." *Library Journal*, 82:206-10, Jan. 15, 1957; *Junior Libraries*, 3:2-6, Jan. 15, 1957.

Lists bibliographies of materials, sources of pamphlets, indexes, services, and series. Also lists books of information on college entrance, scholarships and fellowships. Lists first-purchase books on careers.

Houghton, Hubert W. "The Librarian and the Counselor." *Bookmark*, 15:53-4, Dec. 1955.

Useful information on types of guidance materials to be included in a school library.

Logan, Mary. "Time-Tested Career Series." *Library Journal*, 82:212-3, Jan. 15, 1957; *Junior Libraries*, 3:8-9. *An evaluation of pamphlet series in the career field which have proved valuable in one library.*

Miller, June Labb. "Guidance in the School Library." *Illinois Libraries*, 34:141-4, April 1952.

Examines function of the school library in guidance program of the school. One section of article is on vocational information.

Stephenson, Shirley K. "The Library as a Career Laboratory." *Wilson Library Bulletin*, 28:497-498, Feb. 1954. *Suggestions for the selection, organization, and publicizing of vocational material. Bibliography of sources of vocational materials and selected career books.*

"Where To Find Information About Résumés, Exams, and Scholarships." *Library Journal*, 82:214, Jan. 15, 1957; *Junior Libraries*, 3:10, Jan. 15, 1957.

Brief lists of books on preparing résumés for applications, entrance examinations, and scholarships.

ENROLLMENT TEACHERS AND SCHOOLHOUSING

The following is from Office of Education Circular No. 551, Fall 1958 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools, by Samuel Schloss and Carol Joy Hobson.

EVERY year the Office of Education publishes data gathered from State departments of education on 8 basic items of information about the public elementary and secondary schools in the United States. This year's report, which summarizes the fall 1958 survey, is being issued in February.

Some of the facts reported by the States in this survey are these:

Pupil Enrollments

33,936,470 pupils were enrolled in the fall of 1958—an increase of 1,148,000, or 3.5 percent over the fall of 1957.

Classroom Teachers

1,301,000 classroom teachers were employed in the fall of 1958—an increase of 47,000 or 3.8 percent, over the

year before. The average pupil-teacher ratio, however, stayed about the same: 26.1 to 1.

Substandard Credentials

92,300 teachers had substandard credentials in the fall of 1958—an increase of 300, or 0.9 percent, over the year before. But the percent of all teachers with such credentials declined—from 7.3 percent to 7.1 percent.

Instruction Rooms Completed

71,600 instruction rooms were completed during 1957-58. These were 4.8 percent more than the 68,300 completed in the previous year.

Instruction Rooms Scheduled

68,440 rooms are scheduled for completion in 1958-59—a decrease of 4.4 percent from the 71,600 rooms completed in 1957-58.

Instruction Rooms Abandoned

17,300 instruction rooms were abandoned during 1957-58, as compared with 15,700 in 1956-57.

Pupils in Excess of Capacity

1,843,000 pupils (5.4 percent of total enrollment) were in excess of normal capacity in the fall of 1958, as compared with 1,943,000 pupils (5.9 percent of total enrollment) in the fall of 1957.

Classroom Shortage

140,500 additional instruction rooms were needed in the fall of 1958. Of these, 65,300 were needed to accommodate the 1,843,000 pupils in excess of normal capacity; 75,200 were needed to replace unsatisfactory rooms. Apparently the need was not quite so great as it had been the year before, when a shortage of 142,300 rooms was reported.

SOVIET EDUCATORS

Continued from page 10

About history

I [a member of the team who is also a historian] noted that American children are well-grounded in the history of their own country—and that is commendable, that is as it should be. And they knew some world history, too, though to a much lesser degree.

But apparently the United States school pays little attention to the

history of the Soviet Union—and even less to the history of Kazakhstan, my own republic, though great events are happening there. In the courses of history that I observed, the history of the Soviet Union is referred to as "Russian History"—an outmoded term.

About many other matters

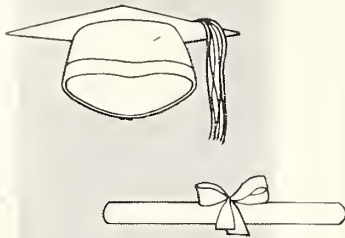
You have asked us to point out what we judge to be defects, and in our efforts to oblige you we may have obscured one principal fact: that we have had many, many favorable impressions in addition to those we have already mentioned.

We have noted the wonderful work you are doing with retarded chil-

dren. We have admired the great scope of your program of evening studies, where both young and old can complete their education. We have been impressed by your interest in sports, and by your fine physical education facilities. We have seen that your teacher-training institutions are working just as hard as ours to prepare good teachers, and we salute the dedicated spirit of your many splendid teachers.

Above all, we've been favorably impressed by the wonderful children we've been meeting everywhere—friendly, free, and relaxed. And we count as one of the greatest benefits of our visit the friendly contacts we have established with our American colleagues in education.

NATIONAL DEFENSE EDUCATION ACT



On Feb. 2, 1959, the National Defense Education Act was 5 months old. Not all the problems it raises have been solved, nor all the questions answered; but the Act is working, funds are going out, and school people everywhere are expending exceptional effort to make it effective. A quick look at where each title is now, in the first week of February, will intimate how far the Act has come since its signing, Sept. 2, 1958.

TITLE II Student Loans

FOR A 4-YEAR PERIOD, beginning this year, up to \$295 million has been authorized for loans to worthy college students; funds also have been authorized beyond that period to enable students who have entered the program to finish their studies (lending operations under the Act will cease June 30, 1966). Interest, at 3 percent, does not accrue until repayment begins; and repayment need not begin until the borrower has been out of school 1 year. Payments may be spread over 10 years, and up to one-half of the loan will be forgiven if the borrower becomes a public school teacher. Each institution administers its own loan fund, to which it must add \$1 of its own for every \$9 it receives from the Government. The student applies to his own institution for a loan, not to the Office of Education.

JANUARY 6, 1959, was the deadline for institutions of higher education to file applications with the Office of Education for a share in the first funds for student loans—and 1,227 institutions, together enrolling more than 2 million students, met it. They are the institutions that now have received the \$6 million available from the initial appropriation (letters of notification went out January 30 and checks will go out in mid-February), and loans are being made to students this semester.

The institutions had asked for much more than \$6 million for this fiscal year. Even after they had voluntarily cut \$17 million off their original requests, the total stood at nearly \$62 million; so that, on the average, they got only \$1 for every \$10 they had finally asked for.

But the distribution is not expected to be the only one this fiscal year: Congress has been asked for a supplemental appropriation of \$24 million; and, as soon as funds are made available, they will be distributed among the 1,227 institutions on the same basis as the \$6 million. In any distribution, each State shares in proportion to its share of the Nation's full-time enrollment in institutions of higher education; and each institution's share in a

State's total is determined by the size of its request in relation to the total requests in the State.

The 1,227 institutions now lending Federal funds under Title II represent the 49 States, the District of Columbia, Hawaii, and Puerto Rico. The largest amount to go to any one institution is \$61,255; the smallest, \$51. The grand total, augmented by institutional funds, is enough to lend as much as \$1,000 this year to 6,666 students. Actually, however, the average loan is expected to be much smaller and the number of borrowers correspondingly larger. The list below shows, for each State, the number of participating institutions and the amount received from the currently available funds:

Alabama (19).....	\$88,625	Mantana (8).....	\$23,549
Alaska (1).....	1,357	Nebraska (14).....	57,263
Arizona (6).....	39,705	Nevada (1).....	4,363
Arkansas (17).....	47,553	New Hampshire (6).....	24,655
California (82).....	571,699	New Jersey (19).....	107,448
Colorado (17).....	81,116	New Mexico (9).....	24,987
Connecticut (15).....	83,211	New York (92).....	623,442
Delaware (2).....	11,657	North Carolina (46).....	138,216
District of Columbia (9).....	71,276	North Dakota (9).....	25,249
Florida (17).....	106,456	Ohio (48).....	273,764
Georgia (29).....	98,290	Oklahoma (27).....	110,097
Hawaii (3).....	14,465	Oregon (18).....	73,393
Idaho (8).....	22,810	Pennsylvania (75).....	354,192
Illinois (52).....	305,718	Puerto Rico (3).....	33,500
Indiana (28).....	174,357	Rhode Island (8).....	31,755
Iowa (36).....	113,971	South Carolina (21).....	65,687
Kansas (30).....	97,508	South Dakota (13).....	27,375
Kentucky (25).....	77,472	Tennessee (37).....	110,227
Louisiana (15).....	105,125	Texas (63).....	344,690
Maine (7).....	22,858	Utah (10).....	60,460
Maryland (22).....	81,525	Vermont (12).....	20,016
Massachusetts (52).....	249,680	Virginia (17).....	96,624
Michigan (35).....	255,618	Washington (15).....	105,572
Minnesota (27).....	135,149	West Virginia (9).....	52,806
Mississippi (22).....	65,719	Wisconsin (30).....	135,462
Missouri (37).....	142,068	Wyoming (3).....	9,627
		TOTAL.....	\$5,999,397

The total is a little short of \$6 million because the Canal Zone and Guam, for which \$603 had been reserved, made no request.

Looking ahead: The deadline for submitting applications for loan funds for the fiscal year beginning July 1, 1959, will be announced April 1. And between March 3 and April 10 there will be 12 regional workshop conferences on Title II, where those administering the loan funds can share information and join in determining various procedures. In addition to financial officers, high school guidance counselors and principals from high schools in the areas surrounding the participating institutions will be invited. The workshops are tentatively scheduled for New York City, Boston, Pittsburgh, Chicago, Kansas City, Minneapolis, Denver, San Francisco, Seattle, Dallas, Louisville, and Washington, D.C., approximately in that order.

The Commissioner of Education administers Title II through the Student Loan Section of the Financial Aid Branch, Division of Higher Education. Peter P. Muirhead is the section chief.

**TITLE III
Instruction
in Science,
Math, and
Foreign
Languages**

TITLE III authorizes, for a 4-year period beginning in 1958-59, a total of \$300 million to be paid to State educational agencies for strengthening instruction in science, mathematics, and modern foreign languages in elementary and secondary schools. The money is to be divided between equipment and related minor remodeling in the schools

(\$280 million) and better supervisory services from the State educational agencies (\$20 million).

For every Federal dollar a State gets for equipment and remodeling, it must spend either a State or a local dollar; but no such matching is required for Federal dollars spent on expanding State supervisory services until after the first year. To receive funds, a State will have to submit a plan to the Commissioner setting forth programs both for local equipment and remodeling projects and for State supervisory services. Each State will be the sole administrator of its program.

Each year 12 percent of the equipment-and-remodeling money will be set aside for loans to nonprofit private elementary and secondary schools, and each State will share in this amount on the basis of its private school enrollment.

CONGRESS is being asked for a supplemental appropriation of \$37 million to see Title III through June 30, 1959, the end of its first fiscal year. Funds available thus far are limited to \$19 million for remodeling and new equipment (12 percent of this amount, or \$2,280,000, has been set aside for loans to private nonprofit schools) and \$1.35 million for expanded supervisory services from the State educational agencies.

There is no cutoff date, or deadline, for the submitting of State plans under Title III, and the plans are being reviewed and responded to as they come in. Not all plans submitted thus far are "official": some are tentative, either

because they have been submitted for review and suggestion or because they have not been prepared in accord with the guides and instructions sent out by the Office on December 12.

Twenty-seven official State plans have been received in the Office. Eight have been approved; their shares of the funds now available are as follows:

FLORIDA	Equipment and remodeling	\$371,302
	State supervisory services.	21,618
	Total	392,920
GEORGIA	Equipment and remodeling	561,606
	State supervisory services.	25,436
	Total	587,042
INDIANA	Equipment and remodeling	435,475
	State supervisory services.	26,622
	Total.	462,097
MARYLAND	Equipment and remodeling	252,681
	State supervisory services.	20,000
	Total	272,681
MONTANA	Equipment and remodeling	74,937
	State supervisory services.	20,000
	Total	94,937
OKLAHOMA	Equipment and remodeling	286,437
	State supervisory services.	20,000
	Total	306,437
PENNSYLVANIA	Equipment and remodeling.	939,795
	State supervisory services	61,500
	Total	1,001,295
TEXAS	Equipment and remodeling	1,111,421
	State supervisory services.	57,217
	Total	1,168,638

These allotments for equipment and remodeling are available for expenditure not only in this fiscal year but also in the fiscal year ending June 30, 1960; but allotments for the State supervisory programs must be expended this fiscal year. Each approved plan is considered as being in effect from the date on which it was received in the Office of Education in substantially approvable form.

The other 19 official plans on hand the first week in February are now being processed and many may well have been approved by the time this issue comes off the press. They have been submitted by Alabama, Arkansas, Colorado, Connecticut, Idaho, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Missouri, Nebraska, New Hampshire, New Mexico, New York, North Dakota, South Carolina, South Dakota, and Tennessee.

To discuss the loans available to nonprofit private schools, the Office of Education held a conference on December 2 with the executive directors of national and regional organizations of private schools. Early in January, application forms to determine eligibility, together with tentative regulations, were sent to nearly 6,000 private schools so that, if any wanted loans to improve instruction in science, mathematics, and modern foreign

languages, they could easily submit to the Office the information it needs to determine what schools are eligible for such loans. The first cutoff date for returning these application forms has been set for March 15.

The Commissioner of Education administers Title III through a new branch in the Division of State and Local School Systems—the Aid to State and Local Schools Branch, directed by John R. Ludington. Three of its four sections are involved in the administration of Title III: (1) *The Science, Mathematics, and Foreign Language Section* is under the direction of Herbert A. Smith, who on January 5 came to the Office from the University of Kansas, where he has directed the program for the education of science teachers since 1953; (2) the *Loans to Schools Section*, which is concerned with the lending of Federal funds to nonprofit private schools, is headed by George C. Decker, who formerly was chief of the educational advisory services to the college housing programs in the Division of Higher Education; and (3) the *State Plans and Reports Section*, which reviews plans and reports for both Titles III and V, is headed by Lloyd W. King, recently executive secretary for the American Textbook Publishers Institute and formerly the State commissioner of education for Missouri.

TITLE IV Guidance

TITLE IV authorizes "such sums as may be necessary" for 5,500 fellowships, each for not more than 3 years of study after the baccalaureate degree.

They will be awarded over 4 years:

1,000 for the year ending June 30, 1959, and 1,500 for each of the next 3 years. Each fellow will receive a stipend of \$2,000 for the first year, \$2,200 for the second, and \$2,400 for the third, plus \$400 a year for each dependent. In addition, his university will receive each year an amount to offset the costs of making the program available to him. The fellow must attend an institution participating in the program; to participate, an institution must either offer a new graduate program or expand an old one. The new or expanded program must have been approved by the Commissioner of Education, with the advice of his Advisory Committee. In nominating fellows, the institution must give preference to persons interested in becoming college teachers.

FORTY-EIGHT colleges and universities in 39 States, Hawaii, and the District of Columbia are now nominating the first fellows—160 of them—under Title IV. By the first of March their names will have been submitted to the Commissioner of Education, who will announce the awards of individual fellowships on March 10. Payments to both fellows and their institutions will be arranged for later this spring. This calendar will fit the usual practice of institutions' awarding fellowships in the spring, most often in April, for the following academic year.

All of the 160 fellows will be first-year graduate students working toward a doctor's degree; and for their education next year the Federal Government will spend \$800,000—the entire amount available thus far for the purpose.

For the remaining 840 fellowships authorized by the Act for this first fiscal year, a supplemental appropriation of \$4.5 million has been requested of Congress. As soon as the money has been appropriated, these awards will be announced.

The 48 new or expanded graduate programs now being offered in the 48 institutions participating in the Act were approved by the Commissioner of Education on the recommendation of the recently appointed National Advisory Committee on Graduate Fellowships. The Committee met

NATIONAL ADVISORY COMMITTEE ON FELLOWSHIPS

MEMBERSHIP of the National Advisory Committee on Fellowships was announced on January 16, 1959, by the Commissioner of Education, who appointed it to assist the Office of Education in administering the graduate fellowship program under the National Defense Education Act.

Leonard B. Beach, dean, graduate school, Vanderbilt University

Harold L. Hazen, dean, graduate school, Massachusetts Institute of Technology

Henry Hill, president, George Peabody College for Teachers

Frederick G. Hoekwalt, executive secretary, National Catholic Educational Association

Walter F. Loehwing, dean, graduate school, State University of Iowa

Robert M. Luminansky, dean, graduate school, Tulane University

Robert W. MacVicar, vice president, Oklahoma State University of Agriculture and Applied Science

Rosemary Park, president, Connecticut College for Women

John A. Perkins, president, University of Delaware

Jay Saunders Redding, professor of English, Hampton Institute

John C. Weaver, dean, graduate school, University of Nebraska

Lloyd S. Woodburne, dean, College of Arts and Sciences, University of Washington

3 times during January to review the 1,040 different fellowship programs that, before the deadline of December 31, 1958, had been submitted by 169 institutions of higher education in 46 States. These programs embodied requests for nearly 6,000 fellowships. The Advisory Committee has reviewed all of these programs and has reached its final recommendations.

The 48 institutions are named here, each with the field of study in which it has established or expanded a graduate program. The number in parentheses indicates the number of fellowships to be awarded at each institution:

ALABAMA POLYTECHNIC INSTITUTE.....	Mathematics	(4)
COLORADO STATE UNIVERSITY.....	Botany and Plant Pathology	(3)
DUKE UNIVERSITY.....	History	(3)
EMORY UNIVERSITY.....	Old Testament	(3)
FLORIDA STATE UNIVERSITY.....	History	(6)
GEORGE PEABODY COLLEGE FOR TEACHERS.....	Comparative Education	(3)
HOWARD UNIVERSITY.....	Physics	(3)
INDIANA UNIVERSITY.....	Quantitative Business Analysis	(5)
JOHNS HOPKINS UNIVERSITY.....	Political Economy	(3)
KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE.....	Mechanical Engineering	(2)
MONTANA STATE UNIVERSITY.....	Geology	(3)
NEW MEXICO STATE UNIVERSITY OF AGRICULTURE, ENGINEERING, AND SCIENCE.....	Solid State Physics and Temperature Phenomena	(5)
NEW YORK UNIVERSITY.....	Hebraic and Judeo-Arabic Studies	(3)
NORTH DAKOTA AGRICULTURAL COLLEGE.....	Plant Science (Botany and Agronomy, Crops and Soils)	(4)
NORTHWESTERN UNIVERSITY.....	Philosophy of Education	(2)
PENNSYLVANIA STATE UNIVERSITY.....	Philosophy	(3)
ST. LOUIS UNIVERSITY.....	Spanish and Latin American Studies	(5)
STANFORD UNIVERSITY.....	Classics	(3)
STATE UNIVERSITY OF IOWA.....	Urban Community Studies	(2)
TEXAS A & M COLLEGE.....	Applied Mathematics	(4)
THE CATHOLIC UNIVERSITY OF AMERICA.....	Statistics and Probability Theory	(2)
TULANE UNIVERSITY.....	French and Italian	(4)
UNIVERSITY OF ARIZONA.....	Physics	(4)
UNIVERSITY OF ARKANSAS.....	Psychology	(3)
UNIVERSITY OF CALIFORNIA, BERKELEY.....	Child Development	(2)
UNIVERSITY OF COLORADO.....	Modern Languages	(5)
UNIVERSITY OF DELAWARE.....	Chemical Engineering	(3)
UNIVERSITY OF HAWAII.....	Biochemistry	(3)
UNIVERSITY OF IDAHO.....	Political Science	(2)
UNIVERSITY OF KENTUCKY.....	History	(2)
UNIVERSITY OF MICHIGAN.....	Language and Area Studies of Southern Asia	(4)
UNIVERSITY OF MISSISSIPPI.....	English	(4)
UNIVERSITY OF MISSOURI.....	Comparative Vertebrate Physiology	(8)
UNIVERSITY OF NORTH CAROLINA.....	Mathematics: The Theory and Practice of Digital Computing	(2)
UNIVERSITY OF OKLAHOMA.....	International Studies	(3)
UNIVERSITY OF OREGON.....	Romance Languages	(4)
UNIVERSITY OF PITTSBURGH.....	Educational Psychology	(3)
UNIVERSITY OF RHODE ISLAND.....	Biological Sciences	(4)

UNIVERSITY OF SOUTH CAROLINA.....	Physics	(3)
UNIVERSITY OF TEXAS.....	Germanic Languages	(3)
UNIVERSITY OF VERMONT.....	Physiology and Biophysics	(2)
UNIVERSITY OF VIRGINIA.....	Economics of Underdeveloped Countries	(3)
UNIVERSITY OF WASHINGTON.....	Music	(2)
UNIVERSITY OF WISCONSIN.....	Russian Area Studies	(3)
UNIVERSITY OF WYOMING.....	Zoological Physiology	(3)
UTAH STATE UNIVERSITY.....	Zoology, Entomology, and Physiology	(4)
VANDERBILT UNIVERSITY.....	Comparative Literature	(4)
WEST VIRGINIA UNIVERSITY.....	Chemistry	(2)

In selecting the above programs to receive the first fellowships, the Commissioner and his Advisory Committee had to bear in mind two criteria specifically set up in the Act: first, that the program be a substantial addition to the Nation's graduate facilities for training college and university teachers; and, second, that it contribute to a wider geographic distribution of such facilities.

The Commissioner of Education administers Title IV through the Graduate Fellowships Section in the Financial Aid Branch, Division of Higher Education. J. P. Elder, on leave from his position as dean of the Graduate School of Arts and Sciences, Harvard University, is chief of the section.

TITLE V Guidance

TITLE V is divided into two parts, both designed for talent search and talent development. Part A, concerned with State programs, launches the search in the secondary schools, among the students. Part B, concerned with the professional preparedness of guidance specialists, launches it in colleges and universities, where such specialists are being trained.

Part A authorizes \$15 million a year for 4 years, in grants to State educational agencies for better guidance programs, including both testing and counseling, in the secondary schools. To share in the funds, a State must submit a plan to the Commissioner setting forth an expanded program of testing, guidance, and counseling in public secondary schools. Intent of the Act is that testing programs shall be carried into private schools also: for that reason, in States that have legal authority to test in nonpublic secondary schools, the State educational agency will include those schools in its testing program; but in other States the Commissioner will arrange for tests in those schools. For the first year the Federal Government will pay all costs of the expanded programs; thereafter Federal funds must be matched fifty-fifty.

Part B authorizes \$6¼ million for this fiscal year and \$7¼ million for each of the next 3 years to establish training institutes to improve the qualifications of people who are, or expect to be, engaged in counseling and guidance in the secondary schools. These institutes, either short term or regular session, will be operated by institutions of higher education under contract with the Commissioner. Individuals attending are eligible for a stipend of \$75 a week, plus \$15 for each dependent, if they are

engaged in or preparing for counseling and guidance work in public secondary schools; personnel in nonpublic secondary schools may attend but are not eligible for stipends. To receive a stipend, the individual applies to the institution, not to the Office of Education.

PART A—STATE PROGRAMS. Congress is being asked for a supplemental appropriation of \$2 million to see Part A of Title V through its first fiscal year. Funds available thus far are limited to \$5.4 million.

The Office has set no cutoff date, or deadline, for the submitting of State plans under this part of the Act, and plans are being processed as they come in.

Twenty-six States have submitted official plans. Seven of these have been approved; their shares of the funds now available are as follows (each State's allotment for the rest of this fiscal year of course will be increased to the extent that Congress appropriates supplemental funds):

Florida.....	\$113,730	Oklahoma.....	\$73,422
Illinois.....	275,639	Texas.....	301,019
Kansas.....	64,329	South Dakota.....	22,936
Missouri.....	123,094		

The 19 other official State plans are in various stages of the reviewing process, and many of these no doubt will have been approved by the time this issue comes off the press. They have been submitted by Alabama, Colorado, Connecticut, Idaho, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Montana, Nebraska, Nevada, New Mexico, New York, North Dakota, Oregon, Pennsylvania, South Carolina, and Tennessee. Each approved plan is considered to be effective as of the date when it was received in the Office in a substantially approvable form. Costs that the States may charge against their plans this fiscal year must have been incurred this year.

Part A of Title V, like Title III, is administered in the new branch in the Division of State and Local School Systems. It is assigned principally to the Guidance, Counseling, and Testing Section, headed by Frank L. Sievers, but the State plans and reports are reviewed in a section that serves both Titles III and V (see Title III).

PART B—INSTITUTES. Nineteen institutions of higher education have made preliminary agreements with the Commissioner of Education to operate federally financed counseling and guidance institutes this summer. On these the Government will spend an estimated \$760,000 of the \$2 million now available for fiscal year 1958-59 for this purpose.

But this is only part of what is contemplated with 1959 funds for Part B. The remaining \$240,000, when aug-

mented by a supplemental appropriation (\$1 million has been asked for), will make it possible for the Commissioner to contract for at least 40 institutes to be held this summer. Approximately 200 universities and colleges have expressed interest in participating in the program.

The institutes vary in both length and approach, but all address themselves directly to the task of identifying talent in high school students. Most are at the graduate level, and most of the students who enroll will have at least a bachelor's degree. Each institute is described briefly here:

BOSTON UNIVERSITY, from July 13 to September 4, directed by Dugald S. Arbuckle, professor of education. Will stress practical experience for its counselors.

COLLEGE OF THE CITY OF NEW YORK, from July 1 to August 7, directed by Dorothy Davisbald, 6 hours graduate credit. Leaders of national repute will conduct courses in aptitude measurement. Guidance policies will be reviewed against today's needs.

KANSAS STATE TEACHERS COLLEGE, from June 8 to July 17, directed by E. G. Kennedy, director of guidance service, 6 hours graduate credit. Will use a committee of State and local educators to select the counselors who will participate in the institute.

LOYOLA UNIVERSITY, from June 29 to August 8, directed by Robert C. Nicolay, assistant professor of psychology, 6 hours graduate credit. Will be concerned especially with counselor needs in both private and public schools in the metropolitan area of Chicago.

MARSHALL COLLEGE (West Virginia), from June 29 to August 7, directed by Clarke F. Hess, 6 hours graduate credit. Will combine the facilities of the psychological clinic with those of the laboratory high school, to provide extensive practical experience.

MICHIGAN STATE UNIVERSITY, from August 3 to September 4, directed by Walter F. Johnson, professor in education, graduate credit given. Will provide more effective guidance, testing, and counseling techniques for both public and nonpublic school counselors.

PURDUE UNIVERSITY, from June 8 to July 31, with 9 semester hours credit. A special activity will be trips to colleges employing college-trained specialists, and visits to inspect high school guidance facilities.

TEMPLE UNIVERSITY, from June 29 to August 7, directed by Roy B. Hackman, professor of psychology, 6 semester hours credit. Will offer both theoretical and practical training in the interpretation and uses of tests as well as in general counseling techniques.

THE GEORGE WASHINGTON UNIVERSITY, from July 6 to August 14, directed by Dean Mitchell Drees, 6 hours graduate credit. Expects to select its teacher counselors in cooperation with school superintendents and principals in the metropolitan area of Washington, D.C.

UNIVERSITY OF FLORIDA, from June 16 to August 7, directed by Ted Landsman, department of personnel services, 6 to 9 hours graduate credit. Plans to ask various community agencies to help identify able students.

UNIVERSITY OF KENTUCKY, from June 8 to July 31, directed by Marion R. Trabue, former dean, College of Education, Pennsylvania State University, 6 semester hours credit. Staff will be experienced members of college faculties who have specialized in testing, guidance, and counseling.

UNIVERSITY OF MINNESOTA, from June 15 to July 17 (applications and records required by April 1, participants notified by May 1), directed by Willis E. Dugan, professor of educational psychology. Plans to use counseling psychologists to help secondary-school counselors improve the quality of their help to students.

UNIVERSITY OF MISSOURI, from June 15 to August 7, directed by John L. Ferguson, College of Education, 8 hours graduate credit. Will emphasize the identifying of counselors skilled in recognizing talented students who probably should continue their education beyond high school.

UNIVERSITY OF PITTSBURGH, from June 22 to August 14, directed by John Geise, assistant chancellor for student affairs, graduate credit given. Will stress work in schools serving the industrial area of Greater Pittsburgh.

UNIVERSITY OF TOLEDO, from July 20 to August 28, directed by Robert Gibson, 7 semester hours credit. Will put special emphasis on counseling of parents. Plan of the institute was developed from information provided in an intensive cooperative survey of the secondary schools served by the University.

UNIVERSITY OF UTAH, 8 weeks, but exact dates still uncertain, directed by Phelon J. Melouf, 13 quarter hours graduate credit. Will put special emphasis on identifying and guiding youths who are potentially college material.

UNIVERSITY OF WYOMING, from July 15 to August 21, directed by Lyle L. Miller, 10 semester hours credit. Institute is planned primarily to give counselors now practicing in guidance programs in small schools an opportunity to upgrade themselves through intensive training.

WASHINGTON STATE COLLEGE, from June 15 to August 7, 10 semester hours credit, directed by Zeno B. Katterle, dean, School of Education. Will emphasize development of school and community leadership.

WAYNE STATE UNIVERSITY, from June 22 to August 15, 8 semester hours credit. Trainees will be selected from professional personnel in Detroit metropolitan area and southeastern Michigan.

A substantial part of each institute's budget will go for the stipends to public school personnel studying at the institute.

The Commissioner of Education administers Part B of Title V through the Counseling and Guidance Section of the Financial Aid Branch, Division of Higher Education. Ralph C. Bedell is the section chief.

TITLE VI Language Development

TITLE VI authorizes the Commissioner of Education to contract with institutions of higher education for two kinds of training programs in modern foreign languages. One is called an institute, where teachers and prospective teachers of modern foreign languages in elementary and secondary schools can improve their qualifications. The other is called a center, where instruction is offered in certain important but rarely taught languages and in certain related fields. The Title also authorizes the Commissioner to do research, either directly or through contract, on the teaching of foreign languages: (1) to measure the needs for improvement, (2) to find better methods, and (3) to develop specialized materials.

For institutes, the Act authorizes \$7¼ million a year for 4 years. Federal funds can be used to pay the full operating costs of an institute, either short-term or full-term. Any person who teaches a modern foreign language—or is preparing to teach such a language—in a public elementary or secondary school is eligible to get a stipend of \$75 a week, plus \$15 for each dependent, while he attends. No tuition or other fees are charged eligible students. Teachers in nonpublic schools may attend but are not eligible for stipends.

For centers and research the Act authorizes up to \$8 million a year for 4 years. For a center, the Federal Government will pay the sponsoring institution up to 50 percent of the cost of establishing and operating. To individuals studying to prepare themselves for college teaching or public service in one of the rarely taught languages, the Act provides for stipends and transportation.

PLANS have been completed for the opening of an 8-week language institute at the University of Colorado on June 22, 1959. Approximately 100 high school teachers of Spanish, French, and German will attend. The University already has announced that it will spend \$10,000 to expand its language laboratory facilities to accommodate the institute.

Federal funds for this institute will amount to about \$108,000, a little more than one-fourth of this year's initial appropriation of \$400,000. Three more institutes—and these are now in the negotiating stages—will exhaust the remaining funds; but the Office has applied to Congress for a supplemental appropriation of \$1.1 million, to make it possible for several other institutes to open this summer. Approximately 213 colleges and universities in 48 States, the District of Columbia, and Puerto Rico have expressed an interest in participating in the program. Interested institutions may submit official registration forms at any time; there is no deadline.

Regular-session institutes, running for a full academic year, will begin in the fall of 1959; but for the first year such institutes will be few and exploratory. Even thereafter the number is not expected to be large.

No contracts for centers have yet been negotiated,

chiefly because, for these programs, the Act has laid a prior responsibility on the Commissioner, namely, to determine which languages are the most "critical." To assist him in his determination, he has contracted with the American Council of Learned Societies to make a survey measuring the present and future needs of Government, business, industry, and education for languages now rarely taught. The Council reported its conclusions to the Commissioner the first week in February, and he is now making his decisions on what languages shall have top priority and what centers shall be the first to be contracted for. Contents of the Council's report will be announced shortly.

The Commissioner administers Title VI through the Section for Language Development in the Financial Aid Branch, Division of Higher Education. The section is directed by William R. Parker, Distinguished Service Professor of English at Indiana University, and his assistant, Kenneth W. Mildenerger, who is on leave from his position as associate secretary of the Modern Language Association and director of its foreign language program.

**TITLE VII
Commu-
nications
Media**

TITLE VII authorizes a total of \$18 million over a 4-year period (\$3 million in 1958-59 and \$5 million in each of the next 3 years) for a program to get the schools closer to the best educational uses for television, radio, motion pictures, and related media. The program divides into 2 parts: Part A, which provides for research into these uses; and Part B, which provides for dissemination of information about these media to schools and colleges, including information about the research findings.

Research funds are available under the title not only to agencies, organizations, and groups, but to individuals, through either grants-in-aid or contracts. All applications for grants-in-aid and all proposals to enter into contract must be reviewed (and approval must be certified) by an advisory committee of 14 members.

NEARLY 200 research proposals met the deadline of February 1, 1959, for review by the Advisory Committee on New Educational Media at its second meeting, March 5 and 6. The Committee individually now are reviewing these proposals, together with evaluations of each proposal made by Office of Education specialists and consultants in various parts of the country. At the meeting, a number of these proposals will be certified for approval; and immediately thereafter the processes of making grants and contracts will begin. The proposals being considered come from institutions, agencies, organizations, and individuals in 34 States (five come from State departments of education):

Alabama.....	3	Maine.....	1	Ohio.....	16
Arizona.....	3	Maryland.....	4	Oklahoma.....	2
California.....	7	Massachusetts.	3	Oregon.....	2
District of Co- lumbia.....	5	Michigan.....	6	Pennsylvania..	6
Florida.....	11	Minnesota.....	6	Tennessee.....	3
Georgia.....	2	Mississippi.....	1	Texas.....	11
Illinois.....	12	Missouri.....	7	Utah.....	2
Indiana.....	17	Montana.....	1	Vermont.....	3
Iowa.....	6	Nebraska.....	1	Washington....	4
Kansas.....	4	New Jersey... 3		West Virginia..	2
Louisiana.....	1	New York.... 15		Wisconsin.....	6
		North Carolina	4		

At its first meeting, on December 15-16, the Committee considered chiefly questions of policy and overall objectives. One of its major actions at that time was to review and approve the Commissioner's proposal that the first steps be taken in the direction of making clear just what information resources are available with regard to the new educational media. To that end, it set aside \$127,500 of the \$500,000 initially appropriated for Title VII for six pilot projects to collect and disseminate information; thus, its first commitments of funds were to Part B of the Title.

Funds for these six projects, which will be carried out by institutions of higher education, agencies, organizations, and individuals under contract with the Commissioner of Education, will be divided about as follows:

- \$75,000 Production and wide showing of a series of filmed reports on good teaching practices with the new media.
- \$12,500 Conducting a small number of institutes and workshops.
- \$15,000 Developing and publishing informational materials about educational practices with the new media.
- \$5,000 A series of studies to determine ways and means of getting more adequate information about available audio-visual materials directly to teachers.
- \$5,000 Preparing exhibits and displays for professional and public meetings.
- \$5,000 A study of the possibilities for establishing a new educational media research information service within the Office of Education.

The Office estimates that a total of \$1½ million is needed to carry work under Title VII through June 30, 1959, the end of its first fiscal year, and has therefore asked the Congress for a supplemental appropriation of \$1 million.

The Commissioner administers Title VII through the Communications Media Research Branch, established last fall in the Division of Statistics and Research Services. The section is under the direction of Kenneth D. Norberg.

TITLE VIII**Area****Vocational Programs**

TITLE VIII, which aims at alleviating the Nation's shortage of technicians, authorizes \$15 million a year for 4 years for "area vocational education programs" of less-than-college grade. These programs will provide a much more highly technical kind of training than has generally been offered in vocational education programs at that level; they will prepare skilled workers for such fields as electronics, instrumentation, aviation and tool design.

To receive Federal funds for these programs, a State must submit a plan to the Commissioner of Education—a plan which actually is a new part of the vocational education plan it has already submitted under the George-Barden Act. Federal funds must be matched by State or local funds, dollar for dollar.

BY THE FIRST of February all but a few States had submitted plans, either tentative or official, for area vocational educational programs. There was no cutoff date to meet, and plans were processed as they came in. Thirty-eight States, the District of Columbia, Puerto Rico, and Hawaii had had their plans approved, and had been certified to receive payments on the first half of their allotment for the fiscal year ending June 30, 1959 (each State's plan is considered effective as of the date on which it was received in a substantially approvable form):

Alabama	\$52,353.50	Missouri	\$52,851.50
Arizona	9,215.00	Montana	10,098.50
California	85,225.00	Nebraska	21,721.00
Colorado	15,542.00	Nevada	8,613.50
Connecticut	16,410.50	New York	106,763.00
Delaware	8,613.50	Ohio	80,550.50
Florida	27,843.50	Oklahoma	33,410.50
Georgia	55,787.50	Oregon	19,123.50
Idaho	10,939.50	Pennsylvania	96,540.00
Iowa	43,063.00	South Carolina	38,349.00
Illinois	78,427.00	Tennessee	55,793.50
Indiana	48,870.50	Texas	93,560.00
Kansas	27,687.50	Utah	8,613.50
Kentucky	53,294.00	Vermont	8,613.50
Louisiana	37,096.00	Washington	26,071.00
Maine	11,532.00	Wisconsin	46,551.50
Maryland	22,446.00	Wyoming	8,613.50
Massachusetts	32,308.00	District of Colum-	
Michigan	64,434.50	bia	9,234.00
Minnesota	43,766.50	Hawaii	8,897.00
Mississippi	49,536.00	Puerto Rico	46,977.00

On January 22 the Office held a conference in Washington of representatives of approximately 50 organizations to discuss Title VIII. Among the participants were representatives of professional organizations, persons now connected with going programs of technical training, and persons from military establishments and specific industrial fields in which technicians are needed. The objectives and procedures for the area vocational education programs were outlined; and the representatives of the organizations were requested to raise questions and make

suggestions as to ways in which the programs could most effectively meet the Nation's needs for technicians to effectively meet the Nation's needs for technicians.

Thus far Title VIII has been administered in the office of the director of the Vocational Education Division; but a branch within that Division will eventually be established to administer the Title.

**TITLE X
Statistics
About
Education**

THE ULTIMATE goal of Title X (Section 1009) is to improve educational statistics for the Nation as a whole. Beginning in the fiscal year that ends on June 30, 1959, and for 3 years thereafter it authorizes "such sums as Congress may determine" to help the States be more prompt, accurate, complete, and reliable in their collecting and disseminating of facts and figures about education.

To get a Federal grant under Title X a State must submit a plan to the Commissioner of Education, showing that its proposed program is either a new one or an expanded one. Each State is free to choose the shape and direction of its own improvement, as long as it fulfills the purpose of the Title. The top limit on what a State may receive in any one year is \$50,000; and it must match each dollar with one of its own.

TWENTY-FIVE States have submitted plans to the Commissioner: 20 are official; 5, tentative. Ten of these plans have been approved. Together, the 10 States plan to expend \$221.156 this fiscal year to match the \$221.156 they have asked to receive from the Federal Government, making a total of \$442,312 for improved statistical services before the year is out. Federal costs for each approved plan are estimated as follows:

Connecticut	\$2,359.50	New York	\$50,000.00
Florida	50,000.00	Oregon	8,152.00
Iowa	13,700.00	Pennsylvania	15,914.00
Nevada	5,000.00	Rhode Island	26,100.00
New Mexico	12,430.00	Texas	37,500.00

Plans submitted thus far vary widely in detail but all are strikingly similar in their major objectives. All, for instance, propose to evaluate their present statistical services to find the weak spots that need attention; and all call for the employing of staff well-trained in educational statistics. Most plans propose to install machinery to speed up the processing of data.

More plans are expected to arrive shortly; in a few days the number submitted is likely to reach 40. All States have expressed an interest in participating.

The Office estimates that at least \$1 million is needed to carry Title X to June 30, 1959, and has asked Congress for \$600,000 to supplement the initial appropriation of \$400,000.

The Commissioner of Education administers Title X through the State School Systems Section of the Administration Branch, Division of State and Local School Systems. James E. Gibbs, Jr., is chief of the Section.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

(For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.)

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- 1954-56. Ch. 4, Sec. 1. STATISTICS OF HIGHER EDUCATION: FACULTY, STUDENTS, AND DEGREES, 1955-56, 60¢.

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513. FALL 1957 STATISTICS ON ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULLTIME PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS, 35¢.

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517. HIGHER EDUCATION PLANNING AND MANAGEMENT DATA, 1957-58, 60¢.

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Miscellaneous

ADMINISTRATION OF P.L. 874 AND 875, 7TH ANNUAL REPORT OF THE U.S. COMMISSIONER OF EDUCATION, JUNE 30, 1957, 75¢.

1957 ANNUAL REPORT, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, 75¢.

PROGRESS OF PUBLIC EDUCATION IN THE USA, 1958-58, 50¢.

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SCHOOL LIFE

OFFICIAL JOURNAL OF THE * * * * *

OFFICE OF EDUCATION

International Issue

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March 1959

NDEA—FIRST STEPS

IN THE effort to launch the National Defense Education Act of 1958, the Office of Education has utilized three approaches: (1) The maximum involvement of leading educators in program planning, (2) the transfer of key Office of Education administrators to NDEA programs, and (3) the wide employment, on the long-term loan, of outstanding experts from leading educational institutions.

Since the National Defense Education Act went into effect on September 2, 1958, more than 500 leading educational officials and consultants, including all of the Chief State School Officers of the 48 States and most of the Territories, and some 150 heads of national organizations interested in education, have been involved in shaping guidelines and regulations for implementing the Act in the spirit and substance intended by the Congress. In addition, a detailed explanation of the Act has been made to some 4,000 key administrators in higher education. In this same period, 12 of the chief career administrators in the Office of Education have been transferred to leadership positions in the NDEA programs, and about 30 outside experts have been recruited, with the full cooperation of their employing institutions, for long-term assignments in the NDEA programs.

Our intensive and extensive effort to consult with heads of State departments of education, with professional organizations and institutional leaders throughout the country as we have worked together to resolve issues and develop plans has consumed a great deal of time. But deadlines are being met and plans are already being activated.

Moreover, the time and precautions taken for wide consultation will prove sound in the long run. They will forestall the errors and misunderstandings which inevitably crop out when a program is hastily implemented through shortcuts in planning and procedure. But more important, these efforts have placed a solid foundation under the Act and have established sound procedures for continuing partnership.

Lawrence G. Dertnick

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . ARTHUR S. FLEMMING, <i>Secretary</i>		and programs affecting education. Published monthly, September through May. Printing approved, Bureau of the Budget, July 28, 1958. Contents not copyrighted. Subscription: Domestic, \$1 per year; foreign \$1.50; 1-, 2-, and 3-year subscriptions available. Single copies, 15 cents. Send check or money order (no stamps) to the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.
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JOHN H. LLOYD <i>Managing Editor</i> THEODORA E. CARLSON <i>Editor</i> CATHERINE P. WILLIAMS <i>Assistant to the Editor</i>		

From November 5 to December 5, 1958, UNESCO held its 10th General Conference, in Paris.

Two representatives of the United States at that conference here present their impressions: One sees it as a whole, a world in microcosm; the other moves in closer, to show how it operated in one of its "substantive areas"—education.

UNESCO AND THE UNITED STATES



ROBERT H. HAMLIN, *assistant to the U.S. Secretary of Health, Education, and Welfare, was an official delegate to the 10th General Conference. Here he shows UNESCO as an organization "come of age"—an organization with a past, a present, and a future.*

AFTER its occasionally stormy, sometimes uncertain, and frequently modified early phase of development, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) has come of age: it now has a role of significance in national and international cultural, economic, and social development.

Its massive, immeasurably modern new Paris headquarters boldly symbolizes this growth to strength. The milling, sharing, learning delegates to its General Conference in 1958—hundreds of world leaders from 81 nations—unmistakably prove UNESCO's gradual growth to international recognition. Its sound, substantial progress in the clarity, coherence, and consolidation of its programs and in the use of its moderate resources significantly demonstrates its achievement.

Measured against the long perspec-

tive of history, UNESCO's potential, without a doubt, transcends its past accomplishments. But UNESCO convincingly demonstrates that men, despite their diversity, despite their preoccupation with immediate demands and needs, despite their limited vision of their destiny, can plan and work together; can at times put aside possessiveness to understand both the idealism and the practicability of cooperative, multinational endeavor.

UNESCO quite possibly would not exist today—and certainly would not be what it is—if it were not for the original and continued support of the United States.

Even though the American public at times may have been uncertain in its attitude toward UNESCO, those individuals most responsible for our country's foreign policy decisions have always upheld strong, active United States participation in

UNESCO. Our educational and scientific leaders, who early saw the value of international cooperation, have been preeminent in their support. The Department of State shares credit for the American role in UNESCO's development—a fact not often sufficiently recognized.

A citizen of the United States can be proud of the considerable contribution his own country has made to UNESCO.

Idealism and realism—two strong and sometimes apparently unharmonious American qualities—are the foundations for strong, positive United States support of UNESCO: idealism in our search for peace and a world where all men are truly equal; realism in our recognition that cooperation with other nations and peoples is a requisite to our own survival.

In our modern-day world, a nation in the position of world leadership, voluntary or involuntary, must constantly recognize the absolute necessity of taking action with other nations if it is to maintain itself. The absorptive power of American beliefs, the ability of these beliefs to command a high degree of assent from populations of disparate blood, language, and tradition within our

own borders, is probably the outstanding characteristic of our American democratic system—and the source of its inner strength. But it is important for us to realize that this characteristic, vital though it is, in and of itself is insufficient to assure our growth, the perpetuation of our form of government, and the preservation of our way of life.

It takes an extra dimension of vision to see beyond our inner, immediate circle of interest. Fortunately for both the world and ourselves, we in the United States are realizing with increasing clarity the value of our country's strong participation and leadership in UNESCO's development as an instrument of international cooperation.

Growth of UNESCO

Membership

Since its inception, UNESCO has appealed to the world of advancing mankind and has been recognized as an international tribunal of increasing impact; and these facts are reflected in its membership. It now has the same number of members as the United Nations, though the composition of membership differs slightly.

UNESCO, therefore, is now a forum of almost all the nations of the world. And as more countries gain their independence in the next decade, UNESCO will continue to grow, for one of the first important acts of any nation is to apply for admission to UNESCO.

Analysis of present UNESCO membership makes one fact cogently clear: in the years of UNESCO's growth, the membership has significantly changed, not only in number but in characteristics.

Charter members in 1946 included 7 countries from the European continent, 6 from the British Commonwealth, 5 from the Middle East, 2 from the Far East, and 8 from the

Americas. The present roster consists of 16 nations from Western Europe, 10 from Eastern Europe, 4 from the old British Commonwealth, 12 from the Near and Middle East, 12 from the Far East, 7 from Africa, and 21 from the Americas. The Soviet Union did not join until 1954.

With the new members, new communities of interest have appeared: nations have alined themselves with increasing frequency into flexible, shifting groups supporting or opposing specific issues. Among these polarized groups are countries, such as those of Western Europe, which expect UNESCO to emphasize scholarly, intellectual cooperation and growth, as opposed to those who seek technical assistance to promote the development of their less well-evolved educational and scientific life. The countries who are assessed for the major share of UNESCO's expenses (four members—the United States, the Union of Soviet Socialist Republics, the United Kingdom, and France—contribute almost 60 percent of the budget) may often have fiscal policies inconsistent with the desires of the large majority of nations paying only a limited share. On other issues, nations act in geographic or ethnic groups, as a part of Europe, Latin America, the Arab world, Africa, or South Asia. On issues with political overtones, the communist countries are frequently opposed to the Western democracies.

Program

Any successful international organization must first reconcile the different points of view and interests of its member nations and groups of nations. This process of reconciliation—often highly complex, sometimes cumbersome and frustrating—is no more and no less than democracy in action. With the adding of new members and their interests, it is a process that is inevitably chang-

ing the content and direction of UNESCO's program.

A few significant program permutations may be summarized here.

Pleas of the economically less developed countries have increased in volume and urgency: these demands, particularly in education, are now recognized more directly and substantially in the UNESCO program, a reflection of the growing influence of the non-western countries of Asia, the Middle East, and Africa. The original catchall, almost chaotic, frequently misconstrued UNESCO concern with means for directly contributing to universal peace has, therefore, been replaced by a greater emphasis on the specific needs of individual states. This evolution was hastened after 1954, when delegates to the General Conference (the legislative body of UNESCO) and members of the Executive Board were required to be governmental, not individual, representatives.

Along with member states, international nongovernmental organizations (NGO's), important and influential cogs in UNESCO's programs, have increased their activities, aspirations, potentials, and financial needs (approximately 125 NGO's now have consultative status with UNESCO). UNESCO grants some of these organizations, such as the International Congress of Scientific Unions, substantial "subventions," all of which have been well-applied, but whose use is determined by the NGO, not UNESCO. The number of subventions given to NGO's has increased, but not at a rate proportional to grants to member states or always in a manner satisfactory to the NGO's. Clearly, the pleas of member nations have received preference in line with their influence. Although their ultimate objectives are the same, member states and NGO's have a disparity of immediate interests that remains a schismatic force between them.

UNESCO's favorable response to requests for assistance in economic and intellectual development, both governmental and nongovernmental, inevitably requires additional financing. This necessity has been acknowledged: UNESCO's budget for the 2 years 1947 and 1949 was \$14.6 million; for the 2 years 1959 and 1960 it is \$34.4 million. This looks like a large increase, but in terms of UNESCO's responsibilities it is quite modest.

A crescendoing demand for reorganization of the program and clearer definition of methods to accomplish UNESCO's objectives is a natural result of the growing diversity of requests and interests, the proliferation of projects, the increasing need for an optimally effective program reflecting staff and budget limitations, and the evolving concern of the major financial contributors over the expanding budget.

The multitudinous programs through which UNESCO serves the cause of people have now been divided into six major functions, each with a separate "department" in the organization's Secretariat: Education, natural sciences, social sciences, cultural activities, mass communication, and technical assistance. These functions, in turn, have been related and concentrated in part into three "major projects" for purposes of effectiveness, financing, and world appeal: Extension of Primary Education in Latin America, Scientific Research in Arid Lands, and Mutual Appreciation of Eastern and Western Cultural Values. Through these priorities of interest, UNESCO is welding its activities into a program of greater substance and clarity.

The admission of the USSR to membership in 1954 has increased and highlighted UNESCO's essentially "political" orientation. The USSR, undoubtedly impressed by the swelling number of economically less de-

veloped and uncommitted nations who were turning to UNESCO for assistance, realized it could not afford to remain outside an organization that, with United States leadership, had become a major forum for political discussion in the struggle against communist ideology.

The USSR's entrance into UNESCO has unquestionably increased the time and effort devoted to political issues; it has affected the consideration of program issues and substance, much to the consternation of many people. But the time and effort given to political questions are necessary and valuable, for mankind unfortunately has not reached the stage of development and mutual trust in which its decisions can be based realistically and solely on a binding, altruistic mutual understanding among its members. International growth will require, now and for a considerable time to come, the consultation of national governments as representatives of their people, a system that is the essence of political determinism.

Future Role of USA

Almost certainly UNESCO has not reached its maximum capabilities, or the level which world society needs or will support. It is now entering an era of great potentiality for furthering the means of man's advance and bringing these means to bear more universally on his problems.

One fact is manifestly apparent: the anticipated growth of UNESCO necessitates continued strong United States participation, support, and leadership in the organization. There is no turning back from the path we have established for ourselves.

In view of this inescapable conclusion, the following principles are suggested as guidelines for future United States policies and actions:

★ Man's most important investment is in man himself, for his progress is

related to the emphasis he gives to the development of his own capacities and abilities; for the continued advance of man there are no resources as important as human resources.

★ This investment must be in part for long-term, intangible, and even unforeseeable returns; immediate, tangible goals will require a large part of the increased effort and funds, but they by themselves constitute shortsightedness.

★ International organizations such as UNESCO can accomplish objectives which, although in the interest of the United States, are beyond its capabilities when working alone: Intellectual and cultural cooperation, regional planning, financing of projects from multiple sources, and promotion of actions restricted by prevailing bilateral foreign policies may at times be feasible only through international organizations.

★ The United States program of aid to other nations, regional groups, and international organizations, including UNESCO, should be considered necessary and permanent, at least in terms of decades: whether the world's emerging peoples will turn to communism or to democracy will be influenced heavily by the effort the industrialized countries of the West are prepared to put forth in promoting intellectual cooperation and helping the less developed areas achieve an adequate rate of economic growth.

★ We must strike a planned, inter-related balance between bilateral assistance to other individual countries and multilateral assistance to regional and international organizations such as UNESCO: in this balance the substantial proportion of aid will remain bilateral, but an increasing share should be multilateral, supplemented by integrated bilateral assistance.

★ Effective future development and operation of our foreign aid programs require personnel specifically trained

for *career* service in other countries and international organizations—people with technical knowledge, fluency in foreign languages, understanding of the culture of the working environments, and ability to subordinate per-

sonal interests to a cause. In short, we must use our ablest people if we are to succeed in our efforts to assist other nations and groups of nations. ★ A refined, judicious, flexible, and expanding United States perspective

of its participation and leadership in UNESCO—in accordance with these general principles—should contribute substantially to our vital, continual search for universal progress, peace, and security.

UNESCO AND EDUCATION

BESS GOODYKOONTZ, *Director of International Educational Relations, Office of Education, who served as one of the advisers at the 10th General Conference, here shows how, despite the great diversity of their interests and philosophy, 70 countries reached agreement on UNESCO's program for education.*

UNESCO's 1958 general conference was attended by about 800 representatives from 70 countries, with delegations ranging from 1 member to more than 30. A fine spirit of friendliness prevailed. Some members had attended as many as five previous conferences and were already well acquainted with each other when the sessions began. Although the delegates represented all of UNESCO's substantive interests—education, social sciences, natural sciences, mass communication, and cultural activities—this conference had the largest and most impressive international gathering of public officials in education I have ever seen. Half of UNESCO's member states, 35 nations, had sent their ministers of education or their deputy or vice ministers; fifteen others had sent members of their education ministries, many of them the directors of international educational relations; and nine more had included educators in their delegations. In fact, only eight

delegations included no educators.

Educators played important roles in the conference. The Minister of Education of France, M. Berthoin, was the effective president of the conference. Dr. Beebe, New Zealand's Minister of Education, was chairman of the highly responsible Program Commission. Dr. Weeden, Director of the Office of Education, Commonwealth of Australia, was particularly active in the Education Working Party. Others who played important roles included the Minister of Education of Turkey; the director of teacher training, Ministry of Education, Thailand; the parliamentary secretary of education, Great Britain; and Sir Ben Bowen Thomas, permanent secretary, Welsh Department, Ministry of Education, who now becomes chairman of the Executive Board of UNESCO.

A Smooth Operation

The pattern of Conference operation was simple, orderly, and reas-

suring. Even for such a large group, meeting for the first time in UNESCO's new headquarters, everything operated smoothly. Each of UNESCO's substantive areas had a working party. The one on education was the largest, including delegates from 46 countries, probably more than 150 persons. Though it met for seven sessions totaling more than 20 hours, its very size precluded much discussion or real exchange of experience and opinion.

Each working party had two assignments: (1) To review the Director General's proposed program and budget for 1959-60 and (2) to review the draft proposals for new programs, all of which had been submitted to UNESCO at least 6 weeks before the general conference convened, early enough to give all member countries time to react. From the working party the proposed program went on to the Program Commission, a super group representing most of the countries, which compared proposals made by all working parties, examined cost estimates, and formulated a final total program to present for action by the Plenary Session. This final document becomes the program and budget guide for the next biennium.

Lineups

Working relations among delegations showed some interesting lineups. African and Asian countries worked actively as groups on matters of special interest to them. As usual, there were the lineups of countries

emphasizing UNESCO's *cultural role* and of those interested in *technical assistance* to underdeveloped countries. The United States, to emphasize a proper combination of both roles, voted consistently for projects involving literary translations, cultural history, art, and so on, and also for programs of technical assistance and development. On most educational matters we found no major difference of opinion between the USSR and the USA: disagreement was usually on matters other than on the substance of education.

Chief Topics

As the delegates worked to define UNESCO's program in education for the next biennium, their discussions focused attention on a number of major areas. I have selected some of the major ones to mention briefly here.

Regional programs for Africa

The Proposed Program recommended a study of educational needs in Africa. To this end, it suggested (1) an inquiry into the need for secondary schools, including vocational and technical education; (2) a seminar for administrators of technical schools; and (3) a seminar on secondary education, including both general and technical education and emphasizing the access of women to both types.

Throughout the discussion of the project, delegates assumed that this exploratory work might lead to approval at the next General Session of a major project on African education. Representatives of African countries expressed some concern over the fact that the proposed study emphasized secondary education, when, in their opinion, primary education needs are paramount. During extensive discussions, the question was raised as to how far a country can go with primary education programs only.

Is there not a need for a country to study its whole range of educational needs when the graduates of its primary schools insist on entering secondary education, but have no secondary or technical schools to attend; when its vocational education is not advanced enough to turn the wheels of industry and to support an extended education program; or when its secondary education is still limited to the college preparatory curriculum? This point of view convinced the delegates, and they endorsed the study of the comprehensive program.

The questions raised in connection with the study of education in Africa are of interest to the United States both for domestic and for international programs. There is no place to stop in education. A stepped-up program of primary education leads to social upheaval if the avenues upward are not broadened and made available to all.

Opportunities for girls and women

The program proposed for expanding educational opportunities for girls and women had three emphases: (1) Cooperation with the United Nations in its activities on the status of women; (2) participation of women in the African program; and (3) special studies and documentation on the problem.

The United States has consistently recommended more attention to this aspect of UNESCO's program, and it proposed to commend UNESCO for increasing its attention to the matter. Excellent speeches were made by delegates from the United Kingdom and Denmark, seconded by the United States, to the point that all member countries and UNESCO itself should see that opportunities for girls and women are opened in all fields and levels of education. Statistics of enrollment around the world do not support any comfortable feeling that op-

portunities in education are now open to all.

Discrimination in education

For the past 3 years, UNESCO has cooperated in the study being made by the United Nations Subcommittee for the Prevention of Discrimination and the Protection of Minorities. Starting out with a major interest in racial discrimination in education, the Subcommittee has moved rapidly into a consideration of all forms of discrimination in education. The Subcommittee's report and recommendations were referred to UNESCO as the competent body for action and implementation.

A proposal was made to the working party that UNESCO prepare for all member states a series of recommendations and suggest techniques for eliminating all kinds of discrimination in education. But some countries that favor regulation of educational activities rather than freedom of action urged that UNESCO be authorized to prepare a convention or a treaty on the subject. Other countries, including the United States, objected to a convention. Canada, for instance, objected on the grounds of its having no central authority over education. After much discussion, the delegates reached a compromise and the working party accepted the point of view that both recommendations and conventions are respectable; that countries may find one or the other more effective for their own situation; and that, therefore, UNESCO should provide both forms of cooperative action. In the next 2 years UNESCO will draft both recommendations and a convention on broad aspects of discrimination in education for review by the member countries.

Out-of-school education

The out-of-school education section of the program evinced much interest

on the part of delegations, but created two minor revolts—one over the use of the term “fundamental education” and the other over finance.

For some of the delegates from the so-called “under-developed countries” the term “fundamental education” has assumed some coloration of discrimination, or disparagement, and they brought a resolution to the floor requesting discontinuation of the term in all UNESCO publications and activities. Delegates from countries believing that UNESCO has rendered a real service in pointing out that the school has a responsibility for improving the lives of the people within its sphere of influence, such as the United States, were unhappy about this reaction. But the feeling that “fundamental education” is for the under-privileged and “adult education” for advanced countries, was so strong that some change seemed desirable. Delegates therefore passed a resolution recommending that the Director General be invited to discontinue the term as rapidly as possible and to find some other designation that would be universally acceptable. There is reason to believe that objection may be to the type of education as well as to the term and that the centers of fundamental education in the field may come under critical survey.

The other revolt was over the small amount of money available to UNESCO for adult education programs. Delegates complained about not enough staff, not enough money for program activities, not enough understanding and support of the whole field of adult education. The United States delegation recommended additional funds, particularly for the proposed world conference on adult education. Many other countries agreed, and an additional \$30,000 was voted for the conference, to be held in Canada sometime in 1960.

Arab and Asian needs

While the United States was preparing for the General Conference, President Eisenhower, in a major address, stated that the United States should take action to assist Arab countries with their social and economic problems in any possible way. Within the required time limit the United States notified the Director General of UNESCO that it would propose that UNESCO make an analysis of the educational needs of Arab countries and provide an opportunity for educational planning country by country and for the region as a whole. In consultation with representatives of the Arab states, the proposal was well received. Accordingly, the United States delegation presented a draft resolution which the Arab delegation promptly supported, calling for a study and program planning in Arab countries, looking toward a possible major project in this area in the next biennium. Funds were allotted, and it appears that this much needed activity will get under way promptly.

At the same time, India presented a draft proposal for a similar study of the educational needs in Asian countries; and this, too, received strong support, not only from the countries involved but from widely scattered parts of the world.

Delegates favoring each proposal referred to the outstanding success of UNESCO's major project in Latin America. Possibly the best evaluation the General Conference heard of that project was the demand from other parts of the world for something much like it.

UNICEF aid to primary education

At its board meeting in September, UNICEF had discussed the possibility of extending its activities into the educational field: as it has contributed

greatly to the eradication of hunger and illness, so now it would assist in the eradication of ignorance. It proposed a joint study by UNESCO and UNICEF of the areas of possible cooperation. Accordingly, UNESCO's general conference passed a resolution authorizing UNESCO to collaborate with UNICEF on such a study. If the executive boards of the two organizations agree to the findings, UNESCO has authority to cooperate with UNICEF in carrying out the recommendations. In its preliminary prospectus, UNICEF stated that its aid would be limited to such things as equipment—visual aids, for example—and fellowships and stipends for training teachers; that it would not contract with petitioning countries until it had UNESCO's approval; and that in all educational activities UNESCO would be involved, from the planning stage on. As in cooperation between UNESCO and the World Health Organization or the Food and Agriculture Organization, functions of the two organizations will be identified before cooperative programs can be developed.

Nongovernment Organizations

Representatives of nongovernment organizations were much in evidence at the conference both at briefing sessions held for them on various issues of the program and at social occasions at which they met members of the secretariat and delegations. During consideration of subventions, delegates showed great interest in some of the educational organizations. For some they showed strong opposition, for others, strong support. Among those they supported is the Institute for Education at Hamburg, an agency which holds seminars on special topics, issues monographs (such as the recent one on educational measurement), and publishes a journal for

Continued on page 11

Financing Public School Buildings

By CLAYTON D. HUTCHINS
Chief, School Finance
and ELMER C. DEERING
Specialist in Financing
School Capital Outlay

EXPENDITURES for new school buildings have been increasing rapidly in recent years, but the shortage of classrooms continues to plague boards of education and school administrators. In response to persistent shortages in all the States, school officials must maintain high rates of construction for several years before the crisis will be passed.

During the 7 years covered in a forthcoming Office of Education report, *Financing Public School Facilities*, total expenditures for new classrooms have steadily risen, from \$1.3 billion in 1950-51 to \$3.0 billion in 1956-57. In 1950-51 these expenditures were only 44 percent of the figure reached in 1956-57, but each of the next 5 years brought them closer: to 52 percent in 1951-52, 67 percent in 1952-53, and eventually to 87 percent in 1955-56.

The relation of each year's figures to the figures in 1956-57 is shown in the 5 charts accompanying this article; dollar amounts appear in the table below. Expenditures thus reported represent capital outlay for new sites, buildings, equipment, and furnishings, and include funds provided for these purposes from current revenue and building reserves, as well as borrowed funds.

Money for these expenditures comes from various sources. For the whole 7-year period reported here, 79 percent were *local* funds, obtained by boards of education from resources within the local school districts; 9 percent were *State* funds, supplied out of State revenues and allotted to the local school districts; and 4 percent were *Federal* funds, appropriated chiefly to provide new classrooms in federally affected school districts. The remaining 8 percent were expended by local and State school building authorities—nonprofit corporations authorized by law to finance and construct school buildings for local school districts. The districts, after paying the authorities rent for

a specified time, may eventually become the owners of the buildings.

For at least two reasons, reports of expenditures for school facilities have been incomplete in a number of States for several years:

First: Information about the activities of school building authorities is not always available in the records of the public schools or State departments of education. Rental payments, since they are made by the school officials, are reported through the usual channels: but expenditures by the authorities have usually been excluded from listings of expenditures for public education.

Second: In States where boards of education are not fiscally independent, school bonds are often issued by nonschool government agencies, and school buildings are constructed by the town, township, county, or city government. Boards of education, therefore, in making financial reports to their State departments of education, are likely to report their own transactions only and not to include the expenditures for school buildings and school debt service under the control of nonschool agencies.

EXPENDITURES FOR PUBLIC SCHOOL CAPITAL OUTLAY, BY SOURCES OF FUNDS,
SCHOOL YEARS 1950-51 TO 1956-57

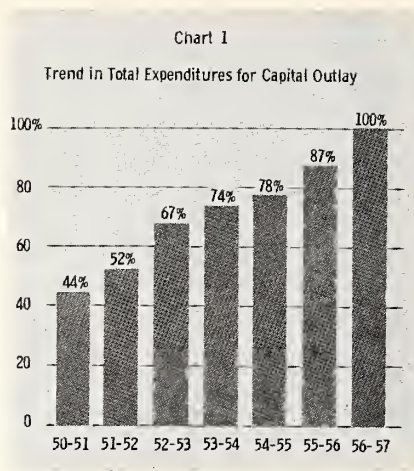
SCHOOL YEAR	TOTAL EXPENDITURES	LOCAL FUNDS	STATE FUNDS	FEDERAL FUNDS	FUNDS FROM SCHOOL BUILDING AUTHORITIES
1950-51	\$1,318,820,923	\$1,167,732,778	\$126,100,047	\$3,959,098	\$21,029,000
1951-52	1,570,327,806	1,260,882,693	196,673,859	46,912,254	65,859,000
1952-53	2,007,965,916	1,452,708,859	211,383,580	125,599,204	218,274,273
1953-54	2,212,735,053	1,715,886,152	183,670,466	109,083,187	204,095,248
1954-55	2,323,509,681	1,899,990,515	167,390,099	126,624,750	129,504,317
1955-56	2,618,582,198	2,114,222,716	200,761,842	92,237,816	211,359,824
1956-57	2,995,259,789	2,336,131,827	255,189,177	70,174,218	333,764,567
TOTAL	\$15,047,201,366	\$11,947,555,540	\$1,341,169,070	\$574,590,527	\$1,183,886,229

In an attempt to fill these gaps, the Office of Education has sought further information about the funds expended for public school facilities by local and State school building authorities and by cities, towns, counties, and other nonschool subdivisions. Its findings are included in the table; but, although the figures are reasonably complete, they may not include *all* expenditures by school building authorities, particularly the local authorities, or *all* expenditures by nonschool agencies. Because of the supplemental information gathered for this report the figures may vary in some respects from those in the regularly published biennial survey reports of the Office of Education.

Total Expenditures

About one-quarter of all money spent for public school purposes in the 7 years 1950-51 to 1956-57 is for capital outlay. Calculations for earlier years, based on Statewide averages extending over long periods of building activity, show that about 15 percent of all school expenditures generally are used for this purpose. The present rate of 25 percent or more can be viewed as compensating for the depression years and for the war years, when the expenditures for school plant facilities sank to 11.4 percent and 6.1 percent respectively.

To eliminate the backlog of requirements, to build for increasing enrollments, to provide the classrooms needed in new locations because of district reorganization and population movements, and to meet the demands of obsolescence, local and State school officials are approving new school debts for construction at a pace that will claim large proportions of available tax revenues in future years. State legislatures are providing some funds and the Federal Government has recognized a responsibility to help with school construction, but the latter

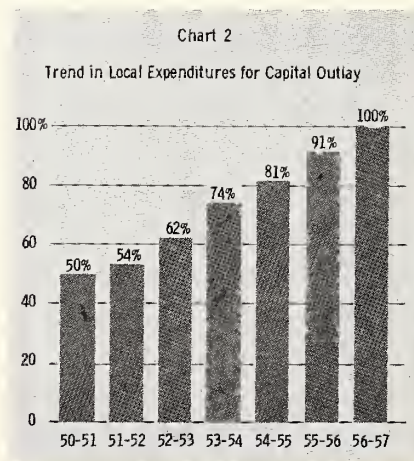


has limited its assistance chiefly to those districts reporting increased enrollments as a result of Federal activities in their vicinity.

Local Funds

Most money for school construction is obtained within the local school administrative units—from current revenues set aside for that purpose and from the sale of local school district bonds.

For the period from 1950-51 to 1956-57 expenditures from local sources have continued to show a



steady growth: by 1956-57 the local funds expended for capital outlay were about twice as large as they had been in at the beginning of the period. The *proportion* of funds ob-

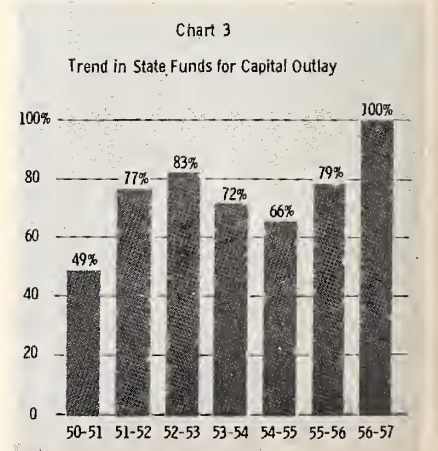
tained from local sources, however, has actually declined.

State Funds

State legislatures have also recognized the critical situations occasioned by the shortage of classrooms in recent years and by grant or loan programs have helped local administrative units to finance construction. Over the 7-year period a total of 59 State grant or loan programs have been operating in 35 States and 3 outlying parts of the United States. Of the 43 grant programs, 29 provide funds for capital outlay, 6 for debt service, and 8 for both. Of the 16 loan programs, 14 lend for capital outlay and 2 for debt service.

This grant and loan assistance is included in the table under "State funds." Eventually the loaned funds will be repaid to the State, and thus the ultimate amount of State assistance will probably be somewhat less than the amounts listed, even though in future years State funds may be granted to help the local districts repay the loans.

Assistance from State funds, however, seems uneven. As chart 3 shows, by school year 1952-53 State funds were 83 percent of the figure they were to reach in 1956-57, but the next year they dropped to 72 percent, and then dropped again to 66 percent before taking another upward turn.



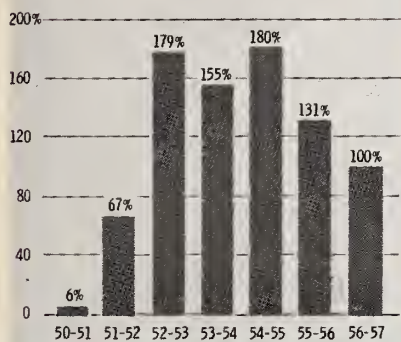
Federal Funds

Federal funds for the construction of school facilities, allocated chiefly to federally affected school districts, have fluctuated widely. Variations are largely due to changes in the number of districts qualifying, the time necessary for programs to begin operating, and the classroom shortages in districts overburdened because of Federal activities.

In the last year of the period here under consideration, Federal expendi-

Chart 4

Trend in Federal Funds for Capital Outlay



tures for capital outlay were at their lowest point since 1951-52. In 1954-55 they had been at their highest: 180 percent of the figure in 1956-57.

Authority Funds

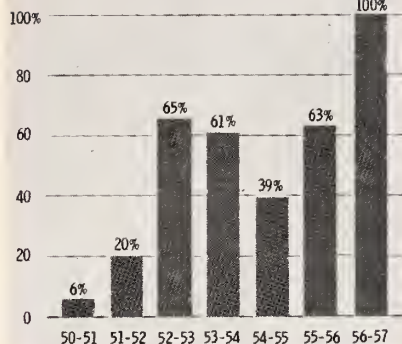
Six States have reported expenditures by State or local school building authorities to provide new classrooms: Georgia, Indiana, Kentucky, Maine, Pennsylvania, and Wisconsin.

The large rise in expenditures by these authorities in 1956-57 makes the amounts in immediately preceding years seem small: the amount in 1954-55 was only 39 percent of the 1956-57 figure; the amount in 1955-56, only 63 percent.

Total expenditures by these authorities are influenced by the trend in Pennsylvania, where building authorities are most active. Ultimately the repayment of authority construction

Chart 5

Trend in Expenditures for School Buildings by School Building Authorities



costs will be made chiefly from local school district sources, but a part of the funds for the payment of rent may come from State funds allotted to local school districts for current operation.

District Indebtedness

In view of the rapid rise in expenditures for school plant facilities in the 7-year period and the fact that local school district indebtedness has been the principal source of revenue for construction, school boards are greatly concerned over the problem of financing the classrooms that must be constructed in the future.

Some districts that have faced critical situations in past years have exhausted their bonding capacity. The heavy payments they must make to service their debts in the years ahead may take abnormally large proportions of their current tax revenues.

Debt service requirements have a prior claim on current revenues. Consequently the burden of debt liquidation in the future may threaten the diversion of funds from the program of financing current school operation. This pledging of a large part of future revenues to take care of growing indebtedness may require that additional funds from outside the local school districts be made available to boards of education if the instructional program is to be protected.

UNESCO

Continued from page 8

reports on comparative education. Another they strongly supported is the International Association of Universities.

Now and then during the session, representatives of organizations were able to take part in the discussion. Two points they made were the importance of the delegates' knowing the programs their organizations already have under way, and of permitting organizations to participate in some of UNESCO's new programs.

Progress Toward a Whole

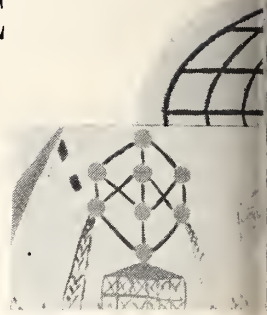
In many aspects UNESCO's new program is broader and yet more coordinated than before. In a number of areas it points out new problems on the horizon and develops ways of initiating action toward solving them. As the Honorable Maxwell M. Rabb, Chairman of the United States delegation, said to the delegates—

"In a world of ever more frantic change—and when modern communications make every change of immediate significance to even the farthest corner of the globe—UNESCO faces the job of finding, and holding to, and making known the fundamental values that do not change.

"UNESCO, whose Charter demands that it meet this challenge, will never do so until its programme becomes something more than a series of separate compartments conveniently but arbitrarily divided into the jurisdictional fields of education, natural science, social science, cultural activities, and mass communication. The sum of these parts, separately added together, may make a budget but do not necessarily make a whole. UNESCO has made some progress toward a wise concentration of its programmes; but the challenge of the frontiers of the future will require even greater consolidation of our efforts."

INTERNATIONAL EXCHANGE OF CHILDREN'S ART

*In a national conference of leaders in
art and education, a meeting
of the ways and a meeting of minds*



By MAYO BRYCE

EVERY year thousands of pieces of children's art, traveling in exhibits of many kinds and sizes, come into the United States from other countries, meeting and passing, as they come, thousands of others created in the United States and also on their way abroad.

This international traffic in the art that comes from the hands of children flows constantly. Its volume and persistence suggest that some great organization, some indefatigable person, is masterminding the whole operation, starting and stopping it at synchronized intervals, routing it here, sending it there. But no one organization, no one person, does these things. Rather, dozens of organizations and perhaps hundreds of individuals are furnishing the impetus and the direction; and for the most part they are doing it independently of each other.

This whole complex, independence and all, is highly commendable; I doubt that anyone wants to change it. But the organizations and individuals who bring it about have often wished for some systematic information about the whole network, something like a good road map, to show both the highways and the country lanes. Besides, though everyone involved has his own philosophy, his own standards, he also has his moments of wanting to talk these over with others, knowing that a discussion would give him useful ideas.

A chance for such discussion, and a chance for the road map too, came this year when the Office of Education, together with the National Art Education Association, a branch of the National Education Association, sponsored a conference on the international exchange of children's art. It met in the Office on January 12-15, in a setting bright with the drawings of children from a dozen countries, and brought together more than 30 persons representing hundreds of others. Among them were heads

Dr. Bryce is specialist for education in the arts, Office of Education.

of art departments in schools and colleges, and representatives of museums and art schools, international organizations, art and communications programs, and Government agencies.

The conferees chose 6 points for discussion, phrasing them as questions. Their answers, much compressed, follow:

1. Why do we believe in the international exchange of children's art?

Art, an instinctive form of human expression, is a means of communication among all peoples. Child art especially is so, for a child's art transmits, in an unspoiled way, a delight in life and a view of the culture of which he is a part. It evokes good will. It shows us both the child and the common ground all children have.

Thus an international sharing of children's art strengthens international understanding. In brief, such sharing acquaints other nations with our ideals and interests at the same time it acquaints us with theirs; demonstrates our interest in the cultures of other countries; and focuses attention on the purposes and values of education in each participating country.

2. What kinds of programs do we, as a group, feel should be carried out?

There is considerable variety among effective exchange programs. For instance, they vary in the *kind* of exchange: (1) Sending art from the United States abroad, (2) receiving art from other countries for exhibit here, and (3) exchanging art between the United States and other countries on a school-to-school or child-to-child basis. *Sponsorship* varies too. It can be by individuals or individual schools, by civic or educational organizations, by government agencies.

But no matter what the kind or the sponsorship, the exchange should be of high quality and should include the work of children at all age levels.



Appeal to intuition: drawings by children in foreign countries attract the attention of members of the conference.

3. How can high quality be maintained?

There are many ways of maintaining and improving quality in exchange exhibitions, but one of the first to be attempted should be a statement of criteria. (The conferees unanimously asked for such a statement and named a committee to develop one: Ralph Beelke, executive secretary of the National Art Education Association; Gratia Groves, supervisor of instruction, Fairfax (Va.) County Schools; Eleanor Mitchell, Fine Arts Committee, People-to-People Program; and myself.)

Criteria should include statements about such matters as philosophy, types of programs, age levels, competitions, geographical representation, a purpose for each exhibit, standards for sizes, language descriptions, and customs barriers. These could be printed by the Office of Education and distributed to all organizations, schools, government agencies, and individuals known to be interested in exchange programs for children's art. They could also be published in educational journals and periodicals and made known to UNESCO.

Although art sent abroad from the United States could not actually be "screened," the criteria would serve as a guide in selecting art for various purposes. The degree to which art from other countries could be screened would depend on the purposes for which it was received.

4. How can exchanges be facilitated and made more effective?

Information about this conference and its outcomes should be given to organizations in a strategic position to encourage the exchanges.

Each exhibit should be accompanied by a statement about the context in which the art work was done, to help teachers and others responsible for the exhibits to understand not only the exhibits but the purposes behind the exchange programs. The statement should be in at least three languages, say, Spanish, French, and English. Each piece of art should be labeled with the name and age of

the child and the name of school, city, and country.

Standard sizes for art do not seem desirable, but uniform mat size would facilitate packaging and mailing.

What stand should be taken on art contests in relation to art exchanges? This is a question of educational philosophy, and differences in point of view make it difficult to answer. (Some conferees thought that an exhibit appearing within the framework of a contest should not be endorsed by the United States under any circumstances; but the majority agreed that it is desirable for the United States to be represented in international exhibitions by good entries provided that the entries were not made for competition and that they are accompanied by a forthright statement of philosophy on the matter.)

Those in charge of sending art from the United States should see that it widely represents the various geographical regions. At the same time, nations not yet involved in exchanges should be encouraged to become so.

5. What sources of support should we turn to?

Foundation grants might well be solicited to encourage exchange programs, but for this conference to make any movement in this direction would probably be premature, considering the number of more pressing problems.

6. Is a clearinghouse desirable?

We need a clearinghouse of information, one that can answer inquiries on the ways and means of expediting exchange programs. The Office of Education seems to be the agency best suited to provide such a center.

Regional pools, where exchange art could be procured for exhibit, are of course possible. But such pools need special facilities and staff to receive, store, sort, and screen the art; and the financial problems they pose make them seem impractical for the present.

**From left: Edwin Ziegfeld, Teachers College, Columbia University; Dorothy Rowlett, Duval County (Fla.) Schools; Edward Richards, Junior Red Cross; Eleanor Mitchell, People-to-People Program; and Gratia Groves, Fairfax County (Va.) Schools.*

ELEMENTARY *and* RURAL SCHOOLS *the World Over*

The elementary school curriculum and rural education—these were the special topics considered at the 21st International Conference on Public Education, Geneva, Switzerland, last summer. Two of the four delegates representing the United States at that conference are specialists on these subjects; and they comment here on the spirit and meaning of the conference and of its recommendations to the ministries of education in the participating countries.

THE ELEMENTARY SCHOOL CURRICULUM

By MARY ADAMS

MARY ADAMS is assistant superintendent, elementary education, Baltimore (Md.) Public Schools. At the conference Miss Adams participated in the discussions of the committee appointed to draft Recommendation No. 46, "Concerning the Preparation and Issuing of the Primary [Elementary] School Curriculum"; and in plenary meetings to arrive at its final form she was the spokesman for the United States point of view.

ONE of the benefits of attending the 21st International Conference on Public Education was that it afforded me an opportunity to see elementary education in a worldwide setting. To one accustomed to working closely with the elementary division of a large school system, it was as if

the everyday telescopic focus on local problems and practices had been switched quite suddenly to the perspective made possible by a wide angle lens. As the full range of elementary education in its present state of development came clearly into view, I saw and appreciated, in a way I had hardly thought possible, the likenesses and differences in educational practice among some 70 countries of the world.

The Scope of Primary Education

Early in the Conference we from the United States saw that we would have to revise, temporarily at least, our usual definitions of the words "elementary" and "primary" as they refer to education. Whereas in our country we use "elementary education" as the wider term, people in most other parts of the world use "primary" to refer to all education that precedes secondary education and thus include in that term all that we call the elementary school. Moreover in many countries the term "elementary" is used to refer



UT PER JUVENES

ASCENDAT MUNDUS

The insignia of the International Bureau of Education, which together with UNESCO sponsors the International Conferences on Public Education

only to the most meager and minimum form of primary education. We therefore promptly reshaped our concepts and revised our terminology, realizing that the Conference inquiry into primary school syllabuses had to do with the development and use of what we commonly term the elementary school curriculum.

Contrasts Among Nations

As the characteristics of elementary education in the various countries came under consideration, we saw striking evidence of the sharp contrast between the well-developed and the underdeveloped nations. Some countries, like our own, are well-advanced in the development of their educational system and in their progress toward the goal of universal education. In marked contrast are the underdeveloped countries, some of them able to provide only a few years of schooling for their children, if indeed they can have any compulsory education at all.

In the face of these lacks, the almost dramatic push of the developing countries toward an accelerated de-

velopment of educational opportunity for their people is impressive, even though they may not now be able to go beyond a few meager years of elementary instruction. As they step up their effort, they have the aid and encouragement of more advanced countries, who are providing exchange and study experiences, lending their specialists for consultation, and interchanging information at meetings: evidence of this cooperation was prominent throughout the conference discussion. The developing countries, for their part, welcome such cooperation, and are eager to have the support of the conference recommendations to reenforce their efforts at home. As a matter of fact, there was great agreement among the delegates on basic educational principles, despite the wide differences in the culture and educational practices of the countries they represented.

The Process Behind Recommendation 46

The method by which the inquiry into the "Preparation and Issuing of the Primary School Curriculum" was carried on merits comment because it shows how the basic data were collected and how the various delegations to the Conference were involved in the final shaping of the recommendations, now published by the International Bureau of Education as Recommendation No. 46.

Many months in advance of the July 1958 Conference, the International Bureau of Education sent a questionnaire to countries throughout the world, inviting each one's response to a number of questions—questions about the structure of primary education, its aims, the present organization of the curriculum, the authors responsible for preparing the primary curriculum, the contributions of teachers and laymen, the adaptation of syllabuses to living conditions, and the place of research and experi-

mentation in curriculum development.

Seventy-five countries responded. The International Bureau of Education compiled their responses into a report, entitling it "Preparation and Issuing of the Primary School Curriculum—A Comparative Study," Publication No. 194, 1958. This volume of facts about primary curriculum practices throughout the world is an invaluable resource, not only for students of comparative education, but also for countries that wish to use these materials as sources for a full study of their own problems.

At the onset of the conference, this publication was distributed to all delegates and formed a background for their special inquiry into the curriculum of the primary school and for the general presentation of the problem by Professor Robert Dottrens of Switzerland, who was rapporteur of the committee appointed to study the subject.

This committee, consisting of Professor Dottrens and delegates from Spain, the United Kingdom, the Union of Soviet Socialist Republics, Ghana, Vietnam, and the United Arab Republic, prepared a statement of considerations and recommendations, which were then distributed to all the delegates. Each delegation was invited to propose amendments in writing; and all amendments in turn were summarized in written form and considered in plenary session. At the plenary session each suggested amendment was supported or justified by the nation proposing it and was then put to vote, each country having one vote. The United States delegation was pleased that nine of the ten amendments it had proposed were adopted; the tenth was implicit elsewhere in the statement. By this process—first, committee preparation; second, study by the separate delegations; and, finally, Conference action—a series of statements was evolved that represented consensus.

The final document is known as Recommendation No. 46.

Analysis and Appraisal

For countries advanced in their educational background, Recommendation 46, with its suggestions for ways of preparing and issuing the primary school curriculum, probably does not set new frontiers or propose revolutionary ideas. On the contrary, to these countries it may seem a conservative statement of present and long-established belief and procedure. In a few instances it may even appear that current practice has gone ahead of these recommendations.

For the less developed countries, however, the Recommendation provides a reliable and authoritative statement of principles that will support them as they attempt their next step of progress. For example, the delegates from Ghana were anxious that the Recommendation specify "girls and boys" rather than "children," because most people in their country still have to be convinced that girls should be educated.

On the whole, Recommendation 46 presents a sound platform of beliefs about the preparation and use of curriculum guides. Its statements recognize forward-looking trends but do not neglect the long steps yet to be taken by the most backward areas.

A brief analysis of the Recommendation as it appears in the published report of the 21st Conference may be of interest. Its introductory section contains a series of statements that characterize the nature and needs of present day society, define the purpose of primary education, and emphasize the importance of recognizing the abilities and interests of the individual child as well as the right of teachers to work with freedom and the right of individual countries to seek varied solutions to their problems. These principles are set forth as basic to curriculum development.

The second section of the Recommendation further clarifies the aims and purposes of primary education. I quote one of these statements here to illustrate the nature of these aims and to show how these aims relate to the purposes of elementary education in the United States.¹

In all countries, primary education should aim at:

(a) Giving the child the basic instruments of thought and action suited to his age, which will enable him to live his personal and civic life to the full and to understand the world in which he has to live;

(b) Not only transmitting a heritage and a culture, but also providing the means of enriching them;

(c) Turning out free human beings, who are aware of their responsibilities, have self-respect and respect for others, and plan an active and useful part in the national life.

This section, also, gives specific consideration to the recognition of the growth and development of children as basic to the preparation of suitable curriculums. In view of our emphasis in the United States on child development, it was interesting to see that this principle seemed to have particular significance for all: advanced countries recognized the need to challenge children to their optimum development; the underdeveloped countries protested against overloading children in the brief years of their schooling with content inappropriate to their age and needs.

The 3d and 4th sections recommend procedures for drafting, issuing, and applying the syllabuses. It is perhaps in this section that differences in values and in methods of operation are most likely to occur from one area to another. Here, too, is the point at which the differences between

well-developed and underdeveloped nations appear most clearly and where the contrasts are most evident between a decentralized educational control such as our country has, and a government-directed and government-dictated program. Even so, the recommendations were generally acceptable to all, as their adoption by the Conference indicates. Note, for example, how the following statement relates to practices in the United States:

All work on the preparation and revision of syllabuses requires very thorough preliminary documentation and research on the needs of the country, the ability of available teaching staff, the particular place of the child's psychological development, comparative studies of primary syllabuses in other countries and the findings of educational experimentation.

FACILITIES FOR EDUCATION IN RURAL AREAS

By LOIS CLARK

LOIS CLARK is assistant director, Division of Rural Service, National Education Association. At the conference Miss Clark served as the specialist for, and was named to, the committee on rural schools. She took an active part in drafting Recommendation No. 47, "Concerning Facilities for Education in Rural Areas"; and in plenary debates on its content she spoke for the U.S. delegation.

RECOMMENDATION No. 47, adopted by the 21st and latest International Conference on Public

Education, deals with "facilities for education in rural areas." Compare it with another recommendation on rural education—No. 8, adopted more than 20 years ago, in 1936—and you will have a vivid impression of the impact that the profound worldwide changes of recent years have had on the needs and problems of rural education.

In presenting the current picture to the 21st Conference, Dr. Matta Akrawi, president of the University of Baghdad and Conference rapporteur on rural education, said this:²

One of the striking facts about life in the middle of the 20th century is that about half the adult population of the world is illiterate and about half the children of school age, numbering at least 200 million children, still remain without any educational provision. . . .

Effective systems of compulsory education have been realized mainly by industrialized nations. Only a few countries where the economy is based on agriculture have succeeded in establishing systems of universal education. The large majority of agricultural countries are still struggling with the problem and since most of their populations live in country districts, the realization of universal education resolves itself largely into the problem of creating adequate educational facilities in rural areas in order to wipe out the inequality from which children of these areas suffer.

The facts as brought out by the inquiry conducted by UNESCO and the International Bureau of Education in preparation for this Conference . . . seem to show that this inequality has three facets corresponding to three stages of social and economic development:

(a) In the least developed rural areas most children do not go to school at all;

² General Report on "Facilities for Education in Rural Areas" presented by Dr. Matta Akrawi, Rapporteur, XXIst International Conference on Public Education, Publication No. 196, International Bureau of Education, Geneva, 1958, pp. 155-6.

¹ 21st International Conference on Public Education, 1958, Pub. No. 196, p. 165, International Bureau of Education, Geneva.

(b) In slightly more favored regions, they may attend school, but the school gives rudimentary and curtailed instruction covering only a part of the primary (elementary) course provided in the towns;

(c) Lastly, in the most highly developed countries, all children in rural areas have in practice the opportunity of attending school and covering the complete primary (elementary) course. Generally, however, they meet great obstacles in continuing their studies at secondary level—either there is no secondary or vocational school in the neighborhood of their home, or else the education provided is inferior to that offered in town schools. . . .

A study of the information supplied leads to the conviction that out of every four children living outside the town, two still do not attend school at all, the third attends for only a very few years, while only the fourth lives in a country where rural schools can take all the children and give them a complete primary (elementary) education.

What recommendation could the Conference adopt that would be useful to the 71 participating countries, drawn as they were from every continent and representing the broadest possible range of national progress—from “least developed” to “most highly developed”?

Forty-seven specific statements are included in Recommendation 47 as it was finally adopted. Some of these have peculiar significance for newly developing areas and are not especially significant for the United States. Many, however, are pertinent to the United States, particularly as they apply to the needs of our disadvantaged groups and areas. Other statements are universally applicable; and the values and principles underlying the entire recommendation are consistent with the ideals toward which United States educators are persistently working.

The recommendation addresses it-



The U.S. delegates (from left, Lois Clark; Mary Adams; Wayne Reed, U.S. Deputy Commissioner of Education; and, far right, Fredrika Tandler, international organizations specialist, Office of Education) with the U.S. Consulate-General at Geneva, Henry S. Villard, and Mrs. Villard.

self to seven major ways of improving rural education—through administration, organization, curriculums, syllabuses and methods, facilities for postprimary (postelementary) education, adult education, teaching staff, and international cooperation.

Administration

The principle was generally accepted that “authorities responsible for school administration should organize for all children in rural areas education of the same standard as that provided for children in urban areas.” To this end, it was suggested that the duties of such authorities should include in particular—

(a) Drawing up an inventory of the educational requirements of rural areas;

(b) Determining the particular nature of educational organization, curriculums and methods to be adopted in rural areas;

(c) Launching plans of action (courses, school buildings, teaching staff, equipment, school social services, etc.);

(d) Ensuring that there are sufficient funds available for education and that they are apportioned between rural and urban areas in accordance with the needs as ascertained;

(e) Providing children in rural areas with equal opportunities of

access to special education services and postprimary studies.

One question of great concern was whether, as a means of overcoming the lag in countries where rural education is least developed, it might be desirable to establish special administrative units to deal with education in rural areas. Conferees did not agree fully on this point; but they did agree that, where such action is taken, this temporary separation of duties must not be allowed to lead to “a perpetuation of existing forms of educational inequality.”

Organization

The statement on organization reiterates the principle that “rural education should not be inferior in quality or extent to that enjoyed by children in urban areas,” then urges that this education be organized to take into account “the advantages and drawbacks of rural areas.”

A United States educator might find no difficulty in agreeing with the statement that “every child has a right to the entire course of compulsory education.” but be puzzled by the sentence which follows: “To achieve this ideal in small communities, the system of the complete one-teacher primary school may be profitably used, as in many highly devel-

oped countries; under this system, with the cooperation of the pupils themselves, the teacher may provide the full course for all the classes covered by this stage of education."

To interpret this, it is necessary to know that in some parts of the world one-teacher schools offer only one level of work: the pupil who returns for a second or third year repeats the same work each year. What is asked for in the recommendation is a one-teacher school that offers a graded program. Some of the newly developing countries considered it of great importance that the Recommendation should say, in essence, that, at one stage in their development, countries now highly developed found the one-teacher school useful. This concern is further illustrated by the inclusion, under the heading "International Cooperation," of this suggestion:

In places where the complete one-teacher school system is unknown, and where conditions make this a necessary or desirable means of extending primary education facilities, it is advisable to arrange study groups on this subject and to make available the assistance of experts if the system is to be introduced.

Curriculums, Syllabuses, Methods

The statement on "Curriculums, Syllabuses, and Methods" also expresses the concern for equality of opportunity:

Every possible means should be employed to ensure that rural school curriculums and syllabuses are not inferior in quality or in scope to those of urban schools, and that they enable primary pupils to acquire the skills, knowledge and processes of thinking which are essential for proceeding to secondary education without a break in continuity, in the same way as urban schoolchildren.

But equality of opportunity does not mean *identical* programs. Rather, "teaching in rural schools, without

being vocational in character, should draw its inspiration from the life and work of the countryside and should contribute to the development of a practical outlook, the improvement of

should be available to all in order to impart further vocational information and training, to advance general culture and to extend knowledge of the important problems of modern life."

Teaching Staff

Conferees faced the question of whether preparation of rural teachers should be separate and different, or whether all teachers should receive the same preparation. They did not reach agreement on this issue, but their concern for quality led them to the general agreement that "in countries where rural primary teachers are trained separately the course for future rural teachers should not be shorter or of a lower standard than that for urban teachers," and that "in countries where primary teachers all receive exactly the same training, they should be acquainted with the particular problems of rural education and with methods of teaching in one-teacher schools."

☆ ☆ ☆ ☆ ☆

Throughout their deliberations on facilities for education in rural areas, conferees recognized the urgent importance to every nation of having a high quality of education available to all people in all nations. The two rural children in four who do not attend school at all and the third who attends for only a few years—these three are of great concern to *all* nations, including those nations now able to provide a high level of opportunity in rural areas.

The tremendous fact that half the world's children are still without education should be of concern, as Dr. Akrawi notes in his report, "not only to educators, but also to statesmen, social thinkers, humanitarians, and all those interested in human freedom and democracy, in the dignity of the human being and in the flowering of a fine 20th century civilization."

THE first requisite for educational reform is the school as a unit, with its approved curriculum based on its own needs, and evolved by its own staff. If we fail to secure that, we simply fall from one formalism into another, from one dunghill of inert ideas into another.

ALFRED NORTH WHITEHEAD
The Aims of Education

life in the rural community, and an awareness of the relationships between this improvement and a wise use of natural resources."

The Recommendation recognizes distinctive problems in providing postelementary schooling in rural areas. One of its suggestions for meeting these problems points to the need for area programs: "When it is not possible to set up suitable schools for postprimary education in each rural community, the necessary services should be established in easily accessible centers serving several communities."

Adult Education

Adult education was recognized as a necessity. "For the improvement of living conditions in rural areas, it is important that the educational authorities, in conjunction with agricultural authorities and agricultural workers organizations, should concern themselves with adult education." Further, "In advanced areas, adult education on a continuing basis

COOPERATIVE RESEARCH PROJECTS

IN 1959 the University of Puerto Rico contracted with the Office of Education to construct a group test for measuring general ability in Puerto Rican students in elementary and secondary schools. The signing of this contract brought to 166 the number of projects initiated under the cooperative educational research program established by the 83d Congress in Public Law 531. The projects, all research, are being carried out by colleges, universities, and State departments of education. Federal funds committed to complete the 166 projects total over \$7.5 million. The number of projects soon will be increased further, for on February 12-14 the Advisory Research Committee met to consider 82 proposals submitted since its previous meeting, in October, and recommended 26 to the Commissioner for his approval.

All but the 20 latest projects have already been listed in *School Life*. The remaining 20, all signed into contract between November 1 and March 1, are given here. The dollar figure named for each project stands for the Federal funds that have been committed to bring the project to its completion.

Attitudes and interests

WESLEYAN UNIVERSITY. *College student images of a selected group of professions and occupations*, 10 months. Donald D. O'Dowd and David C. Beardsley, directors. Federal funds, \$5,302.

Handicapped children

PURDUE UNIVERSITY. *Behavioral and academic implications of hearing loss among school children*, 1 year, 6 months. M. D. Steer, Theodore D. Hanley, George Shaffer, and Frances Patton, directors. Federal funds, \$18,708.

THE PENNSYLVANIA STATE UNIVERSITY. *Motivation of speech and hearing handicapped children*, 1 year, 5 months. Bruce M. Siegenthaler, director. Federal funds, \$4,185.

UNIVERSITY OF SOUTHERN CALIFORNIA. *Education of the avrally handicapped: A psycholinguistic analysis of visual communication*, 1½ years. Edgar L. Lowell, director. Federal funds, \$29,700.

UNIVERSITY OF OKLAHOMA. *Effects and interactions of auditory and visual cues utilized in oral communication*, 1 year. John W. Keys, director. Federal funds, \$5,833.

Juvenile delinquency

RUTGERS UNIVERSITY. *Status of school boys and school leavers as factors in their friendship changes*, 2 years, 8 months. Jackson Toby, director; Federal funds, \$22,142.

Mentally retarded children

GRAMBLING COLLEGE (Louisiana). *Speech responses and social ages of two selected groups of educable mental retardates*, 1 year. Mamie Louise Thompson Wilson, director. Federal funds, \$3,245.

Population mobility

FLORIDA STATE UNIVERSITY. *Late school entrance, social acceptance, and children's school achievement*, 10 months. Walter Douglas Smith, director; Federal funds, \$3,395.

Reading

UNIVERSITY OF CALIFORNIA (BERKELEY). *Significant differences in the substrata factor patterns that underlie reading ability in known groups at the high school level*, 1 year. Jack A. Holmes, director. Federal funds, \$30,000.

INDIANA UNIVERSITY. *Language used by elementary school children and its*

relationship to the language of reading textbooks and the quality of children's reading skill, 3 years. Ruth G. Strickland, director. Federal funds, \$77,096.

School organization

MICHIGAN STATE UNIVERSITY. *How State legislators view the problem of school needs*, 8 months. LeRoy C. Ferguson, director. Federal funds, \$14,347.

Special abilities

UNIVERSITY OF CHICAGO. *Relationships between achievement in high school, college, and occupation: A followup study*, 3 years. Allison Davis and Robert D. Hess, directors. Federal funds, \$39,010.

UNIVERSITY OF PITTSBURGH. *Identification, development, and utilization of human talents*, 2 years. John C. Flanagan, director. Federal funds, \$150,305.

UNIVERSITY OF WISCONSIN. *Perception of music symbols in music reading by normal children and by children gifted musically*, 6 months. Robert George Petzold, director. Federal funds, \$6,142.

WESTERN MICHIGAN UNIVERSITY. *Analysis of factors related to the motivation and achievement of students in science in the junior and senior high school*, 4 years, 7 months. George G. Mallinson, director. Federal funds, \$6,000.

UNIVERSITY OF PUERTO RICO. *Construction of a general ability group test for Puerto Rican students in elementary and secondary schools*, 1 year, 6 months. Pablo Roca, director. Federal funds, \$19,090.

Staffing

HARVARD UNIVERSITY. *Contract correcting: the use of lay readers to assist high school English teachers in grading compositions*, 2 years, 7 months. Edwin H. Sauer, director; Federal funds, \$20,181.

SYRACUSE UNIVERSITY. *Pedagogical significance of unconscious factors in*

career motivation for teaching, 1 year, 8 months. George C. Stern and Joseph M. Masling, directors. Federal funds, \$42,767.

VANDERBILT UNIVERSITY, *Evaluation of laboratory human relations for classroom teachers*, 2 years, 2 months. Robert S. Soar and Norman D. Bowers, directors. Federal funds, \$24,682.

Teaching methods

HARVARD UNIVERSITY, *Teaching high school students a critical approach to contemporary national issues*, 3 years, 7 months. Donald W. Oliver, director. Federal funds, \$61,584.

Counseling

UNIVERSITY OF ILLINOIS, *Use of test results*, 9 months. J. Hastings, director. Federal funds, \$35,850.

A Nationwide Look at SPECIAL EDUCATION

23 national organizations
discuss the needs
of exceptional children

A CONFERENCE on the education of exceptional children, meeting in Washington on January 27-28 on the invitation of the Commissioner of Education, defined "exceptional children" in the broadest possible way, to include the physically handicapped, the mentally retarded, the socially and emotionally maladjusted, children with speech and hearing impairments, and the unusually gifted. On the basis of their definition the conferees then proceeded to seek the answers to three questions:

What makes a good education program for the exceptional child?

What problems in the present programs need nationwide attention?

What can national organizations and the Office of Education do together and individually to meet the needs?

What Is a Good Program?

The conferees felt that a good education program for exceptional children flourishes best in schools with good general educational programs. They agreed that, to be adequate, programs for exceptional children must identify these children early; but that mere identification is not enough, that screening and surveying with "diagnostic tools" without providing suitable instruction and remedial work is of little value. They emphasized that if we are to improve



Research Findings

NINE more research teams under the Office of Education's cooperative research program have turned in their final reports, giving the Office a total of 30 as of March 15. The nine latest reports account for the following projects (earlier ones have already been listed in *School Life*); brief summaries are available for the asking, from the Cooperative Research Program, Office of Education, Washington 25, D.C.

Mental retardation

Achievement motivation in normal and mentally retarded high school children, Washington University, Richard deCharms and Thomas E. Jordan, directors.

Application of Mowrer's Autistic Theory to the speech habilitation of mentally retarded pupils, Purdue University, M. D. Steer, director.

Effect of special day training classes for the severely mentally retarded, San Francisco State College, Leo F. Cain, director.

Some learning characteristics of mentally retarded children and normal children of the same mental age, Syra-

cuse University, G. O. Johnson, director.

Population mobility

Late school entrance and children's adjustment, Florida State University, Walter D. Smith and John A. Demming, directors.

Retention of students

(a) *Decisions of youth about education beyond high school and (b) factors in these decisions*, University of Wisconsin, J. Kenneth Little, director.

Factors related to educational discontinuance of college-ability high school seniors, Southern State College (Magnolia, Ark.), Francis Stroup, director.

School organization, administration

Development and refinement and testing of tools, descriptive devices, and analytical methods for measuring school quality in terms of specific educational goals, New York State Education Department, Samuel M. Goodman, director.

Staffing

Admissions interview in teacher education for predicting success in teaching, University of Minnesota, William H. Edson, director.

these programs we must also develop and use special instructional methods and adequate ways of evaluating the progress of learning.

The Nationwide Problems?

Although the group listed over 20 problems and gaps, they gave major attention to problems of professional preparation and development of school personnel. Participants raised many questions about professional standards. After spelling out certain problems in professional preparation programs, they earnestly urged that colleges develop a high level of instruction and that there be more experimentation with and research into the procedures and methodology of special education. They warned against too rapid expansion into areas where, as yet, there is inadequate opportunity for student teaching or systematic observation of exceptional children. They pointed out that teachers need scholarships, grants, and fellowships to help them get more specialized education; that "regular classroom teachers" need better orientation to the learning problems of exceptional children.

Much of the discussion centered about the need for highly qualified personnel to work in the programs. All felt that teachers, administrators, and consultants at local, State, and Federal levels should be keenly aware of the individual characteristics of exceptional children and well grounded in the values and procedures of education.

Participants recognized a wide variety of organizational frameworks: Special services to children in regular grades, special classes and schools, residential schools, and home care services. But they said that each area should be continually evaluated in terms of the progress of each child.

Above all else, the representatives stressed the fact that only a small



At one end of the conference table: Two Office of Education specialists—Romaine P. Mackie, chief, Exceptional Children and Youth Section (*seated, left*), and J. Dan Hull, director, Instruction, Organization, and Services Branch (*standing, right*)—confer with (*left to right*) John J. Lee, National Society for Crippled Children and Adults; W. Kulm Barnett, National Association of State Directors of Special Education; Kathryn Gruber, American Foundation for the Blind; and Chris DeProspo, American Association on Mental Deficiency.

percentage of the children that need help are presently receiving it.

What Can Be Done?

John J. Lee, president of the National Society for Crippled Children and Adults, and chairman of Wayne State University's Department of Special Education and Vocational Rehabilitation, in the keynote address of the conference pointed out that private agencies have an important function to perform. In supplementing public agencies, the private agencies need staff members who are as informed and as competent as the professional leaders working for public agencies.

The representatives of private agencies at the conference expressed particularly their desire to cooperate with the local, State, and Federal programs for the education of exceptional children. Although the group

felt good cooperation has existed among national organizations, they stressed the need for its continuing development since private agencies have resources and a considerable degree of freedom to provide supplies, equipment, and personnel to aid the program, as well as scholarships to stimulate research.

The extended discussion by participants on fellowships for leaders in the education of exceptional children indicated the importance they attach to such assistance. Among other recommendations, they suggested that the Office of Education serve as a channel for bringing together information about scholarships and fellowships.

Role of the Office

Participants told the Office of Education specialists that they look to the Office to furnish information and

CONFERENCE PARTICIPANTS

The 23 organizations that met with the Section on Exceptional Children and Youth, Office of Education, in this conference to consider educational programs for handicapped and gifted children, were the following:

Alexander Graham Bell
Association for the Deaf

American Association
for Gifted Children

American Association
on Mental Deficiency

American Hearing Society

American Heart Association

American Speech and
Hearing Association

Council of Administrators of Special
Education in Local School Systems

Council for Exceptional Children

Conference of Executives of
American Schools for the Deaf

Convention of American
Instructors of the Deaf

Division on Teacher Education (ICEC)

League for Emotionally
Disturbed Children

Muscular Dystrophy
Association of America

National Association
for Gifted Children

National Association
for Retarded Children

National Association of State
Directors of Special Education

National Association of Training
Schools and Juvenile Agencies

National Epilepsy League

National Foundation

National Society for Crippled
Children and Adults, Inc.

National Society for the
Prevention of Blindness

National Tuberculosis Association

United Cerebral Palsy
Associations, Inc.

leadership that will help to develop educational programs for all the Nation's exceptional children, and that there is need for further study of State laws and regulations, improvement of educational programs at the State and local levels, and the preparation of special educators.

Romaine P. Mackie, chief of the

Exceptional Children and Youth Section of the Office of Education, was chairman of the conference. Harold M. Williams, Donald Harrington, and Irene Westmoreland of the section staff also took part.

By bringing together Office of Education specialists and leaders from organizations concerned with special-

ized groups of exceptional children, the conference has, through the discussion of the problems and goals of exceptional education, given the Office a guide for shaping its contributions to the development of richer and more significant educational programs for the Nation's exceptional children.

50 summer programs for high school counselors

Counseling and Guidance Institutes

FIFTY colleges and universities are contracting with the Commissioner of Education to operate federally financed counseling and guidance institutes this summer. They will offer programs designed to improve the qualifications of persons who are, or will be, engaged in counseling and guidance in secondary schools.

About two-thirds of the Federal funds—provided under the National Defense Education Act—will go to individuals attending the institutes, for each individual is eligible for a stipend of \$75 a week (plus \$15 for each dependent) if he is engaged in counseling and guidance work in a *public secondary school* or is preparing for such work. Persons working in nonpublic secondary schools, though they may attend the institutes, are not eligible for stipends.

The colleges and universities have announced they will offer academic credit for these institutes. All letters of inquiry should be sent to the institutions, addressed to the director each one has designated, as follows:

ARIZONA STATE UNIVERSITY, Sanford S. Davis.

ATLANTA UNIVERSITY, Paul I. Clifford.

BOSTON UNIVERSITY, Dugald S. Arbuckle.

COLLEGE OF THE CITY OF NEW YORK, Dorothy Davis Sehal.

KANSAS STATE TEACHERS COLLEGE, Emory G. Kennedy.

LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COLLEGE, Russell E. Helmick.

LOYOLA UNIVERSITY (Chicago), Robert C. Nicolay.

MARQUETTE UNIVERSITY, Edward J. McCall.

MARSHALL COLLEGE (West Virginia), Clarke F. Hess.

MICHIGAN STATE UNIVERSITY, Walter F. Johnson.

MONTANA STATE UNIVERSITY, Robert E. Gorman.

NEW YORK UNIVERSITY, Milton Schwebel.

NORTH CAROLINA STATE COLLEGE, Roy N. Anderson.

NORTHWESTERN UNIVERSITY, Frank S. Endicott.

OKLAHOMA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE, Harry K. Brobst.

OREGON STATE SYSTEM OF HIGHER EDUCATION (at Portland Extension Center), Daniel W. Fullmer.

PENNSYLVANIA STATE UNIVERSITY, George R. Hudson.

PURDUE UNIVERSITY, Lee E. Isaacson.

RUTGERS, THE STATE UNIVERSITY, C. Winfield Scott.

STATE COLLEGE OF WASHINGTON, Zeno B. Katterle.

STATE UNIVERSITY OF IOWA, Kenneth B. Hoyt.

SYRACUSE UNIVERSITY, W. J. Dipboye.

TEMPLE UNIVERSITY, Roy B. Hackman.

TEXAS TECHNOLOGICAL COLLEGE, Aldrena B. Cobb.

THE GEORGE WASHINGTON UNIVERSITY, Mitchell Dreese.

THE OHIO STATE UNIVERSITY, Herman J. Peters.

UNIVERSITY OF ALABAMA, Ralph M. Roberts.

UNIVERSITY OF CALIFORNIA (Berkeley), Clifford P. Froelich.

UNIVERSITY OF CONNECTICUT, Edward A. Wicas.

UNIVERSITY OF DELAWARE, Wilfred A. Pemberton.

UNIVERSITY OF DENVER, Harry R. Moore.

UNIVERSITY OF FLORIDA, Ted Landsman.

UNIVERSITY OF HOUSTON, Frank L. Stovall.

UNIVERSITY OF ILLINOIS, Fred C. Proff.

UNIVERSITY OF KANSAS, E. Gordon Collister.

UNIVERSITY OF KENTUCKY, Marion R. Trabue.

UNIVERSITY OF MARYLAND, Richard H. Byrne.

UNIVERSITY OF MINNESOTA, Willis H. Dugan.

UNIVERSITY OF MISSOURI, John L. Ferguson.

UNIVERSITY OF NORTH DAKOTA, Paul F. Munger.

UNIVERSITY OF PITTSBURGH, John Geise.

UNIVERSITY OF PUERTO RICO, Augusto Bonis.

UNIVERSITY OF SOUTH CAROLINA, William W. Savage.

UNIVERSITY OF SOUTHERN CALIFORNIA, Earl F. Carnes.

UNIVERSITY OF TENNESSEE, Lawrence M. DeRidder.

UNIVERSITY OF TEXAS, Royal E. Embree.

UNIVERSITY OF TOLEDO, Robert Gibson.

UNIVERSITY OF UTAH, Phelon J. Malouf.

UNIVERSITY OF WYOMING, Lyle L. Miller.

WAYNE STATE UNIVERSITY, William Evraiff.

NATIONAL LIBRARY WEEK, 1959

By JOHN G. LORENZ

Director, Library Services

Branch, Office of Education

THOUSANDS of communities throughout the United States will observe National Library Week, April 12-18, the second year for a special weeklong salute to libraries and reading. Sponsored by the National Book Committee in cooperation with the American Library Association, National Library Week's purpose is to call attention to the importance in American life of reading and libraries of all kinds—public, school and university, and home. Other national associations cooperating in National Library Week activities include the Adult Education Association, the Junior Chamber of Commerce, the National Congress of Parents and Teachers, and the National Education Association. It has the support of leading magazine, newspaper and book publishers, radio and television broadcasters, businessmen, and educators.

As last year, activities will be both national and local. Over 35 magazines will carry editorials, articles, or columns about the celebration. Many radio and television programs will carry spot announcements. Local celebrations will include many special events, such as the dedication of a new library at Colgate University.

The sponsors see life enrichment as the major objective of National Library Week: reading can help the American people to explore and satisfy the human need for a greater

sense of purpose and meaning in life. National Library Week extends to Americans an urgent and strong invitation to use more fully libraries of all kinds, where the treasures of the printed word are waiting for all to make use of them.

Schools celebrated National Library Week in 1958 with many successful local programs. Some held auditorium, radio, or television programs about books that had helped students choose hobbies. Others had exhibits of science projects and books from the school library collection, either in the school building or in the window of a local merchant. Many of them had PTA programs on books for the whole family. School and classroom newspapers carried stories about the favorite books of school leaders—principals, teachers, and students. Local newspapers featured similar or additional stories.

In his proclamation asking all citizens to join in celebrating the first National Library Week, President Eisenhower last year said to the American people—

Let National Library Week be a time for the appraisal of community needs for library services and of the means of meeting them, for encouraging the development of a better-read, better-informed citizenry, and for rededication to that fine public service that has always been characteristic of the libraries of America.

"FOR A BETTER-READ,
BETTER-INFORMED AMERICA"



National Library Week
April 12-18, 1959

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A DIRECTORY OF 3660 16MM FILM LIBRARIES, by *Seerley Reid, Anita Carpenter, and Annie Rose Daugherty*. 1959. 236 pp. \$1. (Bul. 1959, No. 4).

AN APPROACH TO INDIVIDUAL ANALYSIS IN EDUCATIONAL AND VOCATIONAL GUIDANCE, by *David Segel, Frank E. Wellman, and Allen T. Hamilton*. 1959. 39 pp. 20 cents. (Bul. 1959, No. 1).

CURRICULUM RESPONSIBILITIES OF STATE DEPARTMENTS OF EDUCATION, by *Howard H. Cummings and Helen K. Mackintosh*. 1958. 76 pp. 55 cents. (Misc. No. 30).

EDUCATING CHILDREN IN GRADES FOUR, FIVE, AND SIX, by *Gertrude M. Lewis*. 1958. 215 pp. \$1. (Bul. 1958, No. 3).

ENGLISH LANGUAGE ARTS IN AMERICAN HIGH SCHOOL, by *Arno Jewett*. 1958. 122 pp. 50 cents. (Bul. 1958, No. 13).

FALL 1958 ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULL-TIME PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS, by *Samuel Schloss and Carol Joy Hobson*. 1959. 18 pp. 20 cents. (Cir. No. 551).

FEDERAL FUNDS FOR EDUCATION 1956-57 AND 1957-58, by *Albert R. Munse and Edna D. Booher*. 1959. 204 pp. 75 cents. (Bul. 1959, No. 2.)

FOREIGN LANGUAGE LABORATORIES IN SCHOOLS AND COLLEGES, by *Marjorie C. Johnston and Catherine C. Seerley*. 1959. 86 pp. 35 cents. (Bul. 1959, No. 3).

SOCIAL SCIENCE REQUIREMENTS FOR BACHELOR'S DEGREES, by *Jennings B. Sanders*. 1959. 68 pp. 30 cents. (Bul. 1959, No. 8).

SOURCE MATERIALS FOR PRACTICAL NURSE EDUCATION. 1958. 31 pp. 20 cents. (Voc. Div. Bul. No. 273).

FREE

(Request single copies from Publications Inquiry Unit, U.S. Office of Education, Washington 25, D.C. In requesting copies, please include publication number).

ADVANCE REPORT ON ENGINEERING ENROLLMENTS AND DEGREES: 1958, by *Justin C. Lewis, Henry H. Armsby, and Leah W. Ramsey*. December 1958. 4 pp. (Cir. No. 554).

AEROSPACE AND AVIATION PERIODICALS FOR TEACHERS AND PUPILS, by *Willis C. Brown*. 6 pp. (Cir. No. 556, Rev. 1959).

AIR TRANSPORTATION AND MANAGEMENT COURSES, A PARTIAL LIST OF OFFERINGS IN COLLEGES AND UNIVERSITIES. January 1959. 10 pp. (Cir. No. 550, Rev. Jan. 1959).

KEY AUDIOVISUAL PERSONNEL IN PUBLIC SCHOOLS AND LIBRARY SYSTEMS IN STATES AND LARGE CITIES AND IN LARGE PUBLIC COLLEGES AND UNIVERSITIES, 1958-59, by *Anita Carpenter and Annie Rose Daugherty*. November 1958. 87 pp.

NEW DIMENSIONS IN TRADE AND INDUSTRIAL TEACHER TRAINING, Report of a National Conference on Trade and Industrial Teacher Training, May 12-16, 1958. 89 pp. (Cir. No. 548).

SELECTED REFERENCES ON PUPIL TRANSPORTATION, by *E. Glenn Featherston*, December 1958. 17 pp.

SELECTED LIST OF SCHOOL PLANT LITERATURE. January 1959. 5 pages.

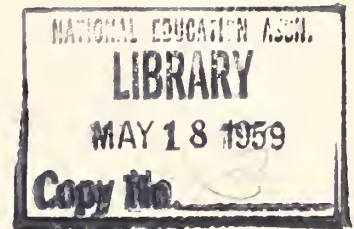
SPEED AS A FACTOR IN AVIATION PROGRESS, by *Willis C. Brown*. Rev. January 1959. 3 pp. (Cir. No. 560).

STATISTICAL SUMMARY OF STATE SCHOOL SYSTEMS 1955-56, by *Samuel Schloss and Carol Joy Hobson*. 1959. 9 pp. (Cir. No. 543).

SCHOOL LIFE

OFFICIAL JOURNAL OF THE * * * * *

OFFICE OF EDUCATION



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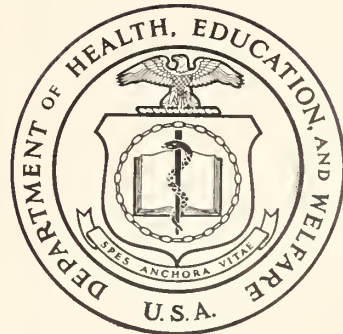
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April 1959

THE DESIRE OF KNOWLEDGE

I*N Germany at Easter time they hide coloured eggs about the house and the garden that the children may amuse themselves in hunting after them and finding them. It is to some such game of hide-and-seek that we are invited by that power which planted in us the desire to find out what is concealed, and stored the universe with hidden things that we might delight ourselves in discovering them. And the pleasure of discovery differs from other pleasures in this, that it is shadowed by no fear of satiety on the one hand or of frustration on the other. Other desires perish in their gratification, but the desire of knowledge never: the eye is not satisfied with seeing nor the ear filled with hearing. Other desires become the occasion of pain through dearth of the material to gratify them, but not the desire of knowledge: the sum of things to be known is inexhaustible, and however long we read we shall never come to the end of our story-book. So long as the mind of man is what it is, it will continue to exult in advancing on the unknown throughout the infinite field of the universe; and the tree of knowledge will remain for ever, as it was in the beginning, a tree to be desired to make one wise.*

A. E. HOUSMAN

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . ARTHUR S. FLEMMING, <i>Secretary</i> OFFICE OF EDUCATION LAWRENCE G. DERTHICK, <i>Commissioner</i>		and programs affecting education. Published monthly, September through May. Printing approved, Bureau of the Budget, July 28, 1958. Contents not copyrighted. Subscription: Domestic, \$1 per year; foreign \$1.50; 1-, 2-, and 3-year subscriptions available. Single copies, 15 cents. Send check or money order (no stamps) to the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.
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Brief * * * * *
EDUCATION AND GOVERNMENT
Reports * * * * *

Youth Fitness Week

PRESIDENT Eisenhower has proclaimed May 3-9, 1959, as National Youth Fitness Week.

Declaring that the continued strength of our Nation depends on the health of our youth and that we must try to improve their fitness, the President requests Government officials, parents, young people, and local and national organizations "to promote programs and activities demonstrating the importance of youth fitness . . . that we may assure the continuing strength and well-being of our people."

Surplus equipment

ONLY the cost of transportation and warehousing stands between schools and much of the science and mathematics equipment they need in their classrooms. Every year the U.S. Government declares surplus \$100 million worth of such equipment. A wide variety of items are available—jet airplanes, nautical and navigational instruments, radio and radar equipment, motors and generators, laboratory items and supplies, lenses, and electronic equipment. Colleges, universities, and schools—public, parochial, and nonprofit—are eligible to obtain this equipment for "carrying charges."

When a Federal agency declares property "surplus" under the terms of the Federal Property and Administrative Services Act of 1949, the Department of Health, Education, and Welfare takes the responsibility for

STATEMENT FROM THE SURGEON GENERAL OF THE UNITED STATES

MILLIONS of schoolchildren and their teachers have not yet received the Salk vaccine, which gives up to 90 percent protection against paralytic poliomyelitis. Additional millions have received only one or two injections, although at least three injections are essential for vaccination. It is from these unvaccinated and partially vaccinated that polio now takes its heaviest toll.

Teachers can contribute to the drive to stamp out polio in three ways:

1. If you have not already done so, be sure to get vaccinated yourself. Adults who work with children are in special danger of contracting polio and the disease is usually more severe in adults than in children.

2. Inform your students about the importance of vaccination and about the free or low cost vaccination services which your community provides for families who cannot afford standard fees.

3. Participate in (or help to organize) a polio vaccination drive in your community.

There is no time to lose if unnecessary crippling and death from polio is to be prevented this summer.

LEROY E. BURNEY,
*Surgeon General
of the United States.*

seeing that the equipment goes where it may do the most good. State surplus property agencies let the Department know what they need and available equipment is then transferred to State warehouses. Some States send out circulars listing items. Representatives of schools visit the warehouses to select what they require. A school can keep its State agency informed of equipment it needs, and the agency, on the lookout, will tell the school when such equipment is available.

Both real and personal property come under the act: recipients may be educational and public health institutions and civil defense organizations of State and local governments, or nonprofit health and educational institutions exempt from Federal taxes.

Youth Serves Youth

AMONG the 92 people President Eisenhower has appointed to the National Committee for the Golden Anniversary White House Conference on Children and Youth are 10 high school and college students. Although delegates to the 1950 conference included youths, the 1960 conference is the first of the six decennial meetings with them on its committee.

Enthusiasm to serve their peers is high among the 10 students. At the February 1959 meeting of the Youth Activities Committee they asked to be considered as "first class members of the Conference." One of their assignments is to prepare a brochure on "The Role of Youth," which the Conference will publish.



A New Zealander's View of American Education

By JOHN FRANCIS JOHNSON

THE AUTHOR has been a professional educator in New Zealand for 33 years. The position he has held since 1952—District Senior Inspector of Schools, Christchurch, with responsibility for nearly 400 schools—has no exact counterpart in the United States, though it corresponds most closely to a superintendent of schools in a large metropolitan district.

Mr. Johnson spent 6 months—September 1958 to March 1959—in the United States as a participant in the International Teacher Development Program, administered by the Office of Education in cooperation with the Department of State. During his stay he met many American educators and saw at firsthand some of our school systems and schools. His report to the Office of Education, here condensed, gives some of his impressions of education in the United States.

MY arrival in the United States coincided with a strong tide of criticism of education. Senators, service chiefs, college presidents, and newspapermen were vying with each other, not so much as opponents of education as such, but as opponents of "what now passes for education since it was ruined by Dewey and others."

Some quarters suggested that the worst had passed; if this was so, then the earlier onslaughts must have been severe. I saw at firsthand a readiness to criticize, and a bitterness and hostility toward education and educationists that was unbelievably harsh. Educationists throughout the country felt obliged to give much time to the "great debate," and I myself took part in many a discussion.

The cry was for greater scholarship, for inflexible promotion requirements, for more intense competition, for firmer discipline. A few of the critics advocated "putting first things first"—which they thought of as a concentration on the most able student, leaving the average and below-average student to receive, in Admiral Rickover's words, "enough to get him into a modern technological society." Russia's scientific achievement had produced unwarranted consternation so that education's old critics were reinforced by the new, all seeking "whipping boys," as well as simple explanations for complex problems.

OUTSIDERS MISLED

A visitor to an unfamiliar culture evaluates what he sees against his own background. His capacity to assess is conditioned by his professional experiences and the maturity and wisdom of his judgment; but these, too, will reflect the traditions to which he is accustomed. Thus a school may appear to one as authoritarian and to another as permissive; to one as

stereotyped and formal and to another as progressive and imaginative.

But there is another factor coloring his judgment—his preconceived idea of what he is going to see. It may surprise many Americans to know how badly their country is advertised abroad, particularly its education. Outside the USA the little known about American schools is apt to be derogatory. The same forces of reaction found here have their counterpart in other lands, and these seize on headlines discrediting your schools. What really matters to them is not the USA and its schools, but that liberal education has failed; and its failure must be shouted from the housetops to warn the liberals at home and to vindicate the local Jeremiahs.

Since World War II Hollywood has produced several films on teachers and schools, some of them poor art and most of them bad publicity. The most unfortunate of all, "The Blackboard Jungle," has done incalculable damage abroad. It has left a widespread, lasting impression of the unhappy effects of liberal education, a lesson not lost on the critics of New Zealand's school system, the more so because in many ways we have followed American traditions rather than British.

I did not expect to find your schools "Blackboard Jungles," but I was not prepared for the solid effort put into both teaching and learning I found almost everywhere I went.

I came a trifle smug about what my

country has achieved—for it has achieved a great deal—but I leave conscious of many ways in which your schools are superior. But the picture of education you present to the world is misleading: I think of some of the issues on which you are assailed—discipline and the general behavior of boys and girls, the quality of instruction, and the application of pupils to the serious business of learning. Every time I spoke to a lay group, therefore, whatever the topic, I made it a point to say something on the fine education I was seeing here—not only the overall guiding ideals, but the manner in which local schools interpret and practice them.

SCHOOL BUILDINGS

Your buildings and equipment are much superior to ours, and I envy your liberal criteria for building construction, floor space, equipment, and teacher-pupil ratio. The provision of 30 or more square feet a child, a cafeteria accommodating a whole school in two sittings, an auditorium seating all pupils in modern comfort, and a splendid gymnasium—all for 400 children—are standards of which any community can well be proud and which prove your faith in education.

But this was not unexpected—for if the world outside knows anything, it knows about your material resources and your willingness to use them for education. What I did not expect was that these facilities should be so abundantly matched by the uses made of them.

DISCIPLINE AND DEMOCRACY

My first impression of your schools was of the splendid discipline. Children manage themselves in a delightful way, easily and naturally as individuals, working in groups both as leaders and followers, and, above all, going ahead with initiative when left to their own devices.

There were standards of democratic living in the first classrooms I visited that I found it difficult at first to account for—a respect by each child for the other and a pleasantly relaxed

atmosphere in which children were at peace with themselves, their classmates, and their teachers, and were thus free to bring their gifts and energies to the task of learning.

The reason lies in a combination of things. Your classes are smaller, much smaller, than ours, enabling teachers to reach pupils in a way not otherwise possible. More than likely, the greater period of training your teachers receive gives them opportunity to learn more about the subtleties of working with children. In your elementary schools most teachers are women; and women, I suspect, are better teachers than men, having more skill in the subtle aspects of child understanding and management. Your inservice training programs are more extensive and more systematically organized; your supervision more effective; and your induction programs reduce the time spent in wasteful groping at the opening of the school year. New Zealand loses many women teachers to marriage. Here, most remain in service, or if they leave for family reasons, nearly always return, better teachers for being mothers.

TEACHER-PUPIL RELATIONS

In American schools teachers have greater intimacy with their pupils and spend more time helping each one, not only with learning difficulties but with personal needs. Without an overwhelmingly large class the teacher can pay attention to a child's ideas, show respect for his opinions, and share with him special events in his life. Each child has his turn to be important and to enjoy success, to have the worthy things he does recognized and praised. This way he learns respect for the dignity and worth of his peers and himself. There is more time, too, for the practice of the common courtesies, and I saw more evidence of these here than at home—in both directions.

Relations between your teachers and pupils are less formal, less authoritarian than they are in my country. Teachers and pupils work more closely together. They have a person-to-person kind of relationship, with

little of the separation by the barriers of status and authority that stand between teachers and pupils in most of the older cultures and some of the new. The merits of such relations are to be seen at every level, from the work and behavior of little people in grade 1 to the deportment of senior high school students—friendly and dignified, alert and curious, cooperative and hardworking—all these things, together with a sense of responsibility to their school, their peers, and their community.

I shall mention but two of the dozens of experiences I have had of schoolboy responsibility and initiative.

In Tyler, Tex., on Christmas Day, I visited a junior high school where the gymnasium was always open for young people. Some 40 boys were present, ranging in age from 8 to 16, with the older boys supervising. One paused to explain things to me: "No, the gym is never locked, and the balls are always left here. . . . Only one pane has ever been broken and that was a real accident! No, we haven't lost any basketballs. We won't either—not in Tyler. The little fellows were a bit lost—you know, they like a bigger fellow with them—so we joined in. I'll have a workout shortly—one of the others will take over. We're both going to be teachers. . . . Would you like me to show you around? It's a swell gym, isn't it?"

In Tallahassee, Fla., I attended a meeting of social workers where a 16-year-old gave an account of a club he and his friends had organized to keep boys and girls off the streets at night—a place to meet, dance, listen to music, and have refreshments—initiated, organized, and conducted by children, an example of young America in action, representative of the 98 percent of American boys and girls who have little or no news value and, so, never make headlines.

Standards of Work

There is a common assumption that American education is vague, woolly, and unsubstantial, and there are two

principal reasons why such an idea persists.

First, because U.S. schools offer students an unusually wide range of subjects, it is natural to assume that little of real depth can be achieved where pupils' energies are widely dissipated.

Second, it is not uncommon for critics to ignore the fact that almost all American boys and girls go to high school, and then to assess performance on the achievements of the less endowed. The work of these less talented students is naturally inferior to the achievements of the elite minority, to whom the privilege of high school is restricted in some countries. But it will take much to convince me that where comparisons are made between comparable groups, American standards will be found wanting. Not only are comparable standards being reached in the fundamentals of instruction, but American schools, as I see them, have gone farther than ours in science, civics, and history. Extracurricular activities are more broadly based and much more out-of-school time is given to hobbies.

GUIDANCE

I am envious of the distance you have gone in guidance and counseling: we have made only moderate beginnings. Your progress is linked to the emphasis you place on individual differences and the importance of determining for each child the courses he should follow at school and the career best suited to his particular interests and talents when he leaves. Where staffing permits, you extend guidance to provide help in personal and family problems; and this, I think, is the direction in which the schools of most countries can make their most positive contribution to the problems of juvenile delinquency. Already you have spectacular results in most unpromising areas, where an intensified campaign of counseling goes hand in hand with first-class teaching in half-sized classes. In this way children have at hand the advice of mature counsellors and the joy of

continuing success in school studies—an expensive solution, but one which may well pay high dividends.

EDUCATION FOR CITIZENSHIP

Training for citizenship is something American schools do in a more positive way than we. Whether greater attention is given it during teacher preparation I do not know, but there is no questioning its place at every level in every classroom.

"Citizenship training" is defined simply as helping children develop types of behavior needed to be effective citizens in American society. In every classroom throughout the Nation the flag is raised each day, and children pledge their allegiance and often sing one or two patriotic songs. This rededication of each to the principles of American freedom is a pleasant and moving experience, and is always carried out with appropriate dignity. Sometimes the ceremony takes place in the playground, and it is quite common for parents who have brought their little ones to school to remain and participate.

But the real training for citizenship comes from living and working with others in democratic ways. Teachers do not assume that children know what citizenship means, but from kindergarten on teach and practice it. Students learn American ideals and take part in self-government and democratic living in the classroom. Ideals of personal citizenship are stressed. It was illuminating to me to hear an 8-year-old clinch an argument by saying, "I don't think Peter is being a very good citizen right now." In the solving of both personal problems and community ones, ideals of citizenship appropriate to the child's age are commonly used as yardsticks of behavior.

Good citizenship implies a faith in and loyalty to American ideals and institutions, and schools have taught these to an impressive degree. The average American boy knows much more about the history of his State and Nation than his New Zealand counterpart, and his emotional attachments are equally intense and sincere.

COMMON MISCONCEPTIONS

I know the dangers of generalizing on education in a country so vast and so diverse as yours, but, as I have seen it, education here is down to earth, rejecting what lacks common-sense and practicability. I could not find a school based on the philosophy of "learning by doing," nor could anyone tell me where such a school might be found, though in every school I visited the influence of the movement was apparent, but never in an unrealistic or ineffective way. I found that your schools emphasize the teaching of facts and skills in the context in which they are met in life; that they emphasize application and relationships instead of rote memorization and drills (but the drills are there nonetheless, in proper perspective and with purpose sensibly defined); that they practice proceeding from larger areas of study to smaller units; and that they have systematic presentation and guided effort in the teaching and learning of academic material, leaving little to chance.

Your concept of high school education for all is of relatively recent origin; it received much impetus between the two World Wars, when increasing enrollments challenged the schools to provide education not only for college-bound students but for the larger group of students for whom the high school must provide the terminal course. Thus the "life adjustment" concept was born. Art, craft, music, physical education, homemaking, and vocational skills received increased attention, and to them were added courses, many far removed from the traditional function of the school, to meet the problems of adolescents. The movement created freer teacher-pupil relationships, extended extracurricular activities, and increased pupil participation in school government.

At first, these changes were offered as enrichments, not alternatives, to programs. But in the hands of over-enthusiastic proponents they assumed a prominence neither the intention of the movement nor the practice of most

teachers. Because movements tend to be judged on extreme practices, American high schools were charged, at home and abroad, with anti-intellectualism, a charge which now, 20 years later, still takes much living down. As originally conceived, the movement had much merit; and the number of comprehensive schools in the United States that remain uninfluenced by its wisest elements must be small. But there can be no question of the solid core of traditional schooling being replaced by less substantial things!

In the hands of the unwise and oversold teacher, "child centered" education calls down criticism, leading as it can to overpermissiveness, confusion, and insecurity. But here again, I was unable to find a school or a class where the child's interests, point of view, and readiness to proceed to a new field or area of learning could be said to come first or to order the school's curriculum and organization. This, too, is evidence of the American teacher's aptitude for modifying and adapting, his flair for retaining the workable and rejecting the unrealistic. The movement is seen, however, in the importance attached to the student's attaining minimal levels of maturity before he is taught certain skills and facts, in the regard for pointing up background and language concepts where these might limit understanding and assimilation, and in pupil participation in planning these concepts and in organizing study prescriptions and class and school management.

It is my impression that most parents in your country are happy about what the schools are achieving but remain an inarticulate majority. The noisy minority, capitalizing on isolated incidents and weaknesses, strives to create the impression that these represent total inadequacy and failure and that parents are unhappy over them.

PRESSURES ON CHILDREN

If I have a criticism, it is not that you are unmindful of scholarship, but rather that you are in danger of los-

ing some of the finest things in your education because of oversensitivity to the charges leveled at you. I am particularly concerned over the danger of undue pressures being put on children at an age when such stress can have grave and far-reaching consequences. Parent interest in "grades" is desirable, but excessive concern for them, often to the exclusion of broadly based developmental experiences, is not in a child's best interests. The present preoccupation with the education of intelligent children will, no doubt, give those sensitive to public opinion a feeling of well being, but it is disturbing that so many are willing to board the bandwagon. Fortunately, teachers, as administrators know, are not quick to revise their practices, so that neither public demand nor administrative response to that demand is likely to bring rapid change!

It is odd that in a country geared to the delayed employment of young people you should be so vigorous and, one is tempted to say, so merciless, in driving children to the maximum of their capacity and beyond. Is success so important? Is it worth the price? Of all the people born in the State of New York, 1 in 12 will receive institutional treatment at some time for nervous disorder, and as many more, though not receiving such treatment, will be in need of it. Statistics for other States are not quite so bad, but bad enough to warrant educators and parents taking another look at what they expect from children. For the sake of mental health, young people must have worthwhile out-of-school activities. Homework that crowds out social experiences, outdoor recreation, creative activities, and adequate time for rest and sleep simply will not meet their basic needs. Almost every country in the world has laws regulating the hours adults may work. It is sad that children, whose well-being is so dependent on others, should be denied like protection.

This is not a plea for soft options but for a continuing regard for the mental and physical health of thou-

sands of boys and girls who could pay dearly for their grades. American education is not too soft; in places it is perhaps too toughminded altogether.

HUMAN RESOURCES

It is not my intention to discount the need for the wisest possible nurture of the Nation's human resources. I have been tremendously impressed both by the efforts your young people make to secure higher education and by the sacrifices their parents undergo to give it to them. In your country pioneering development has been largely completed, and this fact, coupled with rapid technological progress, is bringing about a steady decline in the number of people required for purely laboring tasks. With increased specialization of work comes a need for extensive and expensive specialized preparation—a need the individual feels ever more keenly as you sharpen your social and salary differentiation between the educated and the uneducated.

It could be that you have an "over-regard" for education and an "under-regard" for real talent, with the result that there are people of quite moderate capacity occupying prominent positions, to the exclusion of others of both greater capacity and greater potential. I would venture to say that the chances of a British boy for reaching the top, with neither background nor education but through talent alone, are greater than those of his opposite number on this side of the Atlantic.

Whatever the importance of recognizing and fostering talent for the sake of the individual himself, there can be no questioning its importance to the Nation. Higher education in the United States is expensive, and, despite a wide range of scholarships from a variety of sources, the ability of many boys and girls is lost to themselves and the Nation for financial reasons. For the children of well-to-do parents, higher education is in the natural order of things. But many intelligent children are born into poor

families whose thinking does not include higher education but instead a concern for wage-producing employment as soon as possible. These boys and girls need guidance and encouragement as well as financial help to enable them to bring to the service of society all the gifts they possess.

It is probably true in America as elsewhere that in rural areas gifted children often go unrecognized. Sometimes their educational opportunities frustrate rather than stimulate and encourage. The demand for juvenile labor can be strong competition to the longer term advantages of remaining at school, and usually family traditions of higher education are less strong than in urban communities. Through wise counseling rural children can be shown their talents

and where they can best use them, and, through continuing guidance be helped to break family patterns of limited education and early employment.

EVALUATION

My stay with you has given me, personally and professionally, more than I had hoped for. I have come to know the American people at work and at play, in their schools, homes, and churches, living, working, and worshipping with them. I have received unbelievable kindnesses in unexpected places, and no hospitality that I can show in my homeland can repay that I have received here.

On the professional side, my visit insures that my colleagues and I in New Zealand will have a better under-

standing of your teachers and your students. Knowing differences will insure wiser and more effective planning for Americans who come our way to study or to teach. But whatever our visitors' purpose, I will understand them better and welcome them more warmly than I would have before my visit to the USA. I shall be grateful for the opportunity to do something in return for all that was done for me.

And this I can do, too. As one who now knows something of your country, your people, and your schools, I can state your case—a thing that can be done so much more effectively by a citizen in his own country than by a representative of the country in question, because his motives are less complicated and less suspect.

OVERSEAS OPPORTUNITIES

for American Educators in the Technical Cooperation Program

By GEORGE H. STIFF

THIS ARTICLE is based on a paper presented by Mr. Stiff to members of the American College Personnel Association, at the annual convention of the American Personnel and Guidance Association in Cleveland, March 24. Mr. Stiff is program specialist, Education Missions Branch, Division of International Education, Office of Education.

MORE than a billion human beings—about half the population of the earth—live in areas receiving technical assistance from the United States. Many of these people are desperately poor and continually hungry. Seven out of ten cannot read nor write; they are without the simplest tools of education. Two out of three are chronically sick with preventable diseases that sap

their strength and productive power; 5 out of 10 children die before reaching the age of 12. Recurring attacks of malaria or dysentery so debilitate the villagers that they can work less than half the time. No nation, so long as it is confronted with such tremendous losses in human resources and such accumulations of human suffering, can ever grow strong.

The technical cooperation we give to the peoples in underdeveloped areas is a way of helping those who want to help themselves through their own efforts and their own resources. Technical cooperation, as a part of the foreign policy of the United States, is one of several ways by which we help improve living and working conditions for peoples whose way of life, in many respects, is hundreds of years behind the 20th century.

Today about 5,200 technicians from the United States are working in 64 countries and territories of the Middle East, Asia, Africa, and Latin America. Whatever their field—health, livestock improvement, forestry, land reclamation, child welfare, or education—their main task is to teach, to train, and to demonstrate the special skills that raise living standards and promote a lasting development.

This year, too, about 4,500 technicians from underdeveloped countries are in the United States or in training centers nearer their homeland to study advanced methods and techniques. When they return home, they will help train their own countrymen and thus multiply the technical knowledge they have gained.

MUTUAL AGREEMENT

The United States does not impose technical assistance programs on any country; they are requested by governments and their people, and operate on a person-to-person basis, with American technicians working hand in hand with their foreign counterparts.

The terms of cooperation, setting forth the basic responsibilities of each government, are put into the legal language of a technical cooperation agreement between the two countries. Officials and technicians of both countries then discuss the exact nature of the job to be done and the contributions—in technicians, funds, services, and equipment—that each government will make.

Before the United States agrees to a specific project, it carefully checks to determine that somebody else is not already doing the job—an agency of the United Nations, for instance, or a private organization.

Once the United States and the host government have decided on the work to be done, the next step is to locate the best technicians to do the job. They can be hired either directly or through a contract with a university or private organization.

Our technicians do not decide what kinds and types of programs the other nation must have; rather, they operate within the framework of specific needs and requests set forth in the working agreement. They study the problems of the country and try to put their knowledge at the disposal of the people who will adapt it to their own needs and customs.

EDUCATIONAL PROGRAMS

Through the International Cooperation Administration—a semiautonomous agency within the Department of State—the United States is providing technical assistance to 43 countries and territories to develop and improve programs of education. With this help these countries are already making significant progress in improving the conditions of life for their people and providing better education for their children.

We cannot do a job for others; all we can do effectively is to help others help themselves. The vital element is not just money or supplies; it is the establishment of a system by which a country can train its own technicians. This is education.

Education is the indispensable key unlocking a nation's most valuable resource—its people. Continuing social and economic progress in the countries in underdeveloped areas depends on their improving their own programs of education.

The educational needs in most of the countries are essentially the same. They all lack teachers, teacher-training institutions, school buildings, and instructional materials. Some may know nothing of organized courses of study, education for living, and vocational training. In many, learning is often by rote and has little relation to the daily life of the community.

In the 43 countries receiving U.S. technical assistance in education, American education specialists serve as consultants or advisers to officials in a ministry of education. They also work closely with ministries of agriculture, health, and industry; with United Nations agencies, such as UNESCO; and with private organizations. In all they are emphasizing vocational education and basic elementary education for both children and adults.

The training of teachers is one of the first tasks in most of these countries. Where teacher-training institutions already exist, the need is to bring them up to reasonable standards. In many countries, however, teacher-training institutions are few and far between, and there the technician can help to provide another answer—through the inservice training of teachers in workshops or summer schools.

The lack of instructional materials is critical. Millions of schoolchildren do not own a single textbook. In many schools students study about life in a foreign country because no textbooks are available about life in their own. U.S. textbook writers and

instructional material specialists are helping to develop simple textbooks related to native life and containing, along with the three R's, familiar illustrations that suggest improvements in health, agriculture, and community life. To help native writers prepare textbooks, American technicians work with them or conduct workshops. It is not generally feasible to translate and use material developed in the United States, though some standard textbooks, such as those on automobile mechanics, may be useful. But the best job of developing instructional material is done by the native textbook writer with the help of an American specialist.

Nearly all these countries need vocational education, for the maintenance of modern mechanical devices requires skills not generally available. Because major emphasis is on the development of programs in elementary and vocational education, the greatest needs are for persons with broad training and experience in these kinds of education. Not many countries have asked for help in more specialized fields, such as guidance services; and countries that have done so are, naturally enough, those with fairly advanced programs of education—countries like Brazil, the Philippine Republic, and Nationalist China. It is logical to assume, however, that as countries improve and strengthen their programs, they will feel more need for more specialized services; and even now it is not premature to suggest that persons well qualified in specialized education and interested in foreign service should explore the possibilities of an oversea assignment.

QUALIFICATIONS

What is the ideal equipment for Americans working abroad in the technical cooperation program? First comes technical competence: there is no substitute for knowing how. Of almost equal importance is a knowledge of the language of the country where the technician will serve, and a respect for its people, culture, and customs, plus an ability to adjust to

circumstances. The importance of the family to the success or failure of the technician can hardly be overemphasized. The role of the wife is a close second to that of the technician himself. An unhappy wife, unable to adjust to a new culture, can do great damage to her husband's morale. She is a vital member of a team.

All persons whom the International Cooperation Administration appoints to oversea positions are subject to character and loyalty investigations. They and their families must meet physical fitness standards set by the Department of State for foreign service. Both the candidate and his wife are interviewed prior to an offer of employment. Oversea appointments are limited to individuals who have been U.S. citizens at least 5 years. A naturalized citizen will not be sent to his country of origin.

ICA provides all new employees with a 3-week orientation program in Washington, D.C., before they leave on assignment, to familiarize them with the policies and organization of ICA and the cultural background and political and economic situation of the country of assignment. Wives accompanying employees to Washington are encouraged to attend the orientation sessions. For candidates going to countries in which Arabic, Spanish, or French are spoken, there is an intensive 8-week language program if they do not know the proper language or if their knowledge is inadequate. All appointees are encouraged to learn the language of the host country, for there is no substitute for the ability to communicate.

TERMS OF SERVICE

Initial assignments in Point IV programs are probationary and are for a minimum period of 2 years at the post of duty concerned. Many educators enter the program on leave of absence from a college, university, State department of education, or local school system, with the understanding that they will return to their former position when their assignment is over. Others come to the pro-

gram with the intention of making a career of foreign service. Some of the technicians who entered the service in the mid-1940's, when the Latin American programs began, have 10 and 12 years of service behind them. A minimum of 5 years of service entitles an employee to benefits under the Civil Service Retirement Act.

An employment selection panel in ICA establishes salaries for persons appointed to oversea positions. All oversea employees receive a housing allowance or are housed in government-owned or rented quarters. Other allowances may be authorized under Foreign Service Regulations, for example, an educational allowance for an employee's school-age children. The oversea employee receives transportation for himself, his dependents, and his personal and household effects to the post of duty and return at the expiration of the 2-year assignment.

An employee earns home leave at the rate of 5 workdays for each 4 months of foreign service, which may be taken at the end of each 2-year tour of duty. However, he forfeits such leave if he does not go abroad for another period of service.

WHAT EDUCATORS THINK

How do American educators evaluate their experience with the technical service program? Their reports to ICA and the Office of Education are enthusiastic. Take, for example, two:

Harold Adams, deputy chief of the education division of the technical cooperation program in a southeast Asian country, while in Washington, D.C., recently on home leave before returning overseas, said, in commenting on why he is staying with the program, "Those of us in the field come face to face with the cold war. Out there it is real, definite, and something with which we must deal constantly rather than read about in the press. The realities of such situations have struck me so forcefully that I have decided to continue indefinitely in foreign service for as long a period as I feel I am making a contribution to the realization of our foreign ob-

jectives. These are the reasons why I interrupted a university career to remain in the program."

L. P. Terrebonne, recently returned to the States after 4 years as chief of the education division of the program in Haiti, evaluates his experiences thus: "All of my adult life I had been in the field of education in the State of Louisiana. During that time I held practically every type of school position in the State. I served as classroom teacher, principal of small and large schools, parish supervisor of instruction, parish superintendent of education, college teacher, and member of the State department of education. My experiences in these positions were always satisfying. But the 4½ years I spent in Haiti as chief of the education division were the most challenging and satisfying of all the years I've spent in education."

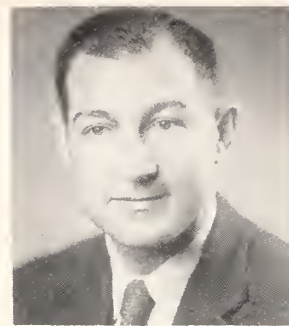
The future of the technical cooperation program is dependent on many things. Yet, there are many indications that for a number of years to come the United States will continue to provide assistance to friendly underdeveloped nations in helping them to raise their standards of living. The improvement of national programs of education is and will continue to be one of the principal means by which this objective may be realized.

Recruiting American educational specialists for service abroad in the technical cooperation program is a responsibility of the U.S. Office of Education, but the International Cooperation Administration is the actual employing agency. Educators with extensive experience in the training of teachers are in greatest demand. The U.S. Office of Education also provides requested professional and technical support for these specialists by drawing on the extensive resources for such services in the Office and in affiliated professional organizations.

Those interested in exploring employment opportunities in this program should write to the Education Missions Branch, U.S. Office of Education, Washington 25, D.C.

Should the United States Have A COST OF EDUCATION INDEX?

By Orlando F. Furno



EXPENDITURES for education have increased more in the 1950's than they did in the entire quarter century preceding. But not all of this increase can be considered a net gain for educational improvement. Part of it must be written off as inflation. At present, however, no device is available for measuring accurately what part of the rise in school expenditures should be charged to inflation and what part to improvement of the educational program.

ALTERNATIVE TO FAITH

The housewife who pays 2 cents more than she did last month for a quart of milk attributes the increase to higher costs, or inflation, since the amount and quality of the milk have not changed. But the local school board whose school costs have risen \$50 per pupil over the past year is uncertain about what part of the increase represents inflated educational costs and what part represents an improvement in the local educational program.

Is there not, however, an alternative to blind faith in this matter? Cannot a valid cost-of-education index be developed that will enable boards of education to know with certainty the part inflation has played in increasing educational costs?

Neither the concept of a cost-of-education index nor the present urgency for constructing one is new. Over two decades ago, in 1938, the National Education Association

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worked on the problem of developing such an index, reporting its study in a bulletin entitled *Why Schools Cost More*. Two decades later, in 1958, at the National Conference on School Finance Problems, two separate committees discussed the usefulness of such an index and urged that one be developed and that it be reported periodically. The State of New York, also, has advocated the development of an index as essential for measuring the changes in costs of education.

Yet nowhere today is such an index maintained and published.

THREE USES

The uses to which a cost-of-education index would ultimately be put is difficult to prophesy. Who would have predicted in 1913 that five decades later the Consumer Price Index would be used to adjust automatically the wages of several millions of persons? Or that it would be widely used in wage negotiations and in measuring the effects of fiscal and other government policies?

For the present, though, one can foresee at least three useful purposes for a cost-of-education index:

1. To measure trends in the purchasing power of the school dollar over the years.
2. To provide for automatic changes in State foundation programs to adjust to inflation and deflation.
3. To set forth defensible fiscal policy at the State and local levels for the improvement of public education.

This would not be all, of course. Still other important uses would no doubt

be found for the index, such as to serve as a guide for local school boards and superintendents when they plan their budgets.

PROBLEMS AND QUESTIONS

Useful though a national index would be, it would be no quick and easy panacea for our complex educational ills. The developing of it would be beset by numerous pitfalls. Preliminary exploratory experiences already have yielded valuable information on a number of the major problems.

First of all, a national cost-of-education index should be constructed to meet at least six criteria:

Practicability. The time and the money required to produce and maintain the index should be reasonable.

Availability of data. Any data to be used in the index should be easily and readily obtainable.

Objectivity. All data entering into the index should be uniform, accurate, and objective so that no matter who calculates the index, he will obtain the one correct answer.

Simplicity. The index should be constructed in the simplest terms consistent with validity. Most persons should be able to understand and to calculate the index.

Flexibility. Since the index would represent all school districts but not necessarily a particular district or group of districts, it must be so flexible that regional, State, and local district data could be substituted for national components.

Title VII

New Communications Media

Standardization. Constructing a cost-of-education index requires following the cost history of educational goods and services that are relatively constant in amount and quality. The board of education may be considered as the purchaser of an "educational market basket," which contains such things as the services of classroom teachers, guidance workers, administrators, custodians, and clerks, and goods such as instructional materials and school equipment. The standardization criterion does not imply the setting of any standards for quality: it is concerned only with the maintenance of a market basket in which the amount and quality of educational goods and services remain relatively constant over a period of time.

Moreover, the procedural aspects of developing an index and evaluating it in the light of the foregoing criteria give rise to a number of fundamental problems and issues:

Would the index be used to retard educational improvement?

What items should be included in the market basket the local school board has to purchase?

Should the index be based on current expenditure only?

Should both regional and national indexes be reported, and should they reflect not only current expenditures but those of capital outlay and debt service as well?

How often should the relative weights of the items in the market basket be tested for validity?

What provision should be made for adding or removing certain items?

These are only a few of the important problems that will have to be resolved.

Because a cost-of-education index would provide information of paramount importance to public education, the Office of Education is studying these and other problems of developing, maintaining, and reporting, at least annually, such an index.

TITLE VII, written into the National Defense Education Act to encourage educators to find more effective educational uses for motion pictures, video tapes, filmstrips, and other new communications media, is moving ahead in both directions specified by the Act: (1) Conducting, assisting, and fostering research and experimentation, and (2) disseminating information. The New Educational Media Advisory Committee, named last fall to assist the Commissioner in administering the title, has approved 34 proposals for research as well as 5 contracts to advance dissemination.

1. Research and Experiment

All of the 34 research projects now approved are being negotiated into contract, but 13 must await Federal support until supplemental funds become available to the Office of Education. The other 21 will carry out research on the following subjects:

EDUCATIONAL TELEVISION AND RADIO CENTER, Effectiveness of a series of filmed demonstrations in teacher education for a new high school mathematics curriculum.

HUNTER COLLEGE, Use of TV for improving teacher training and measures of student-teaching performance.

JOHN TRACY CLINIC (LOS ANGELES, CALIF.), Evaluation of audiovisual methods: changing attitudes toward education.

MAINE STATE DEPARTMENT OF EDUCATION, An economical and practical method of providing intellectual stimulation to gifted pupils in small secondary schools through a TV instructional program.

MICHIGAN STATE UNIVERSITY, Ways in which the application of the new communications media may improve teacher preparation, especially in languages, science, and mathematics.

PINELLAS COUNTY (FLA.) BOARD OF PUBLIC INSTRUCTION, Provision of preschool experiences via educational TV to

orient and motivate children entering grade one and to facilitate their adjustment to group activities.

SAN JOSE STATE COLLEGE, Utilization of TV in the observation program for teacher education.

THE PENNSYLVANIA STATE UNIVERSITY, Patterns for improving the preparation of preservice teachers in the use of audiovisual materials; and effects of optimal use of audiovisual materials on pupil learning and teacher use.

TWIN CITY (MINN.) AREA EDUCATIONAL TELEVISION CORPORATION, Effectiveness of certain specific TV techniques on learning.

UNIVERSITY OF CALIFORNIA MEDICAL CENTER, Use of a mobile laboratory of new media for inservice education of teachers in mathematics and science.

UNIVERSITY OF GEORGIA, Preservice teacher education in the use of new media for classroom instruction.

UNIVERSITY OF HOUSTON, Involvement of a university faculty in improvement of a teaching project utilizing the video tape recorder.

UNIVERSITY OF MIAMI, Summertime use of open-circuit TV instruction to bridge the gap between high school and college.

UNIVERSITY OF MINNESOTA, (1) Use of sound filmstrips for improving teacher-pupil contacts in the classroom; (2) Effectiveness of closed-circuit TV in teacher education.

UNIVERSITY OF OKLAHOMA, Selected vicarious experiences *vs.* direct observational experiences of preservice teachers in the foundation area of professional preparation.

UNIVERSITY OF UTAH, Use of telecasts in public school classes for demonstrating to students of education principles of human behavior and teaching techniques.

UNIVERSITY OF UTAH AND SALT LAKE CITY PUBLIC SCHOOLS, Challenging the superior student by making the study of Russian available in the elementary school curriculum via TV.

UNIVERSITY OF WASHINGTON, Two modern methods for teaching a spoken language.

UNIVERSITY OF WISCONSIN, More effective ways of appraising teachers in training and inservice of ways of improving their day-to-day classroom learning activities and procedures through audiovisual media.

WAYNE STATE UNIVERSITY, Audio-visual project in modern languages.

The thirteen other approved projects, those awaiting funds, have been proposed by the following institutions and agencies:

Baylor Medical College	Oregon State System of Higher Education
Boston University	Purdue University
Earlham College	Syracuse University
Harvard University	
Indiana University	The Ohio State University
Kansas State Teachers College	The University of Akron
Massachusetts Institute of Technology	University of Oregon

As of mid-April, 339 proposals for research and experimentation had been submitted to the Commissioner. These proposals, estimated to have a total cost of more than \$36 million, have come from institutions, agencies, organizations, and individuals in 41 States. The Advisory Committee, which thus far has held two meetings, has evaluated 192 of them.

The Advisory Committee will meet in May to consider the 147 other proposals thus far received, and will meet again this fall. The deadline for submitting research proposals for consideration at the latter meeting has been set for September 1, early enough to give field consultants of the Office of Education time to appraise all of the new proposals before the Committee meets.

Those wishing to submit proposals should first write for information about the content, format, and number of copies to be submitted, as well as for a list of the criteria used to evaluate each proposal. Letters should be addressed to the New Educational Media Branch, Office of Education, Washington 25, D.C.

2. Dissemination of Information

That part of Title VII which has to do with getting information about educational uses of the new media out

to schools and colleges may be carried out either directly by the Office or through contracts with public or private agencies, organizations, groups, or individuals. For projects and other activities designed for this function the Advisory Committee has approved certain preliminary objectives:

To provide information about research, whether completed, in process, or projected.

To provide information about significant progress in teaching practices.

To increase the accessibility and availability of the media by both bibliographic and direct means.

To improve directly both the educational use of the media and the training of teachers in use of the media.

To assist in developing national goals, standards, and guidelines.

To find the most effective ways of reaching these objectives, the Advisory Committee thus far has approved 5 contracts (other contracts will be approved as funds become available):
COLUMBIA UNIVERSITY, A study to determine the feasibility of establishing an

Educational Media Research Information Service.

EDUCATIONAL TELEVISION AND RADIO CENTER, Planning and production of a limited number of filmed case reports showing the uses of the new media in sound teaching practices, in such areas as science, mathematics, and modern foreign languages.

NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS, A symposium on the network concept of educational broadcasting and the publication of reports based on reviews of basic problems, opportunities, and accomplishments in current planning for network systems by States, regions, and sub-regions.

NATIONAL EDUCATION ASSOCIATION, A pilot project to discover ways and means of disseminating information on tested techniques, as developed at regional conferences and workshop demonstrations.

UNIVERSITY OF INDIANA, A study to determine the feasibility of gathering and disseminating bibliographic information about essential teaching materials, including films, filmstrips, recordings, radio, and television programs.

The Advisory Committee has named three of its members as a special committee to consider in detail the dissemination program. All suggestions received will be considered and evaluated both by the subcommittee and by the entire Advisory Committee.

TITLE X

Statistics About Education

DATA-PROCESSING machines have been written into nearly all of the State plans coming into the Office of Education under Title X of the National Defense Education Act. Of the 27 States whose plans are on the approved list as of mid-April, 24 say they are planning either to begin or to expand use of mechanical devices for processing and analyzing the streams of data continuously flowing into their State departments of education.

In this eagerness to draw upon modern technological developments to speed up the production of accurate and meaningful information about education, the States show themselves to be of the same mind as the Congress

that wrote the act. For the Congress was specific on the matter: one of the five purposes it named as legitimate for grants under the title is the installing and operating of mechanical equipment.

The States are looking to machines for many things. They want a speeding up of the processing and reporting of basic statistics about education. They want accuracy unmarred by human error. They want a complex performance that turns out more than sums of figures, that will do such things as run correlations among a dozen different factors—and do it in less than a dozen minutes. In short, they want a fast, economical way of doing a tremendously complicated

job. Once they get it, if they have planned well, they will have at hand the means for probing deeply into the many meanings now hidden in their statistical data.

Five of the States with approved plans already had either moderate or extensive machine operations in effect when they submitted their plans:

Georgia	New York
Iowa	Texas
Kansas	

and eight had made more limited use of machines:

Connecticut	Nevada
Illinois	New Jersey
Maryland	Ohio
Massachusetts	Pennsylvania

All 13 have stated their intention to expand their use of mechanical equipment; in addition, 11 States are planning to install machine operations for the first time:

Colorado	New Mexico
District of Columbia	Oregon
Kentucky	Rhode Island
Michigan	Tennessee
Montana	Utah
	Hawaii

An analysis of the State plans thus far approved shows the States exploring at least three different approaches to the use of automatic data-processing machines by State educational agencies:

1. The agency either buys or rents the machines and itself operates them. This is the way being chosen by New York and Texas.
2. The agency, utilizing basic machines, does the work of preparing the data for the complex machines—that is, does the planning and programming—and then, usually on a reimbursable basis, uses the automatic data-processing machines available to State agencies.
3. The agency contracts with a centralized State unit or with a private company for doing all the mechanical operations.

The approach, of course, varies with the kinds of operations wanted and the volume of data to be processed. In the least populous States it

may not be economical for the State educational agency to buy expensive machines for its own use.

While the States are making their evaluations and decisions, the Office of Education staff is exploring the ways in which it can make technical assistance available to the States. It plans to offer the services of special consultants as well as of members of its own staff: to provide a clearing-house of information about States using various kinds of data-processing machinery; and to build up a collection of informational materials on data processing.

No State is converting to mechanization overnight. It is common knowledge that many businesses and agencies have rushed into machine processing too fast, have made wasteful mistakes, suffered some disillusionments. The State educational agencies, therefore, are generally keeping three ideas in mind:

The use of machines must be integrated with the agency's overall design of systems and procedures; therefore, analysis and improvement of systems and procedures is a prerequisite.

Usually the most practical approach is to develop a plan for a complete system of mechanization, and then to begin in a modest way, with those parts of the data-processing program most ready for conversion.

The agency should have personnel trained to make effective use of the machines in producing the information that is wanted.

Many different kinds of excellent machine systems are now on the market; and the agency needs to evaluate each one before it makes its selection to make sure that what it buys is the equipment best suited to its needs. The New Jersey agency, for example, has developed an outstanding plan for converting to mechanical processing. It will coordinate its plans for installing machines with its strengthening of organization, staffing, and systems and procedures, so that its machines will not be "tacked on" to a system not designed for them but will be part of the most integrated system that can be devised. By this approach, a State will be assured of maximum benefit per dollar expended.

The 196th contract signed The 35th finished project reported

Cooperative Research Program

THE cooperative educational research program authorized by the 83d Congress in July 1954 (Public Law 531) has moved ahead by several more projects since the Commissioner's Advisory committee on the program held its latest meeting, on February 12-14. At that time the committee selected 26 out of 82 proposals it had under consideration, and recommended to Commissioner Derthick that they receive Federal support. As of the first of May, sixteen of these have been signed into con-

tract; the remaining ten are in various stages of negotiation.

The sixteen new projects bring to 196 the total number that have received pledges of Federal support under the program. They will look into many questions high on the educator's *Facts-Needed* list—into the value of group counseling, ability groupings, and special training for gifted children; into the equipment available for high school science courses; even into the characteristics of men who abandon teaching as a

career. Some of the sixteen will take as much as 2 years for completion, others as little as 3 to 6 months. Together they call for \$316,343 from the Federal Government and \$280,782 from the cooperating institutions, or a total of \$1.1 million. For work done this fiscal year—that is, before July 1, 1959—the Federal Government will contribute \$419,360.

The sixteen projects are listed here, together with the names of the sponsoring institutions and the directors. The dollar figure given for each project stands for the Federal funds that have been committed to bring the project to its completion.

Attitudes and Interests

PURDUE UNIVERSITY, *The teenager's conception of mental illness*, 6 months, E. J. Asher, director. Federal funds, \$6,026.

Curriculum

COLUMBIA UNIVERSITY, *Analysis of curricular offerings in a selected group of independent liberal arts colleges*, 1 year, Earl J. McGrath, director. Federal funds, \$25,116.

UNIVERSITY OF TOLEDO, *Facilities and equipment available for teaching science in the high schools*, 9 months, Archie N. Solberg, director. Federal funds, \$46,621.

WASHINGTON UNIVERSITY, *Evaluative study of psychological research on the teaching of mathematics*, 4 months, Philip H. DuBois, director. Federal funds, \$9,254.

Educational Theory

UNIVERSITY OF UTAH, *Development of a theory of education from psychological and other research findings*, 1 year, 4 months, Calvin W. Taylor, director. Federal funds, \$25,174.

Handicapped Children

PURDUE UNIVERSITY, *Speech pathology and audiology programs in elementary and secondary schools: a national survey of current status and problems*, 2 years, M. D. Steer, director. Federal funds, \$48,228.

Mentally Retarded Children

SOUTHERN ILLINOIS UNIVERSITY, *Responses of bright, normal, and retarded children to learning tasks*, 2 years, Leslie F. Malpass and Neil A. Carrier, directors. Federal funds, \$33,248.

Special Abilities

IOWA STATE TEACHERS COLLEGE, *Effect of special training on the achievement and adjustment of gifted children*, 17 months, Tom A. Lamke and Arthur J. Looby, directors. Federal funds, \$46,754.

UNIVERSITY OF ILLINOIS, *Extent to which group counseling improves the academic and personal adjustment of underachieving gifted adolescents*, 14 months, Merle M. Ohlsen and Fred C. Proff, directors. Federal funds, \$24,593.

UNIVERSITY OF PITTSBURGH, *Identification, development, and utilization of human talents*, 14½ months, John C. Flanagan, director. Federal funds, \$479,620.

Staffing

COLUMBIA UNIVERSITY, *Characteristics of men who have remained in and those who have left teaching*, 14 months, Robert L. Thorndike and Elizabeth P. Hagen, directors. Federal funds, \$15,884.

WASHINGTON UNIVERSITY, *Pupil expectation of teacher leadership behavior*, 9 months, Louis M. Smith, director. Federal funds, \$3,680.

Television

UNIVERSITY OF NEBRASKA, *Effect of TV instruction on individual learning curves*, 7 months, Robert E. Stake, director. Federal funds, \$2,415.

Vocational Education

MICHIGAN STATE UNIVERSITY, *Development of research design to investigate the functional understandings of technicians as bases for curriculum planning in technical education*, 1 year, George L. Brandon, director. Federal funds, \$11,489.

Miscellaneous

GEORGE PEABODY COLLEGE FOR TEACHERS, *Empirical investigation of the effects of nonnormality on the sampling distribution of the product moment correlation coefficient*, 1 year, Raymond C. Norris, director. Federal funds, \$12,075.

MICHIGAN STATE UNIVERSITY, *Effectiveness of homogeneous and heterogeneous ability grouping in ninth grade English classes with slow, average and superior students*, 2 years, Elizabeth M. Drews, director. Federal funds, \$26,166.

The advisory committee will meet again on May 28–29 to consider the 118 new proposals that were submitted before the April 1 deadline. All

proposals submitted after that deadline and before September 1 will be considered at another meeting, in October.

SINCE *School Life's* latest report, in March, five more research teams cooperating in the program have completed their projects and sent their final reports to the Office of Education. The total number of completed projects now stands at 35. Four of the latest reports are concerned with the education of retarded children: the fifth is on a study of education of Alaskan natives.

The titles of the projects, the institutions conducting them, and the directors are as follows (brief summaries of the reports are available for the asking, from the Cooperative Research Program, Office of Education, Department of Health, Education, and Welfare, Washington 25, D.C.: in making your request, please include for each report the number in parentheses after the title):

A program of education for Alaska natives, University of Alaska, Charles K. Ray (011).

Investigation of factors involved in the educational placement of mentally retarded children, The Ohio State University, Viola M. Cassidy and Jeannette E. Stanton (043).

Investigation of discrimination learning ability in mongoloid and normal children of comparable mental age, George Peabody College for Teachers, G. N. Cantor (076).

Relationships between articulatory development and development of phonetic discrimination and word synthesis abilities in young mentally retarded and normal children, Syracuse University, C. V. Mange (073).

Identification and evaluation of methods for teaching severely retarded (trainable) children, George Peabody College for Teachers, Margaret Hudson (155).

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ACCREDITATION IN HIGHER EDUCATION, by *Lloyd E. Blanch*. 1959. 247 pp. \$1.50.

CHILDREN WITH SPEECH AND HEARING IMPAIRMENT: PREPARING TO WORK WITH THEM IN THE SCHOOLS, by *Wendell Johnson*. 1959. 32 pp. 20 cents. (Bul. 1959, No. 5.)

COLLEGE AND UNIVERSITY FACILITIES SURVEY, PART 1: COST AND FINANCING OF COLLEGE UNIVERSITY BUILDINGS, 1951-55, by *W. Robert Bokelman* and *John B. Rork*. 1959. 53 pp. 45 cents. (Cir. No. 540.)

EDUCATION OF THE SEVERELY RETARDED CHILD, A BIBLIOGRAPHICAL REVIEW, by *Harold M. Williams* and *J. E. Wallace Wallin*. 1959. 26 pp. 15 cents. (Bul. 1959, No. 12.)

PARTICIPATION IN ADULT EDUCATION, by *Marie D. Wann* and *Marthine V. Woodward*. 1959. 37 pp. 30 cents. (Cir. No. 539.)

STATUS OF PREPARATION PROGRAMS FOR GUIDANCE AND STUDENT PERSONNEL WORKERS, by *Paul MacMinn* and *Roland G. Ross*. 1959. 49 pp. 25 cents. (Bul. 1959, No. 7.)

SURVEY OF STATE LEGISLATION RELATING TO HIGHER EDUCATION, by *Ernest V. Hollis*, *William G. Land*, and *S. V. Martorana*. 1959. 115 pp. 70 cents. (Cir. No. 552.)

TEACHER EDUCATION FIFTH-YEAR PROGRAMS, A SELECTED BIBLIOGRAPHY, by *Shirley Radcliffe*. 1959. 20 pp. 15 cents. (Bul. 1959, No. 9.)

FREE

(Request single copies from Publications Inquiry Unit, U.S. Office of Education, Washington 25, D.C. In requesting copies, please include publication number.)

SCHOOL LIBRARY MATERIALS IN SCIENCE, MATHEMATICS, MODERN LANGUAGES, AND GUIDANCE . . . AND HOW TO USE THEM, by *Mary Helen Mahar* and *Gerald B. Fisher*. Reprint, *School Life*, January-February 1959. 12 pp.

THE NEW EDUCATIONAL MEDIA PROGRAM AUTHORIZED BY TITLE VII OF THE NATIONAL DEFENSE EDUCATION ACT OF 1958. 6 pp. A leaflet.

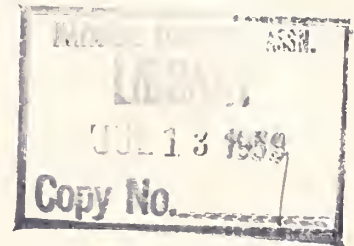
SCHOOL PLANT MANAGEMENT BIBLIOGRAPHY, by *N. E. Viles*. 38 pp.

STATE PROVISIONS AFFECTING LOCAL SCHOOL SUPPORT. 13 pp. (Cir. No. 564.)

SCHOOL LIFE

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OFFICE OF EDUCATION



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May 1959

Whom then do I call EDUCATED

¶ First, those who control circumstances instead of being mastered by them;

¶ Those who meet all occasions manfully and act in accordance with intelligent thinking;

¶ Those who are honorable in all dealings, who treat good-naturedly persons and things that are disagreeable;

¶ And furthermore those who hold their pleasures under control and are not overcome by misfortune;

¶ Finally, those who are not spoiled by success.

ISOCRATES

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . ARTHUR S. FLEMING, <i>Secretary</i>	
OFFICE OF EDUCATION LAWRENCE G. DERTHICK, <i>Commissioner</i>	
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Brief. * * * * *

EDUCATION AND GOVERNMENT

Reports * * * * *

World Refugee Year

TWO hands curving protectingly over a lone human figure are at the center of the United Nations emblem for the World Refugee Year, which now begins, in June 1959.

WRY has been launched because last December, 59 countries in the General Assembly of the United Nations voted for it. Already more than 20 countries have national WRY committees either working or forming. The U.S. committee, a broadly representative group (its board chairman is Francis B. Sayre, dean of the Washington Cathedral; its president, Harper Sibley, former president of the U.S. Chamber of Commerce), is well on its way. On March 26 it recommended to President Eisenhower that at least \$10 million beyond the present outlays for refugees be appropriated to mark this country's observance. To strengthen U.S. participation, the President called a White House conference in May.

The committee is planning a program that aims at reaching all Americans, through their civic and fraternal organizations, through their affiliations with industry, labor, religion, and education. It will make a special attempt to gain the participation of persons and groups not yet especially concerned with the problems and sorrows of people without a home.

Commissioner's Assistant Named

ON May 1 Commissioner Derthick named Donald F. Kline, executive secretary of the Nebraska State Education Association and editor of

the *Nebraska Education News*, as his special assistant. Dr. Kline succeeds Charles M. Holloway, now director of information for the College Entrance Examination Board in New York City. Mr. Holloway had joined the Office of Education staff in April 1957 from the National Education Association.

Cultural Center

THOUGH a continent lies between Berkeley, Calif., and Washington, D.C., citizens of both cities have a common interest in the national cultural center that will rise in the Nation's Capital in the next few years. One reason for this common interest is that the center will be *national*, belonging as much to the citizens of California, Alaska, Iowa, Georgia, and all the other States, as to the residents of the District of Columbia and its environs. Another is that the center will be built with money contributed by the public. The 85th Congress granted 9 acres of land near the Potomac River in the District for the center, but stipulated that funds for the building must come from the public.

The first donation from the public has come in, though the formal fund-raising campaign has not yet begun. In April, Martha S. Clark of Berkeley, Calif., sent a check to Congressman Frank P. Thompson, Jr., of New Jersey, one of the sponsors of the bill granting the land. In turn, Congressman Thompson gave the check to Arthur S. Flemming, Secretary of Health, Education, and Welfare, who has passed it on to Daniel W. Bell,

treasurer of the board of trustees of the cultural center.

Secretary Flemming has praised Mrs. Clark for her fine example and has expressed the hope that citizens everywhere will follow suit and by their interest and generosity make the new center truly reflect the cultural achievements of our Nation.

The national cultural center will be part of the Smithsonian Institution.

Changes in Higher Education

LLOYD E. BLAUCH retires June 1 from the position of assistant U.S. Commissioner for Higher Education. Homer D. Babbidge, Jr., succeeds him.

Dr. Blauch will not be lost to the Office of Education, however. Although he has reached the age of mandatory retirement, Civil Service regulations permit him to continue to serve the Government as a consultant; and under that permission Commissioner of Education Derthick now appoints Dr. Blauch to the newly created post of specialist for graduate education, in which he will not only make studies and reports but act as consultant to colleges and universities and to the National Advisory Committee on Graduate Fellowships.

Thus Dr. Blauch extends into the beginning of a third decade his years of continuous service in the Office of Education. Actually, Dr. Blauch's first connection with the Office of Education was in 1919, under a temporary appointment as educational statistician. Since then the Office has known him as specialist in higher education, specialist for land-grant

colleges and universities, chief for education in the health professions, and, finally, as Assistant Commissioner for Higher Education.

Dr. Babbidge, the new Assistant Commissioner, is no newcomer to the Office of Education. Since last October he has been director of the Financial Aid Branch, administering those parts of the National Defense Education Act that involve institutions of higher education. From September 1955 to August 1956, on leave from Yale University, he was special assistant to the then Commissioner of Education Samuel M. Brownell.

Between these two tours of duty, Dr. Babbidge for a year was assistant to former Secretary of Health, Education, and Welfare Marion B. Folsom. At Yale University he was lecturer in American studies, director of the Division of Financial Aid, and executive fellow of Pierson College.

High School Graduates

SOON it will be an old story: "This year's high school graduating class is the largest in history." Certainly it is a story we have been able to tell without interruption for the past 5 years.

And 1958-59 is no exception. According to a projection made by the Reference, Estimates, and Projections Section of the Office of Education, this year's graduating class has a membership of 1,639,000—half a million more than 15 years ago. But if the estimates are right, it won't take 15 years to add another half million. We ought to be able to do that in 5 short years:

1959-60.....	1,803,000
1960-61.....	1,873,000
1961-62.....	1,880,000
1962-63.....	1,972,000
1963-64.....	2,309,000
1964-65.....	2,508,000
1965-66.....	2,542,000

These projections include all kinds of high schools, public and nonpublic, regular and nonregular (such as practice schools in teacher-training institutions and residential schools for exceptional children).

Survey in Africa

AFRICA is experiencing a boom in education: even in backward areas the natives are begging for "book medicine."

This is a fact certain to tower in a report now being completed in Washington. The report, centering on the countries south of the Sahara Desert and north of the Union of South Africa, is being prepared for the International Cooperation Administration under a contract between it and the National Academy of Science. (ICA is the agency that carries out the U.S. program of sharing knowledge and skills with underdeveloped countries, a program begun 10 years ago under the popular name "Point 4.")

Authors of the report are a team of experts—in medicine, agriculture, mineral resources, fisheries, and education—who, headed by J. G. Harrar, vice president of the Rockefeller Foundation, visited central Africa this spring with one purpose in mind: to find the best ways in which science and technology can be used to solve the problems barring African countries from the progress they desire.

Oliver Caldwell, the educator on the team and Assistant U.S. Commissioner for International Education, says the report will contain not only findings of fact but a series of recommendations to ICA. What those recommendations are of course will not be known until the academy releases the report, probably early this summer; but the recommendations Dr. Caldwell has submitted are based on his belief that Africa's two greatest needs are for skilled men and women and the facilities to train them. Some evidence of what Africa loses for lack of educational facilities, he says, is found in an example of what it achieves where facilities are available. Of the 480 young Africans in Kenya who recently took the Cambridge University examinations, all but 6 percent placed high enough to receive a Cambridge certificate, and

about half of them earned Cambridge Firsts.

For ICA and its technical missions in Africa, Dr. Caldwell has much commendation: "I found in them many Americans of the highest caliber." He speaks, for example, of Dr. Story, former dean of the graduate school at Memphis State University, who is deputy chief of the ICA education mission at Addis Ababa; and of the work being done at Dibre Birhan, also in Ethiopia, where ICA is helping to develop a training school for rural teachers. He is much impressed by the work of Samuel Adams in Nigeria.

Briefly, Dr. Caldwell sums up the situation: "Africans know that their chief problem is the education and training of its people, and already they are spending up to 40 percent of their national income on it. The Soviet Union knows it, too, and is attracting substantial numbers of Africans to itself. The very future of Africa depends on the spirit of the education its people receive."

Basic School Facts, 1956-57

THE Office of Education has just put out a brief report on public elementary and secondary school statistics for the school year 1956-57, a year not covered by the Biennial Survey of Education. *Statistics of State School Systems 1956-57*, circular No. 572, by Samuel Schloss and Carol J. Hobson, includes data on—

- Enrollment and attendance
- High school graduates
- Number of school districts
- Number of schools
- Instructional staff
- Current expenditures
- Capital outlay
- Interest

Most of the figures were gathered from published reports of State departments of education; the rest came directly from the departments in response to written requests.

The circular may be had on request, from the Publications Inquiry Unit, Office of Education, Washington 25, D.C.



Friendship between two flags: L. G. Derthick, U.S. Commissioner of Education, and John Kraemer, Washington schoolboy, accept the first of 3,000 gifts from the children of India presented by Shama Vohra, schoolgirl from Bombay, and M. C. Chalba, India's Ambassador to the United States, while Mrs. Ira Heller, founder of the Share Your Birthday Foundation, looks on.

The Very Finest AMBASSADORS

THIS fall, through the Share Your Birthday Foundation, schoolchildren in half a dozen cities of the United States will receive gifts from the children of India. These are "birthday" gifts with a difference; they are gifts which the children themselves received on their birthdays and which they have chosen to share with the children of another land. American children have more than once set aside some of their birthday presents for the foundation to send to children abroad, but this is the first time they have received gifts through the foundation.

Although distribution of most of the 3,000 gifts will not be made until fall, the first shipment arrived in Washington, D.C., last month. In a brief and simple ceremony in the office of the Commissioner of Education on April 14, the children of India officially gave their gifts to the children of the United States and our children officially accepted them. Shama Vohra, a 12-year-old schoolgirl from Bombay who is now residing in Washington, was chosen to speak for the children of India by India's Ambassador to the United States, the Honorable M. C. Chalba. A Washington schoolboy, John Kraemer, chosen by Commissioner Derthick, accepted the gifts from Shama.

Standing beside the children during the ceremony were Ambassador Chalba, Commissioner Derthick, and Mrs. Ira Heller, a Philadelphia housewife, founder of the Share Your Birthday Foundation. Ambassador Chalba said of the exchange of gifts, "Children make the very finest

ambassadors. They are friendly, they have no tensions, and they know no politics." Commissioner Derthick, too, expressed his belief that the exchange would promote friendship between the two nations. Mrs. Heller, standing fittingly in the center of the group, was perhaps the happiest person of all. In the two-way flow of gifts she sees a strong movement for peace. People who exchange gifts when they are children are less likely to exchange bombs and bullets when they are grown.

This aspect of the exchange brought officials of the Federal Government and of private organizations to the ceremony. Attending from the U.S. Information Agency were Conger Reynolds, Director; John Begg, Deputy Director; and Leo Disher, program executive of the Office of Private Cooperation. USIA also sent Helen Semmerling, program officer for India. The Department of State was represented by Stewart G. Anderson, senior officer for the Near and Far East; Richard M. Hughes, area program officer for the Near East and South Asia; and Benjamin Fleck, officer in charge of the India desk. Paul E. Smith represented the National Education Association. Carl F. Hansen, superintendent of schools for the District of Columbia, and Margaret Pepper, his executive assistant, were present, as was Theodore H. Reed, curator of the National Zoological Park. Completing the company were Thomas Burrowes and George J. Kelly, two directors of the Share Your Birthday Foundation.

The gifts will be distributed to the selected cities—Philadelphia, Allentown, Washington, Kansas City, Los Angeles, and a city of the South yet to be named—by the National Education Association. In each city, the superintendent of schools will decide how many gifts his students should receive. Gifts for children in Washington will come from the children of Delhi, capital of India.

To American eyes, many of the gifts will be exotic—ivory toys, peacock feathers, handicraft, Indian games, and silver India coins. Besides the unusual gifts, schoolchildren in the six cities can expect an even greater treat. A 10-year-old girl from Bombay, Firoza Irani, chosen from hundreds of applicants, will accompany the gifts as a "child ambassador." (Since Firoza speaks fluent English, she can answer the questions of American children about her country.) And with her will travel a baby elephant, a gift to all the children of America. When Firoza's trip is over, the elephant will be given to the National Zoological Park in Washington, D.C.

TEXTBOOKS FOR THE ELEMENTARY SCHOOL

Production • Selection • Utilization

By HELEN K. MACKINTOSH and FREDRIKA M. TANDLER

THE composition, selection, and utilization of elementary school textbooks—this will be one of the two main subjects for discussion at the 22d International Conference on Public Education when it meets this summer in Geneva, Switzerland, July 6 to 15. (The other subject will be *Measures to promote greater numbers of qualified scientific and technical staff.*)

The conference will bring together information on elementary school textbooks from all parts of the world: some 70 countries are expected to report. The U.S. report, prepared from replies to a questionnaire, has been written by an Office of Education committee of specialists in elementary education and international educational relations, with the assistance of consultants from the Association for Childhood Education International, the Department of Kindergarten-Primary Education and the Association for Supervision and Curriculum Development of the National Education Association, and the American Textbook Publishers Institute. We give here some highlights from that report.

Production

Some 90 percent of the educational materials used in U.S. school and college classrooms are commercially produced by individual publishers, a fact that surprises educators abroad,

Dr. Mackintosh is chief of the Elementary Schools Section and Dr. Tandler is international organizations specialist, Office of Education.

THE annual international Conference on Public Education is jointly sponsored by UNESCO and the International Bureau of Education. The United States has sent representatives to these meetings for many years but has been a member of IBE only since last July.

Each year the Conference draws up recommendations on the special topics it has studied and makes them available to conference participants and to national ministries of education. Copies, in limited number, are also available on request from IBE. In the United States, information about the conference and the recommendations appears shortly after the conference in professional journals.

many of whom are accustomed to "official" textbooks issued by a national ministry of education or other education authority. They immediately ask how we establish criteria and how we achieve cooperation among publishers and between publishers and educators.

A unique feature of our system is the American Textbook Publishers Institute, founded in 1943, which has an interesting role in the production of textbooks. Its members—about 30—produce a large majority of our school and college textbooks, reference books, test materials, and workbooks. They also publish a large number of the other books used in our schools but not properly called texts.

Institute activities, carried on to a large extent through committees, include the promotion of measures to improve practices within the industry, increase cooperation between educators and educational publishers, give citizens an understanding of the role of textbooks, and increase financial support of the schools. This organization helps school authorities prepare budgets by furnishing facts on educational costs and current price trends and on budgeting procedures.

In no way does the institute regulate prices, dictate policies of member companies, or eliminate competition among them.

Of course many of the professional organizations of educators, concerned chiefly with quality, have much to do with the producing of textbooks. Among those most closely involved are the National Education Association and its various departments and such other professional organizations as the Association for Childhood Education International, the National Council of Teachers of English, and the Modern Language Association. These organizations work through their committees and staff to collaborate with educational publishers, school administrators, classroom teachers, and scholars to secure more plentiful and effective classroom materials. Subject-field organizations sometimes, though rarely, undertake the actual preparation of textbooks; they do so particularly in instances where the need is great but the market so limited that commercial publishers will not risk capital for it. Such texts may be experimental and may be financed,

at least in part, by a grant from a philanthropic foundation.

The production of a textbook, which the publisher frequently conceives of as one in a series, usually involves a number of persons even though only one or two names may appear on the title page. For many books these persons constitute a team: an editor, a subject expert, a reading specialist, and one or more classroom teachers, together with artists, technicians, and professional critics.

Regulations for the preparation and publication of textbooks vary from State to State and from community to community. Some school systems make it policy not to use books written by members of their staff. This policy, however, does not prevent the staff from writing; and their books may be widely adopted for use in schools of other areas. Some systems, on the other hand, encourage their teachers and other staff members to write textbooks for local use. In all cases, publication is by commercial publishers, who, because of the financial risk involved, will accept only those manuscripts that show promise of wide acceptance in schools across the country.

One or two States buy or rent plates from publishers and then print their own textbooks. State or local school authorities may prepare a special text dealing with the the State or a community and have it published locally.

Since the average life of a textbook is generally 5 years, States do not usually adopt a textbook whose copy-right date shows it to be older than that. Events move so fast in most fields that revision is required at even more frequent intervals and in some fields goes on continually.

Most textbooks in this country are published in English, the language of instruction in the public schools. However, in a few communities where Spanish, French, or an American Indian language is predominantly or commonly spoken, some books in these languages have been produced for use in the schools. The Federal Bureau of Indian Affairs, for example,

has published readers in several Indian languages, but now finds that both Indian children and their parents prefer instruction to be given in English. For Indian boys and girls entering school at a late age, say at 12 to 15 years, easy materials in their native language, based on familiar tribal stories, serve as a helpful introduction to formal instruction.

In Puerto Rico, where Spanish is the language of instruction in the schools, elementary school textbooks are published in that language, either by Puerto Rican publishers or by publishers in the continental United States. English is taught in the public schools informally in the early elementary grades and with increasing formality and intensiveness at successive grade levels. Textbooks for the study of English have been prepared in Puerto Rico and are published commercially on the mainland.

The constitutional decentralization of education and the free enterprise system of textbook publication and distribution in the United States inhibit the Federal Government both from entering into international agreements on the preparation of textbooks (such as the 1933 Inter-American Convention on the Teaching of History) and from regulating the content of textbooks. Nevertheless the U.S. National Commission for UNESCO, the Federal Office of Education, and other agencies have encouraged groups and individuals to work for the improvement of school materials on other countries.

The publishers of textbooks in the United States and their authors and editors have the major responsibility for preventing the publication of materials harmful to international, racial, social, or religious understanding. These publishers, authors, and editors maintain close contact with school people and with national and international organizations working to promote international understanding, and are making an effort to reflect, in the content and tone of instructional materials, the best thinking of these persons and groups. Textbook treatment of other nations and

cultures has improved in recent years as cultural exchanges, especially those involving publishers and educators, have increased between the United States and other countries. Comparison of earlier textbooks with those of today reveals how great the progress has been.

An effort is under way in the United States to produce instructional materials on Asia and other parts of the world hitherto inadequately treated. UNESCO has had a part in stimulating this effort; so have educators, publishers, and other groups, working together.

The Canada-United States Committee on Education, organized in 1944 by the American Council on Education (USA), the Canadian Teachers' Federation, and the National Conference of Canadian Universities, lists among its major publications a study of national history textbooks with respect to the way each country is treated in the other's books. A continuing activity of the committee has been to study what is taught and what attitudes students in each country have about the other country.

During the first decade after World War II a number of U.S. scholars and educators—chiefly through the Pan-American Institute of Geography and History and the National Council for Social Studies—joined scholars and educators from Mexico, the United Kingdom, and Germany to study the content of history textbooks. The results of their studies were made available to publishers and authors in the United States.

In order to be able to meet the changing needs of the schools, publishers keep in touch with leaders of educational organizations and with State and local school authorities. They follow closely the professional publications in education. They study curriculum materials for current content and developing trends. Their field representatives, about 1,800 in number, many of them former teachers, cover the United States in visits to school systems and participate in all types of educational meetings. Textbook publishers, more-

over, make available specially trained educational consultants to assist teachers in the use of texts. Schools, on their part, may request publishers to bring out texts suited to their programs.

New knowledge about education and how children grow and develop has resulted in textbooks with more suitable content and more attractive appearance. Publishers have applied improved techniques of printing, layout, and color reproduction. Each textbook is designed for the particular vocabulary and comprehension level of a particular age group, and is suited to its need, abilities, and experiences.

Textbook authors usually try out their materials before putting them in final form. Some make their manuscripts available to a number of schools for testing for suitability and effectiveness. Others ask experienced teachers in education courses to comment on manuscripts. Many send their manuscripts to a number of experts for suggestions. It is this combination of editorial assistance from experts, suggestions from teacher education classes, and tryouts with pupils that checks the material before it is finally printed.

Selection

There is no nationally prescribed official list of textbooks. Legal authority to select textbooks may rest with a State or county textbook commission; with a State, county, or local board of education; or with some combination of these. Various combinations of teachers, administrators, and citizens serve on local committees to choose school textbooks. Before they recommend books to the board for final selection, these committees usually consult with publishers' representatives to find out what texts are available in each subject, and then analyze the merit of individual texts in relation to the goals and programs of their schools.

Just as there is variety in the way textbooks are selected, so there is variety in the way they are paid for. In some States the State government

purchases and pays for all the textbooks used in the public schools. In other States funds are provided jointly by the State and the local school districts, or by the local school district alone. At present, elementary school textbooks are furnished free of charge in 36 States and the District of Columbia, and in all States textbooks are free to indigent children. It is estimated that less than half the elementary school pupils in the United States are required to buy or rent textbooks. Books provided free of charge do not become the property of the children but are merely loaned to them for the time they need them.

Utilization

Textbooks are used in all classrooms. Generally speaking, each child has his own textbook in each of the basic fields of study in the public elementary school. Seldom, however, are pupils restricted to the use of a single text in a given subject matter area, for schools frequently provide and teachers encourage the use of supplementary books. Good teaching practice places less and less emphasis on recitation from a textbook. Instead, it uses textbooks as sources of information for discussion and problem solving.

Reference books and collections of other books are available to pupils in many classrooms. A report in *School Life* in January 1958 stated that 104,365 schools have library services, that 24 percent of these, or 24,908 schools, have centralized libraries (figures are not available for elementary schools separately). Many elementary schools have libraries of their own, with encyclopedias, books other than texts, magazines, maps and charts, films of all types, recordings, pictures, and other audiovisual aids. In addition, more and more classrooms are containing libraries, made up of materials drawn from the school library or loaned by friends of the school. Bookmobiles, maintained under the Federal Library Services Act of 1956, carry books and other reading material to schools in

rural areas. School libraries are usually provided by the board of education, by the board and the public library jointly, or by the public library alone. In any case they may be supplemented by donations from individuals or community groups.

Most elementary school textbooks, especially those in reading, are accompanied by a teacher's book or manual. Although these manuals are helpful guides, especially to new teachers, teachers are encouraged not to rely too heavily on them but to develop effective techniques and methods of their own. Teachers also get much help from courses of study, curriculum guides, and the publications of professional organizations.

Although textbooks constitute the principal teaching aid in elementary schools of the United States, the use of a variety of supplementary materials is virtually universal. Textbooks themselves, particularly in science and social studies, are designed to stimulate the use of audiovisual materials—films, filmstrips, recordings, charts, maps, and globes—which are part of school equipment or available from a central source. Teachers and students are also prompted to collect realia related to classroom work. Books other than texts, children's magazines, art objects, museum specimens, and equipment, such as animal cages, aquariums, and terrariums, are widely accepted as means of developing interests aroused by textbooks and other avenues of learning.

In a growing number of schools, teacher-training institutions, and the Federal Office of Education, educational materials centers are being established to provide a place where materials of all kinds can be collected, evaluated, and made available for classroom use. A materials center in an elementary school may have originated with the combining of books from the library and from the teachers' professional libraries, together with audiovisual equipment and the school's various picture and curriculum record files and realia collections. It may become the heart of the

school, the resource center and workshop of supervisors, teachers, and students, where curriculum and materials are constantly being developed on an action research basis. It may draw, in turn, on a larger center with hundreds of textbooks, a wider range of professional materials, a film library, reference materials, and a staff for locating materials and stimulating the preparation of teaching aids.

The Educational Materials Laboratory of the U.S. Office of Education comprises over 10,000 items representative of the teaching aids in current use in the elementary and secondary schools and teachers colleges. The largest section of the collection is made up of elementary and secondary school textbooks, manuals, and workbooks, selected for the most part by the publishers themselves and contributed under an arrangement between the American Textbook Publishers Institute and the Office of Education. The Department of State and the International Cooperation Administration also contribute to the support of the Laboratory so that it may serve the hundreds of educators from other countries who visit the United States each year.

The Laboratory staff seeks to interpret American education through materials and to furnish information and stimulation both to educators in the United States and to foreign educators who request services for their projects in the development of curriculums and materials. In addition to the textbooks, the Laboratory also has representative and recent professional books on education; books for children and young people; curriculum materials; journals, yearbooks, and pamphlets of professional organizations in education; samples of free or inexpensive materials—particularly materials on other countries; and reference and research tools such as booklists, catalogs, and audiovisual indexes.

The Educational Materials Laboratory has a special function in the United States in the improvement of teaching about other countries. Thousands of teachers, librarians, and stu-

dents who write to the Office each year for materials on other countries are supplied with selected annotated lists of materials (other than textbooks) which they may obtain for school use. These lists are compiled by the Laboratory staff, who are always searching out free and inexpensive pamphlets distributed by foreign government missions, background books, articles, and audiovisual aids that may serve to enrich the social

studies program and expand the information in basic textbooks.

The objective of all educational materials centers as they collect, evaluate, and utilize materials—written, graphic, and plastic—is to make possible the maximum amount of learning in a given situation. The effectiveness of any textbook is heightened by the use of a wide variety of supporting materials of the sort such centers can provide.

National Defense Education Act

The Supplemental Appropriation, 1958-59

PROGRAMS under the National Defense Education Act now have the wherewithal to continue further along the lines on which they have begun. On May 20, 1959, President Eisenhower signed a bill appropriating \$75.3 million in Federal funds for 1958-59—a supplement to the \$40 million appropriated for those programs last September 2, when the act was passed.

The additional funds mean more college students this year, both graduate and undergraduate; better equipment and better teaching in the local schools; more people studying more languages; more guidance programs; and more meaning out of statistical data. In program after program the new funds are adding up to a general advancement in both quantity and quality, but in five particularly the immediate results can be measured in rather specific terms.

For loans to college students the new appropriation provides \$25 million. A small part of it—\$500,000—is being held in the Office of Education as a loan fund for those educational institutions unable to get elsewhere the \$1 they are required to contribute for every \$9 they receive from the Government; but all the rest already has been distributed among 1,201 institutions of higher learning—the same ones, minus a few, that shared in the \$6 million appropriated last fall. Counting the institutional funds that augment it, the supplement is enough to lend as much as \$1,000 a year (the maximum permitted by the act) to nearly 30,000 students; but since the average loan thus far has been for much less than \$1,000—scarcely \$400, in fact—additional funds probably will meet the needs of a great many more.

(Continued on p. 15.)

A Nation's Concern for KINDER

By HAZEL F. GABBARD

IT'S rare to find an educational organization nowadays that isn't pushing for a downward extension of the public school system. And back of the organizations, of course, are the parents, who grow every day more aware that even very young children can benefit from organized educational experiences—in their habits of health and safety, in their social skills, in their feelings of self-confidence and security, and in their readiness for school before they begin the more advanced activities of the first grade. In fact, public opinion seems to be swinging sturdily behind the idea that the kindergarten—if indeed not the nursery school—should be available to every child.

Signs of the trends are everywhere. Some began to appear years ago; some are more newly on the scene.

Office of Education records show that all but eight States are reporting kindergartens in their public schools. The Census Bureau's latest tally, for 1958-59, found that nearly one-half of the Nation's 3.8 million 5-year-olds are in kindergarten—a great change since 1947, when only one-fourth were there. Much of the increase is taking place in small cities and towns, even in rural areas; and we have now come far indeed from the day when kindergartens were available to only a few in the large cities.

State legislatures as long ago as 1879 began to enact laws permitting local school authorities to establish kindergartens, but the strongest wave of popular demand for these programs has come since 1940. Today all but one of the States have legislation to permit local districts to establish kindergartens. Twenty-two States

have gone even further, by providing State funds for the support of kindergartens; and three States—California, Nebraska, and New York—permit only children who have had a year of kindergarten to enter the first grade before they are 6. Nine States ask every private school for young children to meet standards set by the State department of education; and 10 more provide for accreditation on a voluntary basis, that is, provide a stamp of approval for private schools that can meet the State standards.

Here and there we find State education departments adding to their staff a specialist in early childhood education, thus showing their recognition of the fact that programs for small children need specially qualified personnel to give supervision. Among the first to do so were New York, New Jersey, and Pennsylvania. Today 32 States provide supervision for either nursery schools or kindergartens or both, and work not only with the public schools but with private schools as well, providing leadership in community efforts to make early childhood education a highly productive part of the whole educational process.

Awareness of the advantages of school for the 5-year-old, even for the 4-year-old, is expressing itself in many ways—in public demand, in legislative support, and in the programs and platforms of national organizations.

In the United States, local education moves forward only upon the will of the people, and there's no explaining the sturdy forward march of nursery schools and kindergartens in this country except as the people's reaction to a highly convincing thing—the evidence accumulated by research that



the first years of a child's life are a time of almost awesome opportunity for development.

Thus the kindergarten apparently is well on its way, already quick and steady on its feet. But this year the efforts to hasten its progress seem particularly aggressive, particularly unanimous, so much so that they are a subject for discussion wherever educators and parents meet.

For example, the four organizations that sponsor American Education Week—the American Legion, the National Congress of Parents and Teachers, the National Education Association, and the Office of Education—will be focusing unusual attention this fall on early childhood education and will ask parents and other patrons of the schools to examine carefully the goals, programs, and achievements of nursery schools and kindergartens.

And this is only part of the new surge of support. As I said in the beginning, there is an impressive list of educational organizations—lay and

Miss Gabbard is Office of Education specialist for extended school services and parent education.



professional—that are pushing for school at an earlier age than six. They're not all pushing in the same manner but they're all pushing in the same direction—a fact immediately obvious in the following list of activities, programs, publications, and recommendations of some of the principal national organizations concerned with the education of children.

AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, at its Atlantic City convention in February, made kindergartens the subject of one of its resolutions—No. 21:

In view of the need for constantly improving the quality of public education at every point, the association reaffirms its belief that the kindergarten level is an essential and integral part of the community's educational program.

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN plans to speak up for kindergartens and nursery schools in its legislative program for 1959-61. Already published, in the March issue of the Association's *Journal*, is the tentative legislative program as it will be presented at the June 1959 convention, and it calls for "A sound program in education for children under six."

ASSOCIATION FOR CHILDHOOD EDUCATION INTERNATIONAL has put schools for "under 6's" on its plan of action for 1959-61. It has done so on the urging of its members, who have judged the need for such schools one of the most pressing in education today. It makes these suggestions to its members:

1. Find out the legal status of kindergartens, nursery schools, and group care centers in your communities and States.
2. Find out what are the objectives of schools for children under 6 and what research has to say on the value of such schools.
3. Survey your communities to determine how they stand and what they need in the way of kindergartens, nursery schools, and group care centers.
4. Cooperate with other organizations in bringing the needs accurately before the public. Work for legislation that will help to meet the needs.
5. Work with staffs of universities and colleges to get an adequate program for preparing teachers of young children.

ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT at its annual meeting in Cincinnati, Ohio, March 1959, passed a resolution favoring kindergarten programs:

Whereas many pre-school-age children benefit from organized education experiences; and whereas less than half of the Nation's 5-year-olds are now enrolled in public kindergarten; and whereas many of the programs being established are inadequate, therefore be it resolved that the Association for Supervision and Curriculum Development favor the establishment of public school kindergarten programs which meet high standards of space, time, and teacher-load and utilize educational materials appropriate to the child's developmental stage.

COUNCIL OF CHIEF STATE SCHOOL OFFICERS has before it a recommendation from the Planning Committee of its Study Commission, that it sponsor a study on the responsibilities and services of State departments of education for schools for children under 6. This recommendation was made by the committee at its latest annual workshop in Salt Lake City, December 1958.

DEPARTMENT OF ELEMENTARY SCHOOL PRINCIPALS, NATIONAL EDUCATION ASSOCIATION, has chosen early elementary education as the focus of its 1960 yearbook. It plans to review developments in education for young children as well as present current thinking and the essentials of good programs for this age level.

NATIONAL ASSOCIATION FOR NURSERY EDUCATION has joined the Association for Childhood Education in publishing a promotion flier for wide distribution called *How Are the 5's Faring in Your Town?* Pointing out the thirst of the 5-year-old to learn many things, the associations remind citizens that they can help in two ways: If your schools do not have kindergartens, start them; if your schools have kindergartens, improve them.

NATIONAL CITIZENS COMMISSION FOR BETTER SCHOOLS, in its organ *Better Schools*, has featured a full-page story on kindergartens and the role they play in a child's early education. The commission points out that while some communities may have little space to incorporate these programs in their system at present, if they do not work to obtain these programs now, when school space and teachers are available, nothing will be ready next fall.

NATIONAL CONGRESS OF PARENTS AND TEACHERS, now enlisting the efforts of its 11 million members, suggests through its program activities that State and local branches call for the support of citizens in the community to provide properly staffed and equipped nursery schools and kindergartens and the cooperation of school officials and others to extend public education for the preschool child.

NATIONAL COUNCIL OF STATE CONSULTANTS IN ELEMENTARY EDUCATION is planning to revise for the second time its bulletin on programs for children under 6. Its *Programs for Children Below Six*, published in 1948, was revised and published again in 1955, as *Education for Children Below Six*; and now demand has again exhausted the supply.

NATIONAL EDUCATION ASSOCIATION, through its Department of Kindergarten-Primary Education, has just published a leaflet *Why Kindergarten?* to give the parents of small fry some answers to two questions: What do children get out of it? Why do experts recommend it? The leaflet is planned to be particularly useful in connection with the observance of American Education Week this fall, which will put special emphasis on early education.

NATIONAL KINDERGARTEN ASSOCIATION recently celebrated its 50th anniversary in New York City, April 16, 1959, with an exhibition of paintings made by 5-year-old children across the Nation. In highlighting the creative ability of these children, the association also called attention to the

need for kindergartens to be established in every elementary school in the Nation.

Many of these actions have resulted from the 1950 White House Conference on Children and Youth. Recommendations 19 and 37 of that Conference concerned early childhood education:

As a desirable supplement to home life, nursery schools and kindergartens, pro-

vided they meet high professional standards, should be included as a part of public educational opportunity for children.

Appropriate public bodies should establish minimum standards for licensing or authorization with respect to plant, program, and staff for all child-care and preschool groups.

Almost a whole decade has passed since these two recommendations

were written. Now, as we look forward to the 1960 White House Conference on Children and Youth, it is important that we chart further progress for the education of our young children. One of the best-advised courses we can follow is to extend our educational programs downward, to include more of our preschool population—children under the age of six.

Using School Shops to Develop SAFETY CONSCIOUSNESS in Tomorrow's Workers

A national plan unfolds

From an interview with HOWARD K. HOGAN

EVERY time there has been a President's Conference on Occupational Safety (there have been six in the past 10 years, and a seventh is scheduled for 1960), educators have had a part in it. This is only reasonable: it has become axiomatic in our society that safety is a way of life, and that if you want a person to walk undeviatingly in that way, you teach him from childhood to do it. Every employer knows that unless he can hire workers with safety habits already installed, he will have an expensive training job on his hands—and lots of trouble.

Good Reason

When it comes to safety education, there's at least one thing we agree on, educators and laymen alike: We can't afford to relax. Safety is never finished business; and if the day ever comes when we think it is, we'll be laying ourselves wide open to accidents. We need constant reminders

to be alert and persistent—that's one of the purposes of safety conferences—and we need them for at least three good reasons.

1. *Habit comes slowly . . .*

The first reason is this: Getting safety into the consciousness and reflexes of a worker takes a long time and patient effort. The earlier we begin and the longer we keep at it, the

Mr. Hogan is consultant in employer-employee relations, Trade and Industrial Education Branch, Division of Vocational Education, Office of Education. His was the responsibility for organizing and coordinating the most recent conference he discusses here—the Office of Education's conference, held this spring, on the school's contribution to occupational safety through shop programs. In this task he was assisted by William A. Williams, professor of industrial education at The Pennsylvania State University, who was a special consultant to the Office from mid-February to mid-May.

greater our success will be. The plain truth is that we teach occupational safety only by strenuously and always making it a part of the way a student works, so that every time he lights a gas appliance or discards an oily rag, every time he reaches for a control switch or lifts a heavy load, every time he approaches a hazardous machine, or mixes chemicals, or wields a hand tool, or climbs a ladder, he automatically checks himself with this question: *Am I doing this the safe way?*

2. *The world changes . . .*

Another reason is that our workaday world is constantly changing. Each day brings us new devices with built-in threats and asks us what we're going to do about them. Power tools have given us dozens of new and terrible ways of maiming our bodies. Ventilating systems, introduced to remove hazards, have themselves be-

come hazards when left to function without maintenance and inspection. In short, safety education changes with the times, and the people responsible for its quality need to see the hazards coming long before they arrive.

3. *Our performance lags . . .*

A third reason for our need to be repeatedly encouraged rises out of our human frailty: we don't live up to the best we know. We who are responsible for safety education in our school shops have to admit we aren't nearly as safety-education-conscious as we know how to be.

To illustrate: Among the recommendations made by the first President's Conference on Occupational Safety, back in 1949, were a number that pointed at the responsibilities of the schools. Educators helped to write these recommendations; educators call them wise. But every President's Conference since then has found it necessary to repeat them. Why? Because they are good and can bear repetition? Chiefly, yes. But partly, too, because school after school, community after community, and State after State have fallen short in the job of acting on them.

The first Conference, for instance, recommended regular and frequent inspections of school shops; and shortly thereafter, to help bring these about, the National Safety Council and the American Vocational Association jointly worked out a standard inspection checklist, which is still called the best available instrument for that purpose. Yet to this day many schools have not used this or any other list to insure systematic shop inspections.

The 1949 Conference also recommended standard forms for reporting student accidents. Forms are now available from the National Safety Council, but a dismayingly large number of schools still cannot be bothered with that sort of thing and so cause great gaps in the information we're trying to gather. Also recommended by that Conference were statewide and

local committees on school shop safety, the naming of one person in each State department of education to be responsible for school shop safety, and the use of students as shop safety "engineers" and as members of safety committees. But although the word about these recommendations has been spread far and wide, no wide-scale action we know of has yet been taken as a result.

The Positive Side

It's only fair, of course, to point out that many of the 1949 recommendations to education have been enthusiastically carried out in many quarters. On safe installations of machinery, for instance, there's considerable progress. The joint safety committee of the National Safety Council and the American Industrial Arts Association is well into the job of working out standards for the guarding of machines in school shops. Several communities blessed with the presence of a chapter of the American Society of Safety Engineers are benefiting from the professional competence in their midst: many of these chapters are co-operating with the schools in inspecting shops and otherwise setting safety standards.

Besides, instructional materials of all kinds are being produced on the safe use of machines and tools. The National Safety Council has developed the Safety Education Data Sheets, and several States as well as many local schools have prepared manuals. A number of teacher-training institutions are making safety a required part of their courses of study; and a large number of local inservice programs for teachers—workshops and conferences—are appearing on the scene. Substantial gains are being made by the joint safety committees of the National Safety Council, the American Vocational Association, and the American Industrial Arts Association; in addition to the accomplishments already mentioned here, their other activities include developing a series of school shop safety tests and making safety sessions a regular part

of State and national conventions of the AVA and the AIAA.

Looking to the Future

Thus there's a bright side and a dark side to the story of what we are doing to contribute to the safety our young people will enjoy when they go to work. But the dark side that shows today is frighteningly large. Unless we reduce its proportions, 1 out of every 100 boys and girls 14 to 19 years old now entering the labor force will die as the result of a work injury. Six will suffer a permanent impairment; 70 will have at least 1 disabling work injury. Only 23 will escape unscathed. In other words, under the present circumstances, we can promise only one-fifth of our young people an accident-free working life.

This dark side, with its concomitant cost in manpower and its toll in human suffering, is what prompted the latest President's Conference on Occupational Safety, held in March 1958, to make two recommendations for increasing the school's contribution:

. . . that appropriate State and national associations of educators promote and develop programs for safe school environment based upon the National Safety Council's School Shop Safety Inspection Check List and that they assist in implementing the recommendations of the 1949 President's Safety Conference. . . . that State school officials develop realistic programs of school accident reporting and analysis.

. . . that national organizations and agencies, including the American Vocational Association, the National Education Association, the National Safety Council, the American Society of Safety Engineers, the U.S. Department of Labor, and the Office of Education, coordinate their efforts through a steering committee to develop a guide for the organization and implementation of effective school safety programs to be conducted through the cooperation of appropriate agencies at the local level.

The organizations named in the second recommendation have taken the charge seriously. Before the year was up—on December 2-3, 1958—their representatives, joined by members of the National School Boards Association, the American Industrial

Arts Association, and the National Association of Industrial Teacher Educators, met at a conference table in Washington, in sessions called by the Office of Education, discussing what course they should follow.

They made a recommendation to the U.S. Commissioner of Education. Call a national conference, they said, one that will concentrate entirely on the school's contribution to occupational safety; invite individuals and organizations with a strong interest in the subject and a real willingness to do something about it; and ask them to decide what needs to be done and how we're going to do it.

Then, as a kind of bequest to the conference they had asked for, they composed a five-point statement of their basic principles for school shop safety programs:

1. Safety education is an integral part of the whole education program rather than a separate entity. Therefore safety is an appropriate and functional part of instruction and learning *on a continuing basis*.

2. "Safety" may be thought of as relating to the physical aspects of the school environment, and "safety education" as relating to teaching and learning. Both must be taken into account in programs of educating for safe living.

3. The concept represented in the timeworn slogan "Safety first" has little practical value in education. Students are seeking to develop competence for money earning, for pleasure, or for other reasons important to them. In this light, safety is not the first but a necessary facet of competence in any activity involving hazards.

4. Since one objective of a school program is to develop each student's capabilities to the highest degree, situations should be avoided that build up or glorify star performers or winners at the expense of the rest of the students. In educating for safe living, our goal is to make everyone a consistent winner.

5. Although the positive approach is generally preferred in safety education, a negative approach, such as studying the causes of an accident and analyzing its results, can be effective in developing student insights into safe behavior. But a negative approach used solely to scare students into being safe rarely succeeds.

The conference was quick in coming. April 16-18 brought together 76 persons—about half of them professional educators—representing 21 States and 42 organizations and agen-

cies. Together they came up with a plan that has logic, efficiency, and vigor to recommend it.

The heart of it is this: that the school and the occupational world join forces to step up the school's contribution to occupational safety. Its inspiration is the fact that virtually every school in the United States has access to the local headquarters of some organization—national, State, or otherwise—that has resources to offer for improving an educational program in vocational shop safety. There's the local fire marshal, for instance. There are the government officials responsible for enforcing building and sanitation codes, the safety engineers of local industries, the representatives of insurance companies, and highly skilled workers of all kinds—chemists, engineers, electricians, and machinists. Not only do these people know the safe way to work but many of them have behind them the educational resources of an entire national organization. They can offer such assistance as professional advice, technical information,

EDITOR'S NOTE: *The above article, which stays close to the central idea of the conference recently held by the Office of Education, perforce omits many of the matters considered there and made the subject of major recommendations. For instance, it touches only lightly the need for research, a subject that had the special concern of the conference because the current lack of information on many aspects of safety education is a serious deterrent to sound conclusions.*

A full report of the conference, however, will be published late this summer. This report, which will be presented to the Seventh President's Conference of Occupational Safety in 1960 as evidence of education's response to its responsibility, will include both the proceedings of the conference and a good deal of auxiliary information, such as a list of reference materials and the recommendations from the 1949 and 1958 President's Conferences, the National Standard School Shop Safety Check List, and the Standard Student Accident Report Form.

and audiovisual aids of all kinds; what is more, they can give moral support and set an example for public opinion. Representing, as they do, organizations and industries powerfully motivated for safety education, they are eager to serve the schools in any way the schools want to be served.

Though the plan is a "natural," it can hardly be expected to spring spontaneously into action overnight, just because a widely representative body has willed it. It needs a powerhouse of sorts, some central energizing source, some coordinating intelligence.

The conference thought of that, too. That is why it included among its recommendations to the Commissioner of Education a request for a national steering committee and a request for a permanent staff member in the Office of Education to give full time to safety education. The steering committee, which would be broadly representative, both geographically and functionally, would be responsible for putting the plan into action and keeping it there. For the Office of Education specialist, the conference visualized the task of providing leadership in many projects—for example, producing a textbook and audiovisual aids for use in teacher training, periodic publishing of bibliographies of instructional materials, maintaining liaison with the Atomic Energy Commission for developing instructional materials for school shops preparing students for atomic-energy occupations, and developing guidelines for authors and publishers creating school shop safety materials.

But the plan is not waiting for a coordinator. Already there are signs of action. The executive committee of the American Society of Safety Engineers, meeting in Chicago on May 18-19, has unanimously approved a recommendation that encourages its 70 local chapters to work closely with local schools to find ways of making the promotion of school shop safety education one of the chapter functions. This action was closely tied to the conference held in Washington the

month before: the ASSE representative at the conference had asked that a specific recommendation be sent to the executive committee meeting in Chicago, spelling out activities that might be undertaken; and this was the recommendation that was accepted.

Thus one national organization responds to the urgent need for better safety education in the school shop. The urgency is heightened these days by the increasing number of students coming into school shops to prepare for the technical jobs of tomorrow, (the latest enrollment figure is close

to 3½ million), as well as by the nature of the technical jobs themselves, which call for more precision, more concentration, and more sense of responsibility for fellow workers. Safety of the individual is more than ever a social need; and all of society must work to meet it.

Supplemental Appropriation (continued)

For fellowships to graduate students working toward a doctor's degree and a college teacher's career, the new appropriation gives \$4.5 million. The act authorizes 1,000 fellowships for the first fiscal year: but until the supplemental appropriation was made, only \$800,000 had been available, barely enough to support the 160 fellowships awarded last March. Now the additional funds have made it possible to award the other 840. The fellowships, awarded this year only to first-year graduate students, are for 3 years; 1,500 more are authorized for each of the next 3 years. Stipends for the first year are \$2,000; for the second, \$2,200; for the third, \$2,400. In addition, fellows receive \$400 a year for each dependent. They will study in either new or expanded graduate programs (279 programs this year, in 121 institutions of higher education) in a wide range of subject fields.

For centers to provide graduate study in certain urgently needed but rarely taught languages (especially Arabic, Chinese, Hindustani, Japanese, Portuguese, and Russian), the supplemental appropriation gives \$625,000, bringing the total for the year to \$1 million. Together, the two appropriations make possible the establishing of 20 centers this fall, for which the Federal Government will pay up to 50 percent of the costs. The Government also will pay stipends to persons doing advanced study in one of the critical languages, but only upon reasonable assurance that when they finish their studies they will be available to teach the chosen language in an institution of higher learning. The stipends will be given for either short-term or regular sessions and will range from about \$1,500 to \$3,500. The first 7 centers being announced by the Office will be held at the following institutions in the following languages: Princeton University (Arabic, Persian, Turkish), University of Pennsylvania (Hindi, Gujerati, Marathi), University of Washington (Chinese, Japanese, Tibetan), University of Wisconsin (Portuguese), University of Michigan (Russian), Howard University (Chinese, Korean, Tibetan), University of Chicago (Hindi, Bengali, Tamil).

For institutes to train teachers of modern foreign languages for elementary and secondary schools, the supplemental appropriation gives \$1.1 million. As a result,

the number of institutes financed by the Federal Government now rises from 4 to 16 (the first 4, all summer institutes, are being financed by the \$400,000 appropriated last fall). Of the 12 additions, 8 will be conducted this summer; 4, during the academic year beginning this fall. Participants preparing to teach in public schools may receive, for each week of the institute, a stipend of \$75 and an allowance of \$15 for each dependent; private school teachers are not eligible for stipends but may attend tuition free. How the institutes will vary is shown in the list below, where the initial letters of the languages—French, German, Spanish, and Russian—are either in lower case to indicate institutes serving elementary schools or in capitals to indicate those serving secondary. The figures show how many participants are planned for each institute.

SUMMER

COLGATE UNIVERSITY (FGS) 70
 HOLLINS COLLEGE (FS) 80
 LOUISIANA STATE UNIVERSITY
 (Ff Ss) 80
 SAN FRANCISCO STATE COLLEGE
 (FS) 70
 UNIVERSITY OF COLORADO
 (FGS) 100
 UNIVERSITY OF GEORGIA (FS)
 60
 UNIVERSITY OF MAINE (Ff SG)
 100
 UNIVERSITY OF MICHIGAN (Ff
 Gg Ss R) 100
 UNIVERSITY OF MISSOURI (FS)
 70

UNIVERSITY OF SOUTH DAKOTA
 (FGS) 40
 UNIVERSITY OF TEXAS (FGSR)
 80
 UNIVERSITY OF WASHINGTON
 (Ff G Ss R) 100

ACADEMIC YEAR

INDIANA UNIVERSITY (R) 20
 UNIVERSITY OF MASSACHUSETTS
 (F) 20
 UNIVERSITY OF NEW MEXICO
 (S) 20
 WESTERN RESERVE UNIVERSITY
 (modern foreign languages,
 elementary) 35

To put the new communications media to better use in education, the supplemental funds add \$1 million to the \$500,000 already available. Thus the Commissioner of Education has been enabled to approve (1) 48 more grants to institutions and agencies for research and experimentation, and (2) 8 more contracts to aid in disseminating information about the media to schools and colleges. Previously, only 21 grants had been approved, and 6 contracts (SL, Jan.-Feb. and Apr.).

OFFICE OF EDUCATION PUBLICATIONS IN 1958-59

(For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.)

1958 Bulletins

1. RETENTION AND WITHDRAWAL OF COLLEGE STUDENTS, 65¢.
2. STATISTICS OF LAND-GRANT COLLEGES AND UNIVERSITIES, YEAR ENDED JUNE 30, 1956, 50¢.
3. EDUCATING CHILDREN IN GRADES FOUR, FIVE, AND SIX, \$1.
4. ANALYSIS OF RESEARCH IN THE TEACHING OF MATHEMATICS, 1955, AND 1956, 25¢.
5. COOPERATIVE RESEARCH PROJECTS, FISCAL 1957, 25¢.
6. BLOCK-TIME CLASSES AND THE CORE PROGRAM IN THE JUNIOR HIGH SCHOOL, 35¢.
7. ANALYSIS OF RESEARCH IN THE TEACHING OF SCIENCE, JULY 1955-JULY 1956, 25¢.
8. KNOW YOUR SCHOOL LAW, 20¢.
9. ORGANIZING DISTRICTS FOR BETTER SCHOOLS, 25¢.
10. STATE PLANS UNDER THE LIBRARY SERVICES ACT, 30¢.
11. EDUCATION ON THE AGING, 60¢.
12. CERTIFICATION OF SCHOOL LIBRARIANS, 30¢.
13. ENGLISH LANGUAGE ARTS IN AMERICAN HIGH SCHOOLS, 50¢.
14. THE 2-YEAR COMMUNITY COLLEGE, AN ANNOTATED LIST OF STUDIES AND SURVEYS, 20¢.
15. KNOW YOUR CAPITAL CITY, 30¢.
16. MODERN FOREIGN LANGUAGES IN THE HIGH SCHOOL, \$1.

1959 Bulletins

1. AN APPROACH TO INDIVIDUAL ANALYSIS IN EDUCATIONAL AND VOCATIONAL GUIDANCE, 20¢.
2. FEDERAL FUNDS FOR EDUCATION 1956-57 AND 1957-58, 75¢.
3. FOREIGN LANGUAGE LABORATORIES IN SCHOOLS AND COLLEGES, 35¢.
4. A DIRECTORY OF 3660 16MM FILM LIBRARIES, \$1.
5. CHILDREN WITH SPEECH AND HEARING IMPAIRMENT: PREPARING TO WORK WITH THEM IN THE SCHOOLS, 20¢.
7. STATUS OF PREPARATION PROGRAMS FOR GUIDANCE AND STUDENT PERSONNEL WORKERS, 25¢.
8. SOCIAL SCIENCE REQUIREMENTS FOR BACHELOR'S DEGREES, 30¢.
9. TEACHER EDUCATION FIFTH-YEAR PROGRAMS, A SELECTED BIBLIOGRAPHY, 15¢.
10. STATE SCHOOL LEGISLATION 1957, 70¢.
11. JAPAN, THREE EPOCHS OF MODERN EDUCATION, \$1.25.
12. EDUCATION OF THE SEVERELY RETARDED CHILD, A BIBLIOGRAPHICAL REVIEW, 15¢.
14. CHARACTERISTICS OF LOCAL SCHOOL BOARD POLICY MANUALS, 25¢.
17. STATE PLANS UNDER THE LIBRARY SERVICES ACT, SUPPLEMENT 1, 35¢.

Miscellany Bulletins

28. THE STATE AND NONPUBLIC SCHOOLS, WITH PARTICULAR REFERENCE TO RESPONSIBILITY OF STATE DEPARTMENTS OF EDUCATION, \$1.25.
29. SCHOOL FINANCE AND SCHOOL BUSINESS MANAGEMENT, 60¢.

30. CURRICULUM RESPONSIBILITIES OF STATE DEPARTMENTS OF EDUCATION, 55¢.

31. ADULT EDUCATION SERVICES OF STATE DEPARTMENTS OF EDUCATION, 45¢.

32. FINANCING PUBLIC SCHOOL FACILITIES, \$1.50.

Vocational Division Bulletins

266. SUPERVISORY PERSONNEL DEVELOPMENT, 25¢.
267. INSTRUCTION IN FARM MECHANICS, 35¢.
268. HOMEMAKING EDUCATION PROGRAMS FOR ADULTS, 25¢.
269. TRAINING PROGRAMS IN OUTSIDE SELLING, 15¢.
270. TRAINING OPPORTUNITIES IN OUTSIDE SELLING, 15¢.
272. SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION, 35¢.
273. SOURCE MATERIALS FOR PRACTICAL NURSE EDUCATION, 20¢.
274. GUIDES FOR DEVELOPING CURRICULA FOR THE EDUCATION OF PRACTICAL NURSES, 60¢.
275. SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION (SUPPLEMENT 12).
1. (Revised). ADMINISTRATION OF VOCATIONAL EDUCATION, 25¢.

Biennial Survey of Education in the United States

- 1952-54. CH. 1. STATISTICAL SUMMARY OF EDUCATION, 1953-54, 35¢.
- 1954-56: CH. 2. STATISTICS OF STATE SCHOOL SYSTEMS, 1955-56: ORGANIZATION, STAFF, PUPILS, AND FINANCES, 45¢. CH. 3, SEC. 4. STATISTICS OF LOCAL SCHOOL SYSTEMS, 1955-56: RURAL COUNTIES, 60¢. CH. 4, SEC. 1. STATISTICS OF HIGHER EDUCATION, FACULTY, STUDENTS, AND DEGREES, 1955-56, 60¢. CH. 5. STATISTICS OF PUBLIC LIBRARIES, 1955-56, 45¢.

Circulars

510. THE BEGINNING TEACHER, 40¢.
511. SURVEY OF STATE LEGISLATION RELATING TO HIGHER EDUCATION, JULY 1, 1956, TO JUNE 30, 1957, 60¢.
512. ORGANIZED OCCUPATIONAL CURRICULUMS; ENROLLMENTS AND GRADUATES, 1956, \$1.50.
513. FALL 1957 STATISTICS OF ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULL-TIME PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS, 35¢.
516. ENGINEERING ENROLLMENTS AND DEGREES, 1957, 40¢.
517. HIGHER EDUCATION PLANNING AND MANAGEMENT DATA, 1957-58, 60¢.
518. OPENING ENROLLMENT IN HIGHER EDUCATIONAL INSTITUTIONS, FALL 1957, 40¢.
520. JUNIOR YEAR SCIENCE AND MATHEMATICS STUDENTS BY MAJOR FIELDS OF STUDY, FALL 1957, 45¢.
522. SURVEY OF STATE LEGISLATION RELATING TO HIGHER EDUCATION, 70¢.
526. QUALITY FOOD PREPARATION, A CURRICULUM GUIDE, 35¢.
529. STATISTICS OF PUBLIC SCHOOL SYSTEMS IN 101 OF THE MOST RURAL COUNTIES, 1955-56, 20¢.
533. MATHEMATICS AND SCIENCE EDUCATION IN U.S. PUBLIC SCHOOLS (REPORT OF CONFERENCE), 65¢.
534. SCHOOL PLANT COURSES OFFERED BY COLLEGES AND UNIVERSITIES IN THE UNITED STATES, 1956-59, 25¢.

537. CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: LARGE CITIES, 1956-57, 30¢.

538. CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: SMALL AND MEDIUM-SIZED CITIES, 1956-57, 25¢.

539. PARTICIPATION IN ADULT EDUCATION, 30¢.

540. COLLEGES AND UNIVERSITY FACILITIES SURVEY, PART 1: COST AND FINANCING OF COLLEGE UNIVERSITY BUILDINGS, 1951-55, 45¢.

541. STATISTICS OF LAND-GRANT COLLEGES AND UNIVERSITIES, YEAR ENDED JUNE 30, 1957, 55¢.

544. OPENING (FALL) ENROLLMENT IN HIGHER EDUCATION, 1958: INSTITUTIONAL DATA. 30¢.

549. HIGHER EDUCATION PLANNING AND MANAGEMENT DATA, 1958-59, \$1.

551. FALL 1958 ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULL-TIME PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS, 20¢.

652. REPORTER: CLEARINGHOUSE OF STUDIES ON HIGHER EDUCATION.

653. SPECIAL REPORTS: CLEARINGHOUSE OF STUDIES ON HIGHER EDUCATION.

Education Directory

Part 1. FEDERAL GOVERNMENT AND STATES, 1958-59, 45¢.

Part 2. COUNTIES AND CITIES, 1958-59, 45¢.

Part 3. HIGHER EDUCATION, 1958-59, 70¢.

Part 4. EDUCATION ASSOCIATIONS, 1957-58, 35¢.

Pamphlets

117. (Revised). PUBLIC VOCATIONAL EDUCATION PROGRAMS, 15¢.

120. OFFERINGS AND ENROLLMENTS IN SCIENCE AND MATHEMATICS IN PUBLIC HIGH SCHOOLS, 1956, 25¢.

122. TEACHING AS A CAREER, 20¢.

Other Series

SCHOOL SITES, SELECTION, DEVELOPMENT, AND UTILIZATION, SPEC. PUB. 7, 75¢.

Miscellaneous

ACCREDITATION IN HIGHER EDUCATION, \$1.50.

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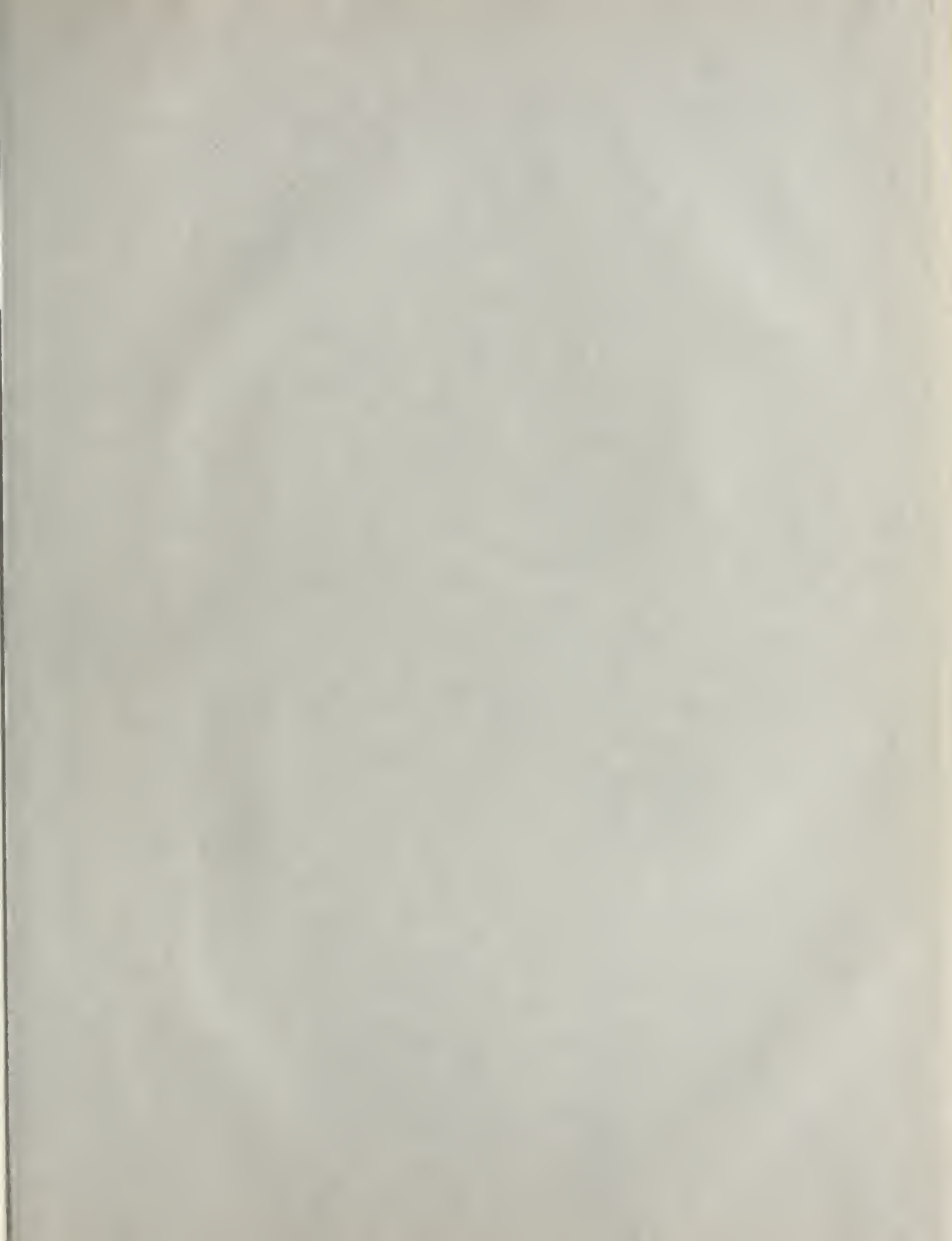
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