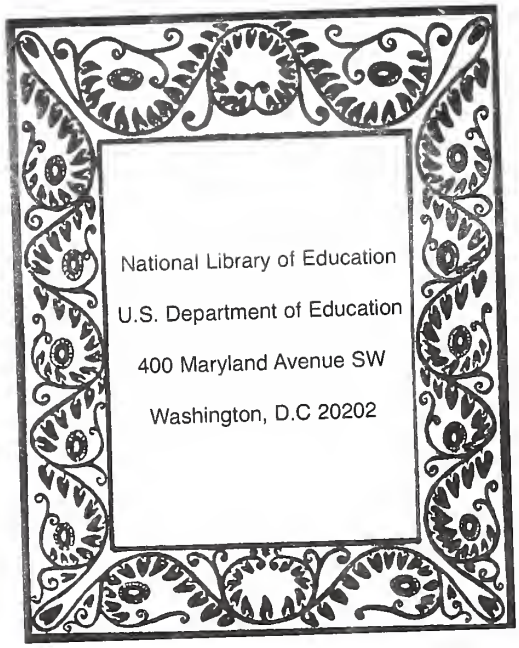

SCHOOL LIFE

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

OFFICE OF EDUCATION

AMONG THE CONTENTS

October 1957

ATLANTIS TO THE FAR EAST

BECAUSE the ideas, languages, and traditions of Western Europe have shaped our schools and much of our thinking, until recently our teachers have concentrated on educating children for understanding a world centered on Europe. Today such concentration is as outmoded as the old flat-world maps of the 15th century navigators. Today we know the true shape of the earth and the true distribution of its land masses, oceans, natural resources, and populations. Today our students must broaden their concepts, their thinking, and their learning to gain a full understanding of all the world and all its peoples. There must be no neglected areas. Educational horizons must be as boundless as the universe.

While our students are acquiring familiarity with the classics of Western thought, they should have more opportunity to know something of the prose, poetry, and legends of the Arabic nations, of India, China, and Japan. Literature does not begin and end with Homer and Shakespeare. The great ideas and achievements of the human race are not the exclusive property of the West. Asians were teaching justice and the brotherhood of man long before the founding of the Western religions. Asian scholars first developed the science of mathematics.

Just as once there may have been a land bridge between Asia and North America linking continents and people, and as once there may have existed the fabled mid-ocean continent of Atlantis making a similar link to Europe, we are today in urgent need of a better educational and informational bridge between our people and peoples of Asia. Asia and America are still more than a hemisphere apart, but we can greatly diminish this distance through our education system.

Lawrence G. Derthick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . . . . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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Educational news

EVENTS AND DEVELOPMENTS

of national significance

Appropriation: $7 million

FOR salaries and expenses of the Office of Education in the fiscal year beginning July 1, 1957, the Congress has appropriated $7 million, with an earmark on $2.3 million for the second year of the cooperative research program. Increase over last year's total is $1,370,000.

Higher education

EVEN as the President's Committee on Education Beyond the High School is bringing its work to a close, a new committee is forming at the Federal level to take over the job of learning how this country can meet the imminent impact of tremendous demand for higher education.

In the Department of Health, Education, and Welfare, the Secretary's office has named nine men to constitute a committee on higher education. The roster of members reflects the Secretary's conviction that the challenges to higher education are the concern of the Department as a whole as well as of the Office of Education. It includes Elliot L. Richardson, assistant secretary for legislation; Joseph H. Meyers, assistant general counsel; Robert Hamlin, assistant to the Secretary for program analysis; Wesley L. Hjornevik, assistant to the Under Secretary; and George St. J. Perrott, Public Health Service, chief of the Division of Public Health Methods.

At the committee's head is Lawrence G. Derthick, U. S. Commissioner of Education. The vice chairman, who is in charge of staff services, is Lloyd E. Blauch, assistant commissioner for higher education. Also from the Office of Education are Ralph C. M. Flynt, director of the Higher Education Programs Branch, and Ernest V. Hollis, director of the College and University Administration Branch.

The Committee began its meetings on July 25 and is continuing them at 2-week intervals. One of its first points of departure was the second report of the Committee on Education Beyond the High School, which was published August 11. This report is being analyzed and its recommendations are being weighed; from it, the new committee will move to other evidence, and to consideration of the rapidly developing circumstances in this area of urgent needs. Thus, when the President's Committee bows out, as it will toward the end of 1957, another group will already have moved far along the road toward the goals that both are now seeking.

For better statistics

AS never before, the American people need—and are asking for—up-to-the-minute statistics about schools and school children, about colleges and graduates, about every feature of the educational scene. In fact, what they seem to want most is reliable information about *tomorrow*.

On the Office of Education, the Federal agency specifically charged with the gathering of educational statistics, this growing demand presses hard. To increase the coverage of its statistical surveys and to speed up the processes of compiling and interpreting data, the Office in the last 2 years has increased the staff of its Research and Statistical Services Branch from 26 to more than 70. And now, to get expert counsel on the methods and techniques best suited to educational statistics, particularly for making estimates and projecting trends, the Commissioner of Education has named a committee of consultants to meet periodically with Office staff during the next few months.

The committee has eight members: Cecil L. Burrill, chief economist, Standard Oil Co.; Francis G. Cornell, educational consultant, Englehardt, Englehardt, Leggett, and Cornell; John K. Folger, research associate, Southern Regional Board; Philip M. Hauser, chairman, department of sociology, University of Chicago; Walter Hoadley, Jr., treasurer, Armstrong Cork Co.; Stuart A. Rice, president, Stuart Rice Associates, Inc.; Frederick F. Stephan, professor of social statistics, Princeton University; and Helen M. Walker, professor of statistics, Teachers College, Columbia University, who is the committee's chairman.

Thus far the Office has had the benefit of two meetings with the committee—on July 12-13 and September 19-20.

To exchange, train, and assist

ONCE again, as the school year begins, the international teacher programs sponsored by the Office of Education and the U. S. Department of State are in full swing. Count of

participants for 1957–58 in all three programs—teacher-exchange, teacher-education, and technical assistance—will pass 1,500 persons.

In August, over 500 teachers exchanged positions, accepted one-way assignments, or completed special seminars under the *teacher-exchange* program. Score of exchanges effected is this: 100 teachers each, British and American; 44 foreign teachers from 11 other countries and an equal number of Americans. Foreign teachers on one-way assignments in the United States number 26; Americans on one-way assignments abroad, 125. Home from summer seminars in France, Germany, and Italy are 76 American teachers. State Department sponsor of this program is the International Educational Exchange Service.

Projects for teachers under the *teacher-education* program began early in July with a 70-day program at Cornell University for 18 teachers of English from Italy. By the end of September, 326 educators from 53 countries will be participating in 1 of 4 special projects, or will have been placed in programs at 11 American colleges and universities. After a lapse of several years, Turkey, Honduras, Ecuador, Haiti, and New Zealand have sent participants. The International Educational Exchange Service cosponsors this program also.

Foreign educators seeking training under the *technical assistance* program are expected to number 617 and to train at 132 centers in the United States and Puerto Rico by the end of next summer, mostly on individual programs. New trends are noted among those seeking this training—more demand for science and engineering and for programs in French and Spanish. Cooperating agency in the State Department is the International Cooperation Administration.

TR and conservation

OUR 26th President, Theodore Roosevelt, was a nature lover and conservationist. While the nation officially celebrates the centennial of his birth, from October 27, 1957, until December 31, 1958, how better can schools mark the event than through programs of conservation?

Office of Education specialists report finding schools throughout the States expressing their interest in conservation through many nature projects. Some of these projects aim at community improvement. Some are immediate to the school; others take children to fields and woods.

Many projects attack local problems. Classes are sowing grass where there is none, to save soil; are planting trees on land left bare by fire.

Some practices are common to many schools: Bird-feeding stations built and tended; school grounds beautified; gardens cultivated. Creation of an outdoor theater is a rarer but no less appropriate activity. Other programs take children to wildlife preserves, bird sanctuaries, or nature trails, student-created and student-maintained.

America's youth is learning to love nature and to husband her wealth. TR would be pleased.

Influenza

COMMISSIONER Derthick calls the attention of school administrators and teachers to the Public Health Service's warning that the country can expect widespread outbreaks of influenza this fall and winter, the result of a new strain of virus introduced last spring from Asia.

Symptoms of the disease include fever, muscular aches, dry cough, and malaise. The acute phase may last 3 to 5 days, and another 4 to 6 days will be required for the disease to run its course. If you develop symptoms, says PHS, call your physician immediately, go to bed, stay warm and as isolated as possible, drink liquids, and rest.

As *School Life* goes to press, the Public Health Service has no specific recommendations for schools other than the precautions already mentioned for the general population and the procedures that schools usually follow to control communicable disease. The Office of Education will cooperate with PHS to keep school officials informed of developments.

Geneva conference

ARCHITECTS had a strong interest in this year's International Conference on Public Education, held in Geneva, Switzerland, July 8–17; and many of the 70-some countries represented included architects in their delegations. Reason: the conference focused on the worldwide need for more and better schoolhouses (though not to the neglect of its other special topic, the training of those who train elementary teachers).

This year the United States sent five delegates. Two—Finis E. Engleman, executive secretary of the American Association of School Administrators, and Fredrika M. Tandler, specialist in international educational relations for the Office of Education—had attended last year's conference and were able to give the delegation the advantages of continuity. The others were Ray L. Hamon, chief of the School Housing Section, Office of Education; Francis Keppel, dean of the Graduate School of Education, Harvard University; and John McLeod, member of the architectural firm of McLeod and Ferrara, Washington, D. C.

The United States sent also a report and an exhibit, both prepared in the Office of Education. The report, *Progress of Public Education, USA, 1956–57*, was made in English, French, Russian, and Spanish, all four under one cover (available from the U. S. Government Printing Office for 45 cents). The exhibit, which features examples of United States school buildings but presents also a general picture of education in this country, will remain on display in Geneva throughout the year.

As this issue goes to press, copies of the two conference recommendations are arriving in Washington. Even a quick reading shows that they emphasize adaptability and flexibility in both building and training programs, wisely accepting change as an element in modern society that must be lived with.

43 Million and More

Enrollments rise again; and again the Nation measures its need for more classrooms, more teachers

ANOTHER school year . . . and the rising spiral of the Nation's total school and college enrollments takes another upward sweep—the 13th in as many consecutive years.

This time, the Office of Education estimates, it will reach a total of 43,135,000—1.8 million more than last year, 5 million more than 3 years ago. This estimate, which covers both public and nonpublic schools at all levels, is a measure of enrollments for the entire school or college year, not just for the first few weeks.

The giant's share of the increase will appear in the elementary schools, which are expected to enroll nearly 1 million more than they did last year, and in the secondary schools, which will enroll an increase of 604,000. But even in colleges and universities, which have yet to feel the impact of the rising birthrates of the 1940's, this year's increase—206,000—is formidable.

Not ready with classrooms . . .

For increases of the size now occurring in the elementary and secondary schools, though long expected, the country is far from ready.

In the classroom shortage, the Office of Education sees some slight improvement this fall. But in the light of last year's situation, that is saying little indeed; and the shortage remains a desperate one despite a quickening of effort to overcome it.

. . . or with teachers

But the shortage of teachers for elementary and secondary schools shows no improvement at all over last year. In fact, it seems to have grown worse. The Office arrives at this conclusion by way of the following steps:

1. Estimating the number of qualified teachers already in the ranks.

Last year, the country's elementary and secondary schools together had 1,342,100 teachers (1,197,000 in the public schools; 145,100 in the others). Of these, only 1,252,700 were qualified; the other 89,400 were known as emergency teachers.

Now, not all of last year's qualified teachers will return to classrooms this fall. Turnover, which includes all losses due to death, retirement, marriage, or change of vocational field, will claim its usual 7.5 percent, or approximately 94,000, leaving the schools only 1,158,700 of the qualified teachers it had last year.

2. Adding up the number of newly qualified teachers.

Continued on page 7

Estimate of 1957–58 enrollments in educational institutions in the continental United States compared with enrollments in 1956–57

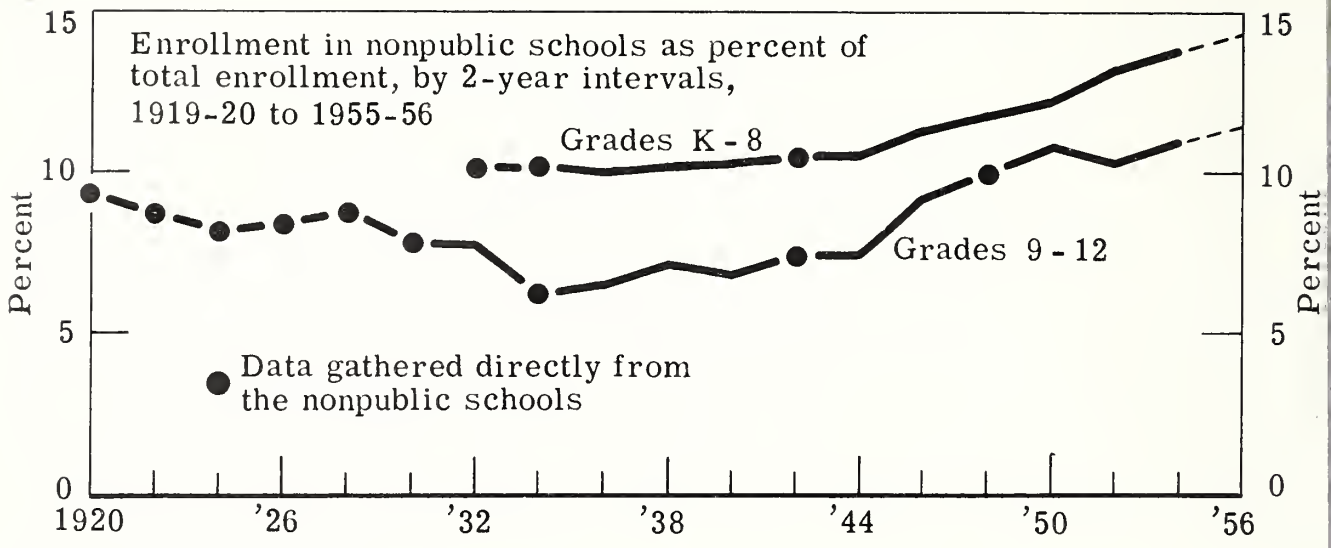
School	1956–57	1957–58 (estimated)
Kindergarten through grade 8:		
Public school system	25,283,000	26,037,000
Nonpublic schools	4,267,000	4,466,000
Federal schools for Indians	26,000	26,000
Federal schools under Public Law 874 [1]	19,000	20,000
Other [2]	116,000	121,000
Total	**29,711,000**	**30,670,000**
Grades 9–12:		
Public school system	6,876,000	7,399,000
Nonpublic schools	866,000	942,000
Federal schools for Indians	[3] 11,000	[3] 11,000
Federal schools under Public Law 874 [1]	[4] 1,000	[4] 1,000
Other [2]	66,000	71,000
Total	**7,820,000**	**8,424,000**
Higher education: Universities, colleges, professional schools, including junior colleges and normal schools	**3,244,000**	**3,450,000**
Other schools:		
Private commercial schools (day and evening)	500,000	500,000
Nurse training schools not affiliated with colleges and universities	91,000	91,000
Total	**591,000**	**591,000**
Grant total	**41,366,000**	**43,135,000**

[1] *Includes only "schools operated on post by a Federal agency."*

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

[3] *Includes 6,500 enrolled in a special Navajo program and in postgraduate, vocational, and other special classes.*

[4] *Rounded from estimates of 650 in 1956–57 and 800 in 1957–58.*



RISING ENROLLMENT *in the* NONPUBLIC SCHOOLS

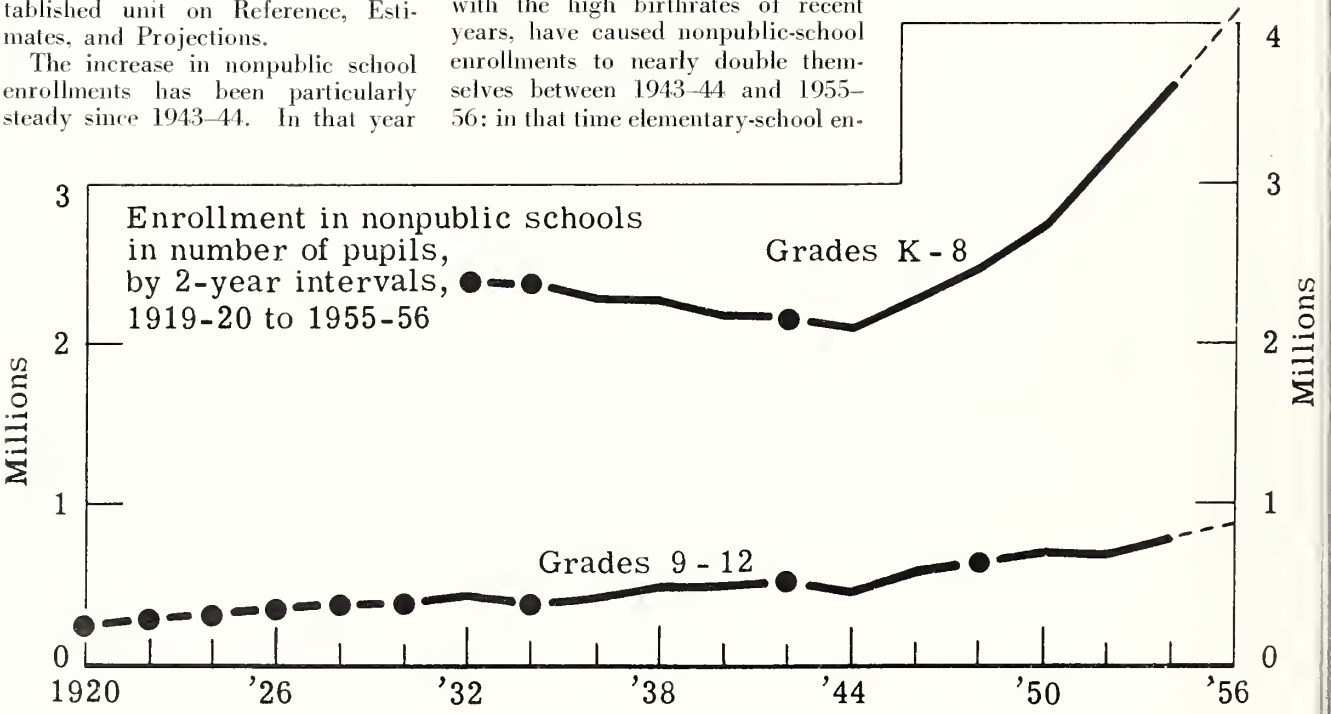
ENROLLMENTS in nonpublic schools are going up, not only because there are more children nowadays but because the *proportion* of children attending nonpublic schools is definitely on the rise.

This fact is brought out in an analysis that the Office of Education now is making of nonpublic-school enrollment, under the direction of Louis H. Conger, Jr., chief of the recently established unit on Reference, Estimates, and Projections.

The increase in nonpublic school enrollments has been particularly steady since 1943–44. In that year every 10th child enrolled in school from kindergarten through grade 8 was attending a nonpublic school. Six years later, every 8th child was doing so; another 6 years later, every 7th child. And in the same 12 years the proportion of all secondary school students who were enrolled in nonpublic schools rose from 1 in 14 to 1 in 9.

Such increasing ratios, together with the high birthrates of recent years, have caused nonpublic-school enrollments to nearly double themselves between 1943–44 and 1955–56: in that time elementary-school enrollments have come from 2.1 million to 4.1 million; secondary-school enrollments, from 446,000 to 860,000. Schools under Roman Catholic auspices currently account for nearly 90 percent of the total nonpublic enrollments.

The gradual but persistent trend toward the nonpublic school, which has both social and economic signifi-



AMERICAN EDUCATION WEEK (NOV. 10–16)

TIME IS SHORT, but it's not too late to plan for American Education Week, November 10–16.

A special packet of basic materials for planning committees can be obtained from the National Education Association, 1201 16th Street, N. W., Washington 6, D. C., for only $1.25. Among the special items the NEA offers to help educators, students, and citizens celebrate this special week are films featuring President Eisenhower, Eve Arden, and Eddie Fisher. One film, *The Challenge*, a 28-minute production, presents the major findings of the White House Conference on Education. For details, write NEA.

cance for the Nation, also has both social and economic causes. For one thing, it reflects our recent years of prosperity, which have enabled more people to send their children to nonpublic schools. For another, it is an aspect of our increasing urbanization, which has brought more of the Nation's population into the areas most adequately supplied with nonpublic schools. And among the factors may be some of the problems associated with integration of the races in the public schools.

Offsetting factors, too, are in operation, such as the heavy costs that nonpublic schools, along with public schools, must face as they attempt to provide enough classrooms and teachers for the evergrowing school-age population.

About the charts: Data behind the rising curves of nonpublic school enrollments are from the Office of Education's *Biennial Survey of Education*, except for 1955–56. For that year the figures are estimates based on an Office projection made in February 1957. The total enrollments to which nonpublic-school enrollments are compared are the total school-year enrollments in the elementary and secondary schools of continental United States, including not only regular day schools but also such schools as residential schools for exceptional children, training or model schools in teachers colleges, and Federal schools.

In certain years the Office of Education has gone directly to the nonpublic schools to get figures for the *Biennial Survey;* in other years it has used figures supplied by State departments of education and the National Catholic Welfare Conference. These variations in source are indicated in the charts.

The curve for the elementary schools reaches no further back than 1931–32 simply because that is the first charted year for which the Office has data based on a complete survey of nonpublic schools at that level.

ADULT EDUCATION IN AMERICAN EDUCATION WEEK

AMERICAN adults are keeping step with their juniors in school attendance. The Adult Education Section of the Office of Education estimates that enrollment in organized adult education activities in the United States is over 30 million and that the total is growing.

Adult education will receive emphasis for the first time during an American Education Week this year. The National Education Association and the Adult Education Section of the Office of Education have prepared, for free distribution, a fact book and other material to help you include adult education in your American Education Week celebration.

13 Million and More

Continued from page 5

Coming into the profession this year will be the following:

22,000 of last year's emergency teachers who have met requirements and now will return as qualified teachers (this is probably a generous estimate; it represents about one-fourth of last year's emergency teachers).

81,100 new teachers just out of colleges and universities; they represent 80.8 percent of the elementary teachers who last year completed their training, and 63.2 percent of the high school teachers.

Together, these new teachers will bring the total supply of qualified teachers for this school year to 1,262,100.

3. Measuring total supply against total need.

Obviously the elementary and secondary schools need at least as many teachers as they had last year—1,342,100—plus enough to take care of this year's increases in enrollment. On the basis, generally, of 1 teacher for every 30 pupils in kindergarten through grade 8 and 1 for every 25 in grades 9–12, it is estimated that the increases alone will call for 55,000 teachers, bringing the total need to 1,397,100.

Thus once again the need far outpaces the supply, this time by 135,000—a teacher shortage more crucial than last year's, which was estimated at 120,700, but less crucial than the one 2 years ago, which was estimated at 141,300.

HOPE lies in the possibilities of recruitment. Former teachers may return to the profession; other persons may come forward to serve as emergency teachers.

But to the extent that recruitment fails, to the same extent the schools again will have to resort to large classes, double sessions, and reduction of the number of courses.

A Quartet of Educators Discuss the Feasibility of

THE YEAR-ROUND SCHOOL

THE 12-month school year was discussed by a panel of four leading American educators during the National Education Association Convention in Philadelphia, Pa., on July 3, 1957, for transcription and broadcast over stations of the Westinghouse Broadcasting Co. L. G. Derthick, U. S. Commissioner of Education, was moderator; other participants were Philip J. Hickey, president of the American Association of School Administrators; Martha Shull, 1956–57 president of the National Education Association; and T. M. Stinnett, executive secretary of the National Commission on Teacher Education and Professional Standards.

Excerpts from this discussion are presented here.

COM. DERTHICK: The question we have before us has been a question of interest in this country for many years. At times more emphasis has been given to it than at other times. Our people of late have become interested again, and right sharply. I suspect the development that has sharpened interest most is the tremendous enrollment pressures calling for additional classrooms, and the speculation on the part of many citizens as to why school buildings involving great capital investments should be idle for a portion of the year. Dr. Stinnett, suppose I ask you for a reaction first.

Answer to the classroom shortage?

DR. STINNETT: I don't believe we have any great evidence one way or another on this problem. It is naturally a logical problem to develop at this time because the apprehension prevalent over the shortage of classrooms and qualified teachers raises the question of why the school plant should lie idle several months a year. Twelve-month school programs have been tried in a number of places, as you all know. I believe most of them have been abandoned, largely as a result of the pressures of parents.

DR. HICKEY: The problem of construction of classrooms today is a pertinent problem, and it is one for which we must have the answer if we do not have buildings that can be used. If you go around the way I do and see kids going to schools in basements and in this place and that place, you are moved to try to work out some kind of program that will at least give kids something to go to school *in*.

I don't know how it is in your part of the country, but I know in our part, when you have reached the bonded indebtedness limit, you cannot borrow money no matter how much you may want to.

I think there are some practical problems that have to be read into this thing. There are more little kids expected in school in the next 10 years than ever: We had better look ahead and see how we are going to solve this situation.

Will it save money?

COM. DERTHICK: People have in mind that they will save a great deal of money by running the schools in the summer. Do you believe that is possible?

DR. STINNETT: I think that is a false conception. In the first place, the assumption that a teacher will now take on a fourth more children and work three months more for the same amount of money just doesn't hold. We could save money if we could stagger the terms in use of the buildings, to be sure. But in the to overall cost I do not see any gr concept of savings.

COM. DERTHICK: What you are s ing is that the additional operati cost will cancel out the savings in c ital investment. Dr. Hickey, as pr ident of the American Association School Administrators, how wo you speak on this subject?

DR. HICKEY: Dr. Stinnett has clea indicated that the problem is neitl new nor unique.

If you teach school down in cotton country, you do so at a ferent time of the year than if y teach in the city in a manufacturi community. I think the time come for us to do some clear thinki in this area because I believe that are conducting a good many 12-mo schools now, if you look around at aspects of programs in the large ban areas. There, we use buildi for summer playgrounds. We some remedial work with pup The use of the buildings to overco retardation is one of the great savi that can come out of the extensive of the school plant. Many of oldsters remember that we did a gr deal of that before the depressi When money became tight we just continued it.

MISS SHULL: I cannot see, and I ha not found any facts to show, that would save money in the long run less we are thinking in terms of kind of diluted or superefficient s tem—I mean, it would look sup efficient. It wouldn't really be an ucation program, but it might lo as if it were. That is the way it pears to people before they start thi ing about the actual facts.

. STINNETT: I want to raise a ques-
n with you, Dr. Derthick, whether
ictually would save money. Take
uilding for 1,200 students: Can we
ume that there will be 900 students
this school three months of the
mmer and every other quarter of
school year?

M. DERTHICK: Yes, that's a big
ection. We school people could
erate schools 12 months of the year
our public, our parents, our tax-
vers wanted us to, but the problem
to get the public to respond and
operate and to take vacations at
convenience of the school rather
n according to personal prefer-
es or at the customary time for
rations—the summer. Some chil-
n would have to have their three
nths off in the fall, some in the
nter, and others in the spring.

n parents, teachers, and pupils "take it"?

M. DERTHICK: There is another
nt we ought to recognize. One
gument of those who advocate the
month year is that we can thereby
able the teacher to earn a higher
nual income.

. HICKEY: I think that would in-
tably be true if we had the year-
nd school. I have these doubts
out it, though. One, whether the
cher can physically take it.
cond, whether the parents can take
Third, whether you can stagger
ms in such a way that you have
building in full use all the time.

M. DERTHICK: That's my biggest
ubt—whether the parents can take

. STINNETT: I'd like to ask Dr.
Hickey several questions. As school people, don't you think we have to admit that there probably isn't any logical reason for the nine-month school year other than the one you implied a moment ago: that we were once a predominantly agricultural country, and that many children were needed on the farm during the growing season of the year? Isn't that the fact that probably set the pattern? Do we have very much evidence that physiologically or biologically a 12-month school year would be bad for children?

DR. HICKEY: I think there is no evidence.

COM. DERTHICK: We must remember that in many sections of the United States it would be impossible to have a summer school with a full load of children without air conditioning.

DR. STINNETT: Miss Shull, as a practicing teacher, do you think there is any sound physiological reason why teachers should not teach 12 months in a year? Most other people work 11 months and then have a month's vacation or less.

MISS SHULL: I have taught for quite a long time, and I cannot imagine existing if I taught longer than the $10\frac{1}{2}$ months I do. I work hard and try to put forth energy and thought all of the time that I have classes with me. And I just don't think I could survive if I didn't have time off to recuperate, to study, to travel, or to do some other thing. Now, that may not be typical. Lots of teachers do sign up for extra work or take on another job in the summer. I can see how I might work at another job for a change of pace. And teaching some subjects may not be quite the same. Maybe I work too hard at it. But I do think that teaching the year around would be a physiological and psychological problem for at least some of us. Perhaps, if you added a great deal of assistance in the way of TV or helpers and so forth, teaching would not be quite so wearing and teachers could teach longer. I don't know.

Acceleration *vs.* enrichment

DR. STINNETT: My own guess is that we will come to a 12-month school year in this country. That's quite different from the 12-month school term. I mean, teachers will have to be employed on a 12-months-of-the-year basis. They will have a month each summer to use as a means of enriching the program in arts, in music, in aesthetics, in camping, and recreation, and then they will have a month for professional growth themselves.

MISS SHULL: It seems to me that there are wonderful possibilities for enriching the program, for making education a much better kind of thing.

For instance, one thinks of extra classes for the fast learners. They could, perhaps, specialize, or they could take more of the subjects they cannot find time for during the regular year. Bright students just cannot find time to take all of the math, science, history, or English they want.

Then, there could be special classes for those who are more slow, to help them keep up and avoid what can be rather serious mental frustration. There could be activities people don't have time for during the regular school year. Surely it is better to think in terms of enriching the program, providing a better educational program, than worrying about making it a little bit cheaper.

DR. STINNETT: There is another aspect of this problem which tends to argue for the longer school year, and that is this: The level of skills and of education of our people must become infinitely higher than it is today to meet the tremendous demand for professional, technical, and scientific people. You have two ways of accomplishing this. You can extend the educational period to 24 or 25 years of age or you can make the school year longer.

COM. DERTHICK: Some people argue for it because of acceleration. In other words, let your children go to school all four quarters each year and get through at 19 instead of 21.

DR. HICKEY: I think that we do have some evidence that it would not be good. Say, 60 or 70 percent of our students did go 12 months of the year and the others did not. You'd have an age group there of the same physical maturation, but when it came to intellectual and social maturation,

they'd be completely out of kilter with the people they lived with.

COM. DERTHICK: Of course, it would break up neighborhood groups and circles of friendship and that sort of thing. And then, for those youngsters who do not go on to college, there would be great difficulty in going to work or keeping usefully occupied if they graduate at 14 or 15.

DR. HICKEY: At this particular moment of our history there probably would not be much opposition from certain groups, but let our labor situation and supply catch up and there would be terrific opposition on the labor market.

DR. STINNETT: We have learned in working with gifted children, in attempting to enrich them so that they can do better in this whole preparation for leadership, that if we are going to dilute this training by getting them out of school earlier or by rushthem through, we have broken down the entire purpose of preparing these people. I don't think that just the thought of getting them through in a fewer number of years can ever be the answer to the problem. I don't think we ought to dilute our educational system. I think we ought to strengthen it.

MISS SHULL: It is very true that children mature at certain paces. They just aren't ready to think and develop ideas at faster paces. You can compress the learning of facts, but you cannot speed up the ability to think about things, to learn to analyze, to construct ideas. I think it would be short-changing them to try to accelerate the program, but I am, too, in favor of enriching the program by additional courses and opportunities in the summer.

More study needed

DR. STINNETT: Dr. Derthick, you are in Washington, and that's a good sounding board for all these problems we certainly have ahead of us. They are not solved at the present time so far as you can say, are they? We still must face the problem of having more rooms for more children. The time has come, perhaps, when we ought to gather a little more data on what is going on around the country. I was in Des Moines, Iowa, not too long ago, attending a meeting of school administrators. I was surprised to find that for the program they'd brought down practically the whole school system of Rochester, Minn., including parents and everybody else, to demonstrate how they were operating a 12-month school. I think we ought to find out just where the system works and how it works, and what makes it click or why it isn't clicking. I don't think we ought blithely to say this thing won't work. Let's make it work.

DR. HICKEY: I strongly believe that some type of study in the larger urban communities where a lot of this talk is taking place is quite in order to get the answer to some of the difficulties that will come up. We should seek the answer with pilot study and experimentation.

MISS SHULL: It is a local problem primarily, and undoubtedly there are some areas where the year-round school would meet with great approval. I live in an area where there are lots of little children all around. Parents are so glad when school starts in the fall and so sorry when school is out in the spring. They would love to have school going on longer, but whether it can be arranged is another matter. That would be a matter for local study.

COM. DERTHICK: I think we agree among ourselves that this question has many aspects and that there are many obstacles, but we are also agreed that we must be openminded. Certainly one of the most constructive notes in this discussion is that we should encourage experimentation if we can get some cities or communities to try it out. I know that down at the Governor's Conference in Williamsburg there seemed to be only moderate enthusiasm for the idea. But the Governors did say we ought to experiment. I think we would all concur in that.

MONUMENT to a SCIENTIST EDUCATOR

AS U. S. Highway 71 leads the traveler through the foothills of the Ozarks, it passes, near Diamond, Mo., 210 acres of land that are the property of all American citizens. Within the boundaries of these acres the eminent scientist and teacher, George Washington Carver, was born. Officially incorporated into the national park system in 1953, this land is now the site of the George Washington Carver National Monument.

Years before his death, Dr. Carver's life story was legend. His accomplishments in art, music, science, and education brought him honor from many sources. Fittingly, the people of his native Missouri began the movement to pay tribute to him through special recognition of his birthplace. Acting on their petition, in 1942, the Governor of Missouri caused a marker to be placed on U. S. Highway 71 indicating the place of birth.

A bill to make the site a national monument, introduced to the Congress of the United States by two Missouri members—Representative Dewey S. Short and Senator Harry S. Truman—became law in July 1943. On the 10th anniversary of the passing of the bill, the Secretary of the Interior formally dedicated the Monument.

The U. S. Park Service, which maintains the Monument, plans to complete new headquarters and a visitor's center by the end of June 1958. The center will house records, historic objects, and memorials to Dr. Carver.

According to the Park Service, the Monument may be approached from Joplin, Neosho, or Carthage, Mo., via U. S. 71 Alternate and County Highway V intersecting at Diamond.

Progress report on the Library Services Act

BOOKS FOR RURAL AMERICA

by JOHN G. LORENZ *and* HERBERT A. CARL

AFTER years of wishing, it was like a dream come true to load up the bookmobile and start up the historic Yaak River to give service to the people living around the Yaak School, a one-room log building. May 10, 1957, was the date . . .

On this first trip around the country, it was necessary to reload each day. The bookmobile holds approximately 1,000 books, and each night it came in with many empty shelves . . . Lincoln County is sparsely populated but the residents are enthusiastic readers.

* * * * *

SO writes Mrs. Inez Herrig, administrator of a newly organized Montana Library system. The story she tells in the July issue of *Montana Libraries* is just one of many dramatic new developments that have taken place in library services to rural people since the Library Services Act (P. L. 597, 84th Cong.) was signed into law on June 19, 1956.

Compelling reasons

Twenty-seven million children and adults in the United States without any public library service, 53 million more with only inadequate libraries—these are the compelling reasons behind the Library Services Act. Because most of the people who have little or nothing in the way of a local public library live in rural areas, it is for rural areas that the Act is designed.

Since the whole approach of the legislation is to stimulate State and local governments to develop their own library programs, the funds authorized by the Act—$7.5 million a year for the 5 years beginning July 1, 1956—are often referred to as "seed money." For the first fiscal year Congress appropriated $2,050,000. This amount provided for a basic grant of $40,000 to each of the States, Alaska, Hawaii, and Puerto Rico, and $10,000 to the Virgin Islands. For the second fiscal year, in which Guam also is eligible, Congress has appropriated $5 million.

The States respond . . .

Even in its first fiscal year the program has chalked up some impressive results by stimulating progress at the State level:

- Utah has established its first State extension agency and has appropriated funds for a program.
- Arizona has made its first appropriation for State extension work.
- Arizona, New Mexico, North Dakota, and Oklahoma appropriated emergency funds for their State extension agencies so that they could qualify immediately for the Federal grant.
- Kansas, Nebraska, Nevada, and Rhode Island have improved their library legislation. In Rhode Island the new law concludes thus: "The general assembly shall appropriate for succeeding fiscal years of the State such sums as may be necessary to provide the requisite matching funds to take advantage of the Federal grants which are available to the State."
- Arkansas, Idaho, North Carolina, North Dakota, and West Virginia have given their library agencies substantial budget increases. In Idaho, for example, the increase is more than 150 percent.
- Minnesota and Oregon have voted their first State grant-in-aid programs for public library development.

In fact, States have participated in the new program to an extent that exceeds all expectations. During the first fiscal year, 36 "State Plans for the Further Extension of Public Library Services to Rural Areas" were approved—a high number for the first year of a Federal grant program.

Just as impressive has been the ability of the 36 States to match—in many States, to "overmatch"—the Federal funds. During the first year the Federal Government paid grants totaling $1,440,000; to match this amount, State and local governments together were required to contribute $1,282,861. Actually, the participating States managed to put as much as $1,224,120 into the effort, and so outdistanced requirements by nearly $3 million!

Of the total budget for the 36 State plans ($5,664,120), $2,300,475 was spent for personnel, $2,083,622 for books and other library materials, $601,938 for library equipment, and $678,085 for operating expenses. Included were approximately 80 new professional positions and 30 new bookmobiles.

. . . with various plans

The State plans are as varied as the State library agencies and States they represent. In virtually every plan, however, one project stands out—the strengthening of the State library agency itself, so that it can carry out a more effective program for improving rural library services. For many States this tooling-up project calls for more staff, stronger book collections, and better equipment.

The library consultants many States are adding to their staffs are experienced hands who can assist local librarians in book selection, reference work, storytelling, conducting adult education programs, and other library work. Field librarians in Arizona, Colorado, Connecticut, Illinois, Ohio, and Vermont are being assigned to regions of their States so that more direct assistance will be available to all rural librarians.

Mr. Lorenz is assistant director and Mr. Carl is research specialist, Library Services Branch, Office of Education.

State library field workers are also at work setting up regional library demonstrations in areas without adequate library service. The first application to the Oregon State Library for a regional demonstration came from Crook, Jefferson, and Deschutes Counties. Plans for cooperation had been discussed in this region for years, but no action had resulted. Now, with the stimulation of State and Federal funds, the Deschutes County Library, equipped with a bookmobile and good leadership, will extend and coordinate its services to Jefferson and Crook Counties, which have an all-rural population of 14,527.

Many State plans include a project to establish a new State service center or branch library. This project takes many different forms: Some States plan regional branches to give permanent service directly to individuals without local libraries; others will use them as headquarters for bookmobiles; still others, as sources of consultant service to local libraries that want the benefits of cooperation and federation among libraries. In many States centralized ordering and cataloging of books and other library materials are also assigned to State library branches.

The State plans also give much attention to bookmobile exhibits and to demonstrations of good bookmobile service. They also include projects for producing films, brochures, and TV and radio shows that will help public libraries interpret their work. Inservice training and scholarship projects appear again and again, as do contracts between State library agencies and public libraries, and agreements between public libraries for sharing services.

To develop all these State plans has called for tremendous amounts of joint action and good will in the States. Much time and energy has already been given to the program by school teachers and superintendents, college and university faculty members, businessmen, women's groups, and State and local government officials. Cooperation between libraries and State library agencies is, of course, the very essence of the program.

The Act itself

State plans are being submitted, approved, and administered under an act that is specific about limits, requirements, and terms. Among its principal provisions are these:

- Each State that wants to participate in the program must first prepare a plan for developing public library services to its rural areas.
- The plan must be submitted to and administered by an authorized State library agency.
- A "rural area" is defined as any place of 10,000 population or less. Funds may be used by urban libraries for extending public library services to rural areas.
- Funds may be used for salaries, books, and other library materials, library equipment, and all other operating expenses, but not for the purchase of land or for the purchase or erection of any building.
- To remain eligible for a Federal grant, a State must maintain its expenditures for all public library service at least at the same level as in the fiscal year ending June 30, 1956; and State and local expenditures for rural public library service also must not fall below the 1956 level.

State and local responsibility also is firmly fixed in the language of the Act:

> . . . this Act shall not be so construed as to interfere with State and local initiative in the conduct of public library services. The administration of public libraries, the selection of personnel and library books and materials, and, insofar as consistent with the purposes of this Act, the determination of the best uses of the funds provided under this Act shall be reserved to the State and their local subdivisions.

Thus the programs under the Act are State and local programs in which the Federal Government pays part of the cost. The "Federal share" varies from 66 percent in the least wealthy State to 33 percent in the most wealthy.

The Office of Education

At the Federal level, the Act is administered by the U. S. Commissioner of Education, through the Library Services Branch of the Office of Education.

To start the wheels rolling smoothly, the Office sponsored four regional conferences in September and October 1956. Some additional staff was secured to help administer the program; field trips were begun; and by the end of May 1957 the Office's extension specialists had visited and become acquainted with the work of 41 State library agencies.

The Library Services Branch has established the following priorities in administering the Act: Review of State plans and amendments; consultation with the States; and collecting and disseminating the best information available on rural library development.

So that experience gained in one State may benefit all the States, the Office is planning specific studies of—

State library extension agencies: their services, resources, personnel, finances, physical facilities.

Rural library development projects, their description, analysis, and evaluation.

A new fiscal year

On July 1, 1957, the Library Services Act entered its second fiscal year.

By the end of July, 39 States and Territories had submitted plans for the year. Nine of these had not participated the year before; added to the 36 States and Territories already operating under plans approved last year, they brought the total to 45.

The 39 States that had submitted plans by the end of July propose to contribute 69 percent more money than they are required to contribute under the Act. By mid-August 41 States and 3 Territories had sent in programs with budgets totaling more than $10 million. As things look now, all States but three will share in the benefits of the Library Services Act this year.

COOPERATIVE RESEARCH PROGRAM

Summary of progress . . .

. . . in projects completed

SOON the Office of Education will be reporting the progress of its cooperative research program from the most important angle of all—the research findings.

Already, as of the end of September, eight projects have reached their scheduled completion dates, and the final reports are beginning to come in.

The first five

Five projects were finished as early as June.

One, carried out by the University of Florida and the Florida State Department of Education under the direction of J. B. White and J. T. Kelly, had evaluated the State's preservice training program for teachers, seeking the opinions of both teachers and principals.

The other four all dealt with education of the mentally retarded.

Three were the work of the University of Wisconsin.

One, directed by Julian C. Stanley, had reviewed research that already had been done on the educational and psychological factors of mental retardation. Its chief purpose: To examine the techniques of such research, to suggest new and better procedures.

Another, under Virgil E. Herrick and Theodore L. Harris, had studied the reactions of retarded children to language symbols.

The third, directed by Robert J. Francis, had compared mentally retarded and normal children in their responses to gross motor performance tests, and related the data to age, sex, and intelligence.

In the fourth, at Boston University, under the direction of Donald D. Durrell, children in special classes had been analyzed for their ability to read, speak, listen, and write. One of the main purposes: To discover the weaknesses that respond rapidly to remedial instruction.

Another on retardation

A fifth project on mental retardation was completed a month later, in the Nebraska State Department of Education, under the direction of William R. Carriker. It had compared two mentally retarded groups in the way their members were adjusting to postschool life. One group was made up of persons who had attended school in special classes; the other, of persons who had followed a regular school program.

Special abilities

Development of the special abilities of students was the focus of two projects, one ending in August and the other in September.

At Regis College, in Weston, Mass., Sister Mary Viterbo McCarthy had worked with bright, underachieving boys to find out to what extent special counseling could help to improve their scholastic achievement.

And at the University of Michigan, under the direction of Alvin Zander, the Research Center for Group Dynamics had studied how highly intelligent students, compared to students with average and low ability, react when their fellows accept or reject their ideas and suggestions. In other words, it had studied social adaptation of bright students.

FOR many other projects, the completion date is within sight; for still others the work has a few years to go. Of the 72 projects signed into contract before June 30, 1957, for example, 11 more will be completed by the turn of this calendar year; 24 in 1958; 21 in 1959; 7 in 1960; and 1 in 1961.

As the months pass, and reports become available, *School Life* hopes to give some account, at least briefly, of the findings.

. . . in contracts signed

EVEN as reports of work completed begin a steady flow into the Office, new contracts are being signed and more research is getting under way. To continue the program, Congress has appropriated $2.3 million for the current fiscal year—July 1, 1957, to June 30, 1958. Of this amount, about $1.4 million will go to continue the long-term projects already contracted for in 1956–57; but the rest is available for new projects.

Between *School Life's* latest report, in May, and the middle of August, the Office of Education signed 16 more contracts, all listed below, together with the name of the director and the length of the project. Six of these, marked with an asterisk, were signed on or before June 30 and thus entered into the total for the first fiscal year of the program, shown in the tabulation at the top of this page: for the 10 signed since June 30, $197,724 of this year's funds have been committed.

Education of the mentally retarded

*Arizona State College at Tempe. *Investigation of mental retardation and "pseudo mental retardation" in relation to bilingual and subcultural factors*, by Willard Abraham; 3 years.

*New York State Education Department. *Educational outcomes under single- and two-track plans for*

educable mentally retarded children, by J. Wayne Wrightstone: 2 years, 2 months.

* University of Minnesota, *Day-class educable retardates compared with institutionalized retardates*, by Maynard C. Reynolds; 3 years, 4 months.

University of Wisconsin. *Perception of symbols in skill learning by mentally retarded, gifted, and normal children*, by Virgil E. Herrick and Theodore L. Harris; 4 years. This project is an outgrowth of a project already completed under the direction of Drs. Herrick and Harris.

Development of special abilities of students

University of Chicago, *Educational motivation patterns of superior students who do and who do not achieve in high school*, by Paul H. Bowman: 2 years.

University of Pittsburgh. *Educational plans and decisions in relation to aptitude patterns*, by John C. Flanagan: 5 years.

Retention and continuation of students in schools and colleges

*University of Wisconsin, *Decisions of youth about education beyond high school and factors that influence them*, by J. Kenneth Little: 1 year, 3 months.

University of Chicago, *Motivation of youth for leaving school*, by Paul H. Bowman; 2 years.

Staffing the Nation's schools

University of Minnesota, *Attitudes and other characteristics that are associated with secondary-school homemaking teachers' ability to maintain desirable learning situations*, by Roxana R. Ford; 3 years.

Other aspects of education

* George Washington University, Washington, D. C., *Use of supervised correspondence study to relieve the teacher shortage*, by Blake S. Root; 9 months.

* Southern Oregon College. *Integrating the humanities and social science in a block teaching project*, by Arthur Kreisman; 1 year.

Stanford University, *Community understanding as a factor in the financial support of public education*, by William R. Odell; 3 years.

Stanford University, *Organization of the study of education*, by W. H. Cowley; 1 year.

Syracuse University, *Influence of adolescents' social value on personal relations with other adolescents and with teachers*, by Eric F. Gardner: 5 years.

University of California. *Attitudes of high school students as related to success in school*, by T. Bentley Edwards; 1 year.

University of New Mexico, *Problems of adjustment of Indian and non-Indian children in the public elementary schools of New Mexico*, by Miles Zintz; 3 years.

OE's Cooperative Research Program strikes some totals for its first fiscal year, ending June 30, 1957

Proposals reviewed by the Research Advisory Committee	316
Proposals recommended to the Commissioner by the Committee	108
Projects signed into contract:	
In education of the mentally retarded*	42
In other fields	30
Total	72
Federal funds obligated:	
For education of the mentally retarded*	$647,894
For other fields	$351,066
Total	**$998,960

***Projects on education of the mentally retarded are singled out here because Congress indicated that $675,000—nearly two-thirds of the funds appropriated for 1956–57—should be applied for research in that field.**

****Most of the 72 contracts signed during 1956–57 are for projects that will run beyond that year—some, for as long as 5 and 6 years. Thus, in addition to the $998,960 obligated from the 1956–57 appropriation, projects continuing beyond 1956–57 would require $1,354,880 in Federal funds for 1957–58, $1,103,614 for 1958–59, and $693,483 for 1959–60 and 1960–61—making a total of nearly 4.2 million Federal dollars for the first 72 contracts. Each year's payments are of course contingent on Congress' appropriating funds for that year.**

Each participating institution or agency also makes a contribution, usually in the form of services or facilities. In the first 72 contracts, participants are contributing an estimated $2.3 million, or 36 percent of the total cost.

THESE 16 new contracts brought the total on August 15 to 82. As of that date, 34 colleges and universities were participating in the program, together with 6 State boards and departments of education; 24 States, the District of Columbia, and Alaska were represented.

As the months pass, other institutions and agencies will be entering the program with new projects. To make further recommendations to the Commissioner, the Office's Research Advisory Committee will meet on October 24–25, when it will study about 40 proposals that the Office of Education has received since the Committee previously met, in June. Proposals, which are accepted only from colleges, universities, and State departments of education, are now being submitted according to a set of instructions that replaces the form used during the first year of the program. Anyone planning to apply for Federal support of a research project in education should first see these instructions; copies are available from the Cooperative Research Branch of the Office of Education, Washington 25, D. C.

WHAT TO EXPECT . . .

FIFTEEN new Office of Education publications are due from the printer between this issue and the January edition of *School Life*. The following list of these publications is for information only. Please do not request copies until *School Life* announces they are available.

SCHOOL ADMINISTRATION

The State and Nonpublic Schools.
Reports the basic pattern of State responsibilities for nonpublic schools over the years and the implementation of these responsibilities through constitutional and statutory provisions.

LIBRARY SERVICES

Status of Public School Libraries, 1953–54.
The only nationwide collection of public school library statistics, this publication tabulates and interprets data on personnel, organization, resources, and expenditures of the 48 States.

INSTRUCTION AND ORGANIZATION

Administrative Facilities in School Buildings.
Discusses necessary space facilities in light of administrative functions and activities in both elementary and secondary schools. Gives sample layouts for principal's office, waiting room, lounges and work rooms for teachers, health and guidance suites, and rooms for conferences, student council use, records, storage, and mimeograph work.

Conservation Experiences for Children.
Concerned with what children do about natural resources, what resources are getting attention in different States, what curriculum problems and projects are encountered in this area, what books and pamphlets are available, and what organizations and agencies send technicians on request or provide publications and other materials.

Guidance Workers—Certification Requirements.
Gives summaries, by States, of the professional training, teaching and work experience, required for school counselors and school psychologists, as reported by State departments of education.

Improving Reading in the Junior High School.
Reviews research in developmental and remedial reading; shows how research findings may be used to improve the reading skills and abilities of junior high school students. Defines responsibilities of subject-matter teachers for teaching reading. Offers suggestions for setting up developmental and remedial reading programs. Discusses how evaluation may be used to improve pupil's reading.

Speech Correctionists—The Competencies They Need.
Part of a broad study of the qualifications and preparation of teachers of exceptional children. Points out the similarities and differences in the importance of competencies; identifies many of the desirable elements in the professional preparation of speech correctionists.

Teachers of Children Who Are Socially and Emotionally Maladjusted.
Another in the series of reports based on findings from the study of qualifications and preparation of teachers of exceptional children. It identifies and describes competencies necessary for teachers of maladjusted children, gives evaluations of these competencies by teachers in the profession, and indicates some guidelines for professional training in this area.

Television in Education.
Relates what is being done in educational television and what can be done with TV in schools, universities, and for adults. Describes an enrichment program for schools, how a community can plan, and how a TV station can develop its services.

HIGHER EDUCATION

Financial Aid to College Students: Graduate.
Reports fellowships, loans, and work opportunities available during the academic year 1955–56 in 406 institutions (fellowships alone amount to $18,239,150).

INTERNATIONAL EDUCATION

Germany Revisited: Education in the Federal Republic.
Education evolving in the German Federal Republic since 1945 is reviewed by one who prepared a study on education in Germany 20 years ago.

VOCATIONAL EDUCATION

Instruction in Farm Mechanics.
Written to aid State supervisors, teacher trainers, and vocational agriculture teachers provide training in farm mechanics in the public high schools for all-day, young farmers, and adult farmer classes. Covers philosophy of farm mechanics instruction; outlines necessary facilities, equipment, supplies; gives typical examples of instruction in each of the five areas of farm mechanics.

Supervisory Personnel Development.
A guide to the organization, administration, and operation of a trade and industrial program in supervisory training, including conference leadership.

GENERAL

Education Directory, Part 1: Education Associations.
Compilation of 1,435 education associations, showing corporate name, headquarters address, names and addresses of chief officers and secretaries, titles and frequency of issue of official publications.

Handbook, Office of Education.
Revision of 1955 issue. Sets forth the Federal role in education; presents facts about the Office of Education's historical background, functions, and organization; and identifies the Federal laws under which the Office operates.

TV AND THE TEACHER

TEACHERS are acquiring new skills in their craft these days, through programs offered by educational television stations, by closed circuit systems in schools, and by commercial television. For instance—

In Pittsburgh, Pa., a station offers credit courses on local resources to public school teachers • In Dade County, Fla., the mathematics teaching supervisor extends her school visits through Miami's ETV station • In New York City, a program instructs nonscience teachers in science teaching methods • In Houston, Tex., an ETV inservice spelling program brings 1,500 teachers together • In Schenectady, N. Y., a program combines inservice teacher training with French lessons for elementary pupils.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

FOR SALE

(Order from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

ADVENTURING IN RESEARCH TO IMPROVE SCHOOL PRACTICES IN HOMEMAKING PROGRAMS:

AN INDIVIDUAL APPROACH. 1956. A folder. 5 cents. (Misc. 3512–I.)

A GROUP APPROACH. 1956. A folder. 5 cents. (Misc. 3512–II.)

A STATE APPROACH. 1957. A folder. 5 cents. (Misc. 3512–III.)

A TRAINING APPROACH. 1957. A folder. 5 cents. (Misc. 3512–IV.)

CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: LARGE CITIES, 1955–56, by *Lester B. Herlihy*. 1957. 25 p. 15 cents. (Cir. No. 500.)

ENGINEERING ENROLLMENTS AND DEGREES, 1956, by *Sidney J. Armore and Henry H. Armsby*. 1957. 45 p. 40 cents. (Cir. No. 494.)

PROGRESS OF PUBLIC EDUCATION IN THE UNITED STATES OF AMERICA—1956–57 (in English, French, Russian, and Spanish). 1957. 99 p. 45 cents.

STATISTICAL SUMMARY OF EDUCATION, 1953–54, by *Rose Marie Smith* and *W. Vance Grant*. 1957. 36 p. 35 cents. Biennial Survey of Education in the United States—1952–54: Chapter 1.

STATISTICS OF HIGHER EDUCATION: RECEIPTS, EXPENDITURES, AND PROPERTY, 1953–54, by *Henry G. Badger* and *Mabel C. Rice*. 1957. 137 p. 55 cents. Biennial Survey of Education in the United States—1952–54: Chapter 4, Section II.

TEACHERS OF CHILDREN WHO ARE MENTALLY RETARDED, prepared by *Romaine P. Mackie, Harold M. Williams*, and *Lloyd M. Dunn*. 1957. 97 p. 45 cents. (Bull. 1957, No. 3.)

U. S. GOVERNMENT FILMS FOR PUBLIC EDUCATIONAL USE, SUPPLEMENT No. 1, by *Seerley Reid*. 1957. 92 p. 35 cents. (Bull. 1957, No. 6.)

FREE

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

CLASS ENROLLMENT AND SCHOOL SIZE, prepared by *Willis Vandiver*. June 1957. 7 p. (Ed. Brief No. 35.)

THE "CONTINUING EFFORT." Reprint from *School Life*, February and March 1957. 5 p.

COURSE OFFERINGS IN GUIDANCE AND STUDENT PERSONNEL WORK, SUMMER 1957 AND ACADEMIC YEAR 1957–58, by *Roland G. Ross*. April 1957. 93 p. (Cir. No. 503.)

DIGEST OF ANNUAL REPORTS OF STATE BOARDS FOR VOCATIONAL EDUCATION, year ended June 30, 1956. 1957. 45 p.

OFFICE OF EDUCATION, ANNUAL REPORT, 1956. 44 p. (Reprint from the Annual Report of the U. S. Department of Health, Education, and Welfare, 1956.)

THE PRIMARY UNIT, prepared by *Myrtle M. Imhoff*. Revised May 1957. 9 p. (Sel. Ref. No. 1.)

A REPORT ON STATE LAWS—EARLY ELEMENTARY EDUCATION, by *Arch K. Steiner*. 4 p. Reprint from *School Life*, May 1957.

STATISTICS OF PUBLIC LIBRARY SYSTEMS IN CITIES WITH POPULATIONS OF 50,000 TO 99,999: FISCAL YEAR 1956, by *Mary M. Wilhoite*. May 1957. 4 p. (Cir. No. 505.)

STATISTICS OF PUBLIC LIBRARIES IN CITIES WITH POPULATIONS OF 100,000 OR MORE: FISCAL YEAR 1956, by *Mary M. Wilhoite*. March 1957. 4 p. (Cir. No. 502.)

STAY-IN-SCHOOL CAMPAIGN, by *Bettina Weary*. 4 p. Reprint from *School Life*, May 1957.

U. S. GOVERNMENT PRINTING OFFICE: 1957

SCHOOL LIFE

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

OFFICE OF EDUCATION

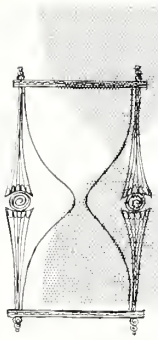
THE EDITORIAL

Half-Day Sessions

AMONG THE CONTENTS

November 1957

THE STOLEN YEARS



OF the 31.5 million children in our public schools last year, there were 2.3 million for whom we actually had no room.

But we made room for them somehow. We *had* to. We crowded more desks into limited classrooms, we resorted to buildings not intended for school use, we went on half-day schedules. And in the end, we managed.

In the end, however, we were not proud of what we had done. True, we had provided schools for those 2.3 million, but only a makeshift kind: crowded and inadequate quarters for 1.5 million of them; less than a full day for the other 840,000.

We had done even worse. Every time we had opened the door to a classroom and ushered in another child, we had taken a little more space from each child already there. And so, in the end, we had crowded not only the 1.5 million but every one of their classmates.

This year we're leaning on the old halfway measures again. Again, we *have* to, for our severe shortage of classrooms continues. Again, we are crowding millions of children into our schools. Again we are slashing the school day for hundreds of thousands more.

For *all* these children and their teachers I feel a deep concern. But at this moment I want to concentrate on *those children who have only half-day schedules, whose teachers are burdened with double shifts.* What, actually, is happening to them in school?

Children on half-day schedules attend school less than the 5 or 6 hours most States require as a minimum. If they are on the single 4-hour session so common nowadays, they are deprived of an hour a day, on the average. And by the end of a school year they have lost a full 2 months. Multiply 2 months by the number of years this condition continues, and you will see that elementary children alone could lose almost 2 full years of schooling.

When we steal school hours and days and years from children, we rob them of much more than time.

We rob them of learning.

Obviously, something has to yield in a schoolday cut back to 4 hours: speech correction and remedial reading, for example . . . well-rounded health programs . . . music . . . supervised study. *Continued on page 13*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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Educational news

EVENTS AND DEVELOPMENTS

of national significance

Youth Fitness

PRESIDENT Eisenhower, in his concern for the welfare of young Americans, in 1956 created two organizations to promote the fitness of youth: the President's Citizens Advisory Committee on Fitness of American Youth and the President's Council on Youth Fitness.

The Committee and the Council met in their first joint annual conference at the United States Military Academy, West Point, N. Y., September 9 and 10. From discussions of the need for youth fitness and the means of attaining it, the conference concluded—and so reported to Vice President Nixon—that it is the local community, with the help of State and Federal governments, that must provide the necessary programs.

The Citizens Committee's 100 members are business, professional, athletic, and education leaders. Carter Burgess, president of TWA, is their chairman. The Council, appointed by the President from his official "family," has six members: Vice President Nixon (chairman), and the Secretaries of Agriculture; Defense; Health, Education, and Welfare; Interior; and Labor.

Conference participants considered facilities, publicity, guidance, research, and leadership for promoting youth fitness.

Conference members felt that public lands and parks might be used more advantageously for recreation programs. They favored a nationwide telecast by President Eisenhower to alert the American public to the need for physical fitness. They expressed the belief that professional guidance is necessary for the success of any fitness program.

The conferees emphasized the importance of school programs of health, physical education, and athletics, as well as other aspects of schooling in meeting the needs of youth fitness.

On the Air

BECAUSE officials of the National Broadcasting Company agree with the U. S. Department of Health, Education, and Welfare that "education of future citizens is just about the most important business in America," eight NBC-owned radio and television stations in as many leading cities across the country are presenting a series of weekly programs on this one subject: *Know your schools*.

The series, announced on September 25 by Secretary Folsom and Commissioner Derthick on Dave Garroway's show *Today*, began on the weekend of October 12–13 and is running through five more, concluding in American Education Week, November 10–16. It is being carried by WRCA and WRCA-TV, New York City; WRCV and WRCV-TV, Philadelphia; WRC and WRC-TV, Washington; WNBC and WKNB, Hartford-New Britain; WBUG, Buffalo; WMAQ and WNBQ, Chicago; KRCA, Los Angeles; and KNBC, San Francisco.

Each station, working with the Office of Education, is telling its story in terms of local needs and interests; thus the subject is being approached in eight different ways each week. Together, the stations are giving $1 million worth of time to the series.

Distributive Education

DISTRIBUTIVE education supervisors and teacher trainers from State and Territorial departments of education held their first national conference since 1948 from September 30 to October 1 in the Office of Education.

The conferees—about 34 in all—met to discuss training for the distributive occupations and, from their discussion, to prepare a report that would serve as a guide for distributive education in the coming year.

The distributive education conference was timed to follow the September 23–25 meeting of the President's Conference on Technical and Distributive Research for the Benefit of Small Businesses, so that conferees could hear reports on it from several of their fellows who had attended the earlier conference.

Topics for discussion during the distributive education conference were both broad and specific. One general session—for instance—took up trends affecting distribution; another, broadening the scope of distributive education. Group discussions covered teaching and teacher recruitment; services required; the development of distributive education; cooperation with other vocational services; the need for research; planning State leadership guides; and suggestions for a program of action.

A highlight of the program was a

panel discussion, on October 2, by members of the Secretary of Commerce's National Distribution Council: Four business leaders and a Department of Commerce official.

Members of State departments of education and universities who assisted in the planning of the conference were Louise Bernard, Virginia; James A. Dorsey, Connecticut; Roy Fairbrother, Wisconsin; Warren G. Meyer, University of Minnesota; Cecil Stanley, Nebraska; Charles W. Steadman, University of Pittsburgh; and Rulon C. Van Wagenen, California.

Office of Education staff members who served as daily chairmen were James H. Pearson, Assistant Commissioner for Vocational Education; John A. Beaumont, director of the Distributive Education Branch; and four program specialists of the branch: Donovan R. Armstrong, Clyde W. Humphrey, G. Henry Richert, and George Sanders. Ward P. Beard, assistant director for Vocational Education, was a resource person for the conference.

The Distributive Education Branch is preparing the final report on the conference for publication this month.

Report on Migrant Conferences

FULL report of the two conferences on planning education for agricultural migrants, sponsored by the Office of Education in mid-spring of this year, is now in print. Paul E. Blackwood, specialist for elementary education in the Elementary Schools Section of the Office, who prepared the report, will furnish copies at your request.

Emphasis on Asia

MEETING for the first time west of the Mississippi, the U. S. National Commission for UNESCO will hold its Sixth National Conference in San Francisco, November 6–9. To emphasize Asian-Western understanding and to stimulate American interest in Asia, the conference theme this year will be *Asia and the United States: What the American Citizen Can Do To Promote Mutual Understanding and Cooperation.*

Attendance is by invitation only, but the four general sessions will be open to the public. Speakers at the plenary sessions will include Under Secretary of State Christian A. Herter and UNESCO's Director General, Luther H. Evans.

The U. S. National Commission for UNESCO has 100 members appointed by the Secretary of State. Sixty of these represent national voluntary organizations; the other members have been individually appointed. The Federal Government has 10 representatives: State and local organizations and institutions, 15; and 15 members are delegates at large. The Commission acts in an advisory capacity to the Government of the United States in matters relating to UNESCO and as liaison between American citizens and UNESCO to coordinate the work of UNESCO and educational, scientific, and cultural organizations of the United States. The Commission itself will hold an annual meeting in San Francisco just prior to the national conference.

Chairman of the Commission is John R. Richards, Chancellor of the Oregon State Board of Higher Education. Among members of the Commission are Senator Leverett Saltonstall; Senator John J. Sparkman; Representative A. S. J. Carnahan; Representative Hugh Scott; Leonard Carmichael, director of the Smithsonian Institution; Lawrence G. Derthick, U. S. Commissioner of Education; Eugene Ormandy, conductor of the Philadelphia Symphony Orchestra; John Walker, director of the National Gallery of Art; and A. F. Spilhaus, dean of the Institute of Technology, University of Minnesota.

Several programs outside of the Sixth National Conference itself will mark the event. Like San Francisco's Museum of Art, for example, museums throughout the United States are observing November as Asia month with special exhibits of Eastern art and culture.

Research Contracts

BETWEEN August 15 and mid-September the Office of Education signed 10 more contracts with universities and State departments of education under its cooperative research program.

Three institutions and departments will focus on *education of the handicapped child:* The California State Department of Education, concerns and rewards of rearing the mentally retarded child (E. P. Willenberg, director); Purdue University, psychological characteristics underlying the educability of the mentally retarded child (W. E. Martin and A. H. Blum, directors); and Wayne State University, verbal learning among children with reduced auditory acuity (J. H. Gaeth, director).

Three more will study the *development of special abilities:* Delaware State Board of Education, developmental guidance at the elementary school level (M. M. Heffernen, director); Harvard University, personality factors in developing communication and leadership skills (J. B. Carroll, director); and Hunter College, identification and classroom behavior of elementary school children each of whom is gifted in at least 1 of 5 different ways (F. B. David and G. S. Lesser, directors).

Housing the Nation's schools is a subject that now gets its first project, in the Texas Educational Agency's study of the development of standard and correlated dimensions of material components in school construction (L. R. Graham, director).

Staffing is the basic problem that the University of Illinois will attack in its project on the logical structure of teaching and developing critical thinking (B. O. Smith, director).

School organization and administration gets one project; so does *the educational aspects of juvenile delinquency.* The University of Washington will study effects of population trends and social change on education institutions (C. F. Schmid, director); Wayne University, relationships of school experiences to delinquency (W. W. Wattenberg, director).

New School Buildings in Europe

By Ray L. Hamon

The Author, *chief of the School Housing Section in the Office of Education and a member of the United States delegation to this year's International Conference on Public Education in Geneva, Switzerland, spent a month after the conference visiting some 50 new school plants in 6 European countries. Although he acknowledges the hazards of drawing general conclusions from what he calls a "flying review," he here reports some of his observations.*

I WAS most cordially received in all of the countries visited and was given a red-carpet treatment far beyond my expectations. In most of the countries I was provided with a car and driver and was accompanied by an official of the ministry of education. At the individual schools we were met by the chief local education officer, the headmaster, and, in many cases, the architect.

I had asked the officials to show me their best new schools. They frequently reminded me that those I was seeing were not typical of their plants now in use, but I told them that I was looking for *new ideas*, that I could see plenty of obsolete facilities at home.

European educational programs and school organization are undergoing substantial changes, and these changes are being reflected in new school designs through the cooperative planning of educators and architects. I found current planning, designs, and construction techniques to be highly modern, in many respects comparing favorably with practices in the United States. In fact, on a few occasions I shocked European administrators and architects by saying: "I like that very much; I wish we could afford it."

School sites

Because of the limited time at my disposal, my visits were largely confined to urban centers, where it is difficult to acquire adequate land for school sites. As a result of this difficulty—and also because the outdoor play activities of most schools on the Continent are of a nature that does not require large areas—most school sites provide small surfaced playcourts instead of large playfields. In England, however, if land is available, the sites include large fields for organized sports. But in no case did I observe a stadium or bleachers for spectators.

I was impressed throughout Europe by the beautifully landscaped school grounds. The carefully planned and well maintained plantings and gardens even on the most limited sites put most of our grounds to shame. Pupils accept responsibility for taking care of the flowers and even come back during vacation to maintain the gardens under the supervision of the resident caretaker.

Quiet and noisy zones

The Belgian Ministry of Education has devoted considerable attention to the zoning of school buildings and grounds into quiet and noisy areas. Judiciously planted shrubbery and single-loaded corridors protect quiet classroom areas from the noises of street traffic, playcourts, lunchrooms, exercise rooms, and shops.

Bicycle parking

Because so many European children ride bicycles to school, "bike parking" is carefully provided. It takes different forms, such as unprotected outdoor racks, covered stalls, or basement parking areas approached by ramps. In many schools the bike parking areas are separate for boys and girls, each connected with the main building by a large cloakroom.

Sheltered areas

It is the practice in northern Europe to provide sheltered areas under school buildings. The south sides are left open to take full advantage of the winter sun; the other three sides are closed to keep out winter winds. These areas serve as playcourts and gathering places during inclement weather.

Classrooms

The typical classroom in the new European schools has only about 600 square feet of net floor area for 35 to 40 pupils—less than is usual in our schools. Most of these small classrooms, however, are supplemented by an alcove containing cloak hangers, storage cabinets, room toilets, wash basin, and work area. This alcove is sometimes cut out of a rectangular area, leaving an L-shaped classroom. By using a column in the corner of the supplementary area, designers reduce the overall structural span of the rectangle. The teacher's platform across the front of the classroom seems to have disappeared, except in Belgium.

Tackboards and chalkboards

Most of the new classrooms are adequately provided with eye-level tackboards of the kind currently used in this country. I saw various kinds of chalkboard materials, ranging from wood to glass. A few of the chalkboards are green, blue, or brown, but most are black.

I was especially interested in the type of chalkboard installation that seems to be standard practice throughout Europe. With minor variations, this is typical: Four linear meters of fixed chalkboard, with a 1-meter-square double-faced unit set on a 180-degree pivot 1 meter from each end of the fixed board. Thus, 8 units of chalkboard are provided in 4 units of wall space, permitting con-

cealment of chalkboard work not applicable to the class currently using the room. When the pivoted units are set at the proper angle, they form a shadow box for the projection of pictures on a screen that can be pulled down over the middle section.

Movable classroom furniture

Nearly all of the new classrooms are equipped with movable and stackable seat and desk furniture. The usual practice is individual and separate chairs and desks.

Fenestration

European designers try to get windows on two sides of every classroom, on opposite sides where possible. The windows usually extend from near the 10- or 11-foot ceilings down to the eye level of seated pupils. I saw a few rooms where they had made the mistake a few of our own architects make: extending windows down to within a few inches of the floor, thus producing more eye strain than effective light. European architects have not given so much study to the control of sky and ground reflection of daylight as some of our southwestern architects have. They use the venetian blind chiefly. Most windowpanes are large, and many of the blinds are mechanically operated. I saw only a few outside venetian-type blinds being used to control sun heat.

Libraries

As a rule, school libraries are not so large in proportion to enrollment as they are in this country, probably because pupils are specifically scheduled for a greater part of the school day and have little free time.

I observed one idea in the arrangement of their libraries that we might consider. Instead of arranging bookshelves around the walls and devoting all of the floor area to reading tables, they run their windows down to normal window-sill height and put double-facing sections of bookcases at right angles to the walls. Thus they create semi-isolated alcoves for reading tables; give the room more informality; place pupils nearer to the books; and, by breaking the accumulated glare from long banks of windows, improve the lighting.

"Halls"

In most European schools the term "halls" means a flat floor assembly room with a stage. These halls also serve as party or social rooms and for light recreation or musical games. I saw no folding chairs such as we commonly use. Instead, these halls are furnished with stacking or nesting chairs. In one I saw chairs that nest like our chainstore grocery baskets and can be pushed under the stage when not in use.

Lunchrooms

School lunchrooms are becoming standard in the new European school buildings. They differ from ours in three respects: Table service rather than cafeteria service; separate dining rooms for boys and girls served from a common kitchen; and almost exclusive use as lunchrooms. Europeans were amused but interested when I told them about our "cafetoriums."

Gymnasiums

In general, European physical education programs stress climbing and calisthenics rather than group games; and their gymnasiums are therefore essentially exercise rooms. Such a room is usually provided for every 500 pupils. Rarely did I see basketball goals in European gymnasiums; and in no case did I observe either fixed or movable seating. They build their gymnasiums for participants rather than for spectators, an idea to which we might give some serious attention.

Shower and dressing facilities

European practice is to provide bathing and dressing facilities in connection with gymnasiums in all secondary schools and in many of the elementary schools. In several infants' schools (for children 3 to 7 years old) I saw rows of small bathtubs installed at convenient heights for attendants to bathe the youngsters.

In some of the elementary schools, however, the physical education program does not call for a bath and change of clothing. One such school provides an alcove, or "dirty" area, between the entryway and the playroom. A bench separates the alcove from the playroom, or "clean" area. The children come into the dirty area, sit on the bench and remove their shoes, pivot themselves on the bench, and step out into the clean area barefooted. After the play period they reverse the process.

Many of the schools on the Continent use the same shower rooms for boys and girls. The shower room is located between the boys' gym and the girls' gym, both of which are in use at the same time. The boys are dismissed first and have 5 minutes to shower and dress; then the girls take their turn. Although this scheme certainly puts expensive installations to good use, it must be carefully administered. Each user has maximum privacy, however, for the installations provide individual dressing compartments and shower stalls. In England the shower practice is similar to that in the United States.

Corridors

Single-loaded corridors are common. Seldom did I see a new building with rooms on both sides of the corridor. Also, there is a trend away from long corridors in the elementary schools, at least in parts of England and Germany. Classrooms are grouped in clusters around a common entryway or small lobby. Hamburg is now erecting ten 3-story elementary buildings in the form of a cross. Each of the four wings on each floor constitutes a classroom, and the center is used for traffic and stairway. Since this plan provides exits in only one direction from second- and third-floor rooms, the practice would be prohibited in many parts of the United States by fire regulations

Foyers

Although Europeans tend to minimize long corridors, they devote considerable area to entrance lobbies or foyers, which often serve also as assembly and exhibit spaces. I ob-

Continued on Page 14

CONGRESSIONAL ACTIVITY FOR EDUCATION

By CHARLES W. RADCLIFFE, *Laws and Legislation Branch*

BY the time the 85th Congress adjourned its first session, on August 30, 1957, as many as 13,627 bills had been placed before it; 896 were of general interest to education. Of the 316 public laws enacted, 33 affect education. In addition, congressional committees held hearings on such matters as Federal assistance for school construction, education beyond the high school, college-housing loans, and assistance for the training of persons for work with mentally retarded children.

School construction

In his state-of-the-Union message, January 10, 1957, and in a special message on education 8 days later, President Eisenhower renewed his request for legislation for school construction assistance. Bills embodying his proposals were introduced in both the House (H. R. 3976 and H. R. 3986) and the Senate (S. 889).

The House Committee on Education and Labor conducted hearings on various bills that would authorize Federal aid for school construction; and on May 28, 1957, it favorably reported House bill 1 (an analysis of H. R. 1 was made in *School Life*, June 1957). After 3 days of debate, the bill was defeated on July 25.

The Senate took no action on school construction bills.

Beyond the high school

The Congress showed much interest in post-high-school education during 1957.

Of the bills introduced and still pending for post-high-school education, most would authorize some form of Federal financial assistance to students. The proposals are varied. Some would assist students in special fields; some are general. Some would assist through scholarships; others would do it through loans. A number of bills would postpone the expiration of veterans' educational benefits; on these a subcommittee of the Senate Committee on Labor and Public Welfare held hearings. Other measures would provide for income tax credits or tax offset for tuition or other college costs.

Late in the session the Subcommittee on Special Education, of the House Committee on Education and Labor, began hearings on the general question of financial assistance to students, without reference to specific bills.

After consideration by the Senate and House Committees on Banking and Currency, the college-housing provisions of the Housing Act were amended (see P. L. 85–104, as shown below.)

Mentally retarded children

Senate bill 395 would authorize the Commissioner of Education to make grants to public or other nonprofit institutions of higher learning and to State educational agencies to assist them in training professional personnel to conduct research in or conduct training of teachers for the education of mentally retarded children. The bill was favorably reported by the Senate Committee on Labor and Public Welfare; and the Senate passed it on August 20, 1957. It is now before the House Committee on Education and Labor.

Public laws enacted

Of the 33 public laws affecting education, 5 are of widespread general interest:

Public Law 85–104 (Housing Act of 1957) amends the college-housing provisions by increasing the loan authorization from $750 million to $925 million and extending eligibility to nonprofit hospitals that operate schools of nursing or are approved for internship, and to State agencies established to finance housing and related facilities for public educational institutions.

Public Law 85–308 amends the Act to provide books for blind adults: Removes a $1,125,000 limit on the annual appropriations to the Library of Congress for materials for the blind and removes the $200,000 limit on annual Library expenditures for books in raised characters.

Public Law 58–267 extends the program of financial assistance in the construction of schools in areas affected by Federal activities (P. L. 815, 81st Cong., as amended). The act was amended to avoid counting the same children twice in determining eligibility and establishing the amount of payments.

Public Law 85–161 extends the provisions of Public Law 815, 81st Congress as amended, to Wake Island.

Public Law 85–67 (Appropriations Act for the Department of Health, Education, and Welfare) includes these amounts for the programs of the Office of Education:

- $33,750,081 for vocational education at less than college level. Includes $4 million for practical nurse training, and $228,000 for education in the fishery trades and industry. Does not include the continuing appropriation of $7,138,331 for vocational education under the Smith-Hughes Act.
- $2,501,500 for further endowment of land-grant colleges of agriculture (Bankhead-Jones Act). Does not include a continuing appropriation of $2,550,000.
- $5 million for library services to rural areas.
- $127 million for payment to school districts for maintenance and operation of schools in federally affected areas (Public Law 874, 81st Cong., as amended).
- $41.7 million for assistance in constructing schools in federally af-

Continued on page 13

AMERICAN EDUCATION WEEK, 1957

* * *

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS education has advanced the national welfare by enriching our culture, by providing a surer foundation for our freedoms, and by helping to prepare our citizens for the demands of each new age; and

WHEREAS our educational institutions have lifted the people of each generation to higher levels of personal living and have trained them for greater service to their fellow men; and

WHEREAS Americans are proud of their educational system and have shown their determination to widen the road of opportunity by maintaining the highest standards of scholarship:

NOW, THEREFORE, I, DWIGHT D. EISENHOWER, President of the United States of America, do hereby designate the period from November 10 to November 16, 1957, as American Education Week, and I urge our people to enter fully into its observance. Let them demonstrate their appreciation of the work of our Nation's teachers, and let them show their active support for every program designed to improve our schools and colleges, which are firmly engaged in building a better and stronger Nation.

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 sixth day of September in the year of our Lord nineteen hundred and fifty-seven, and of the Independence of the United States of America the one hundred and eighty-second.

Dwight D. Eisenhower

THE PRESIDENT PROCLAIMS AMERICAN EDUCATION WEEK

City Expenditures Per Pupil

POPULATION and geographic location mean a difference in the number of dollars cities of the United States spend annually on current expenditures for each public elementary and secondary school pupil. Reports to the Office of Education from nearly 500 cities on what they spent in the 1955–56 school year show that the largest cities, led by those in the Northeastern States, were the heaviest spenders. Medium-sized cities of the South spent the least.

The chart below shows what cities in 1955–56 averaged for current expenditures. Highlights are these:

- Region by region, the largest cities spent the most. Nationwide average for these cities is $322.
- Northeastern cities spent more than cities in other regions: the largest spent, $360; the next largest, $348.
- The largest Western cities spent more than their North Central counterparts; spending in other cities of these regions was nearly parallel.
- Southern cities, no matter what their size, spent less than all other cities in the United States. Largest Southern cities spent $247.
- In all regions except the Northeast, the smallest cities spent more than medium-sized cities.

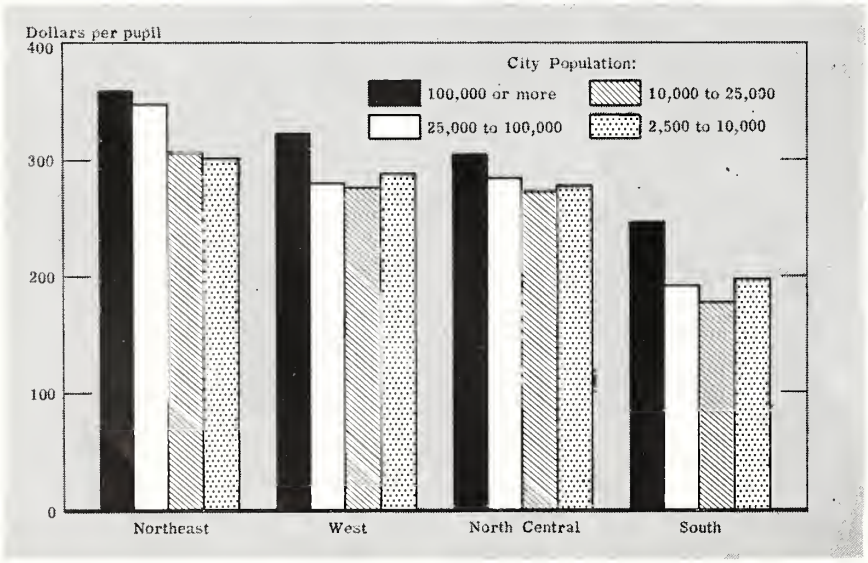
Neither geography nor size seems to change appreciably the percent of the dollar going to each of the six major current expenditure accounts.

On the average, cities divided the dollar about this way: 75 cents for *instruction;* 10 cents for *operation of physical plant;* 5 cents for *maintenance of physical plant;* 4 cents for *administration;* 3 cents each for *other school services* and *fixed charges.*

For the Nation as a whole, the two largest groups of cities spent less in 1955–56 than in 1954–55, partly because the dollar lost purchasing power and enrollments were larger than expected. On the other hand, both medium-sized and small cities reported increases for 1955–56.

Chart and text are based on *Current Expenditures per Pupil in Public School Systems, 1955–56: Large Cities* (Cir. No. 500) and *Small and Medium-Sized Cities* (Cir. No. 501), both by Lester B. Herlihy, specialist in education statistics.

In every region of the United States in 1955–56, biggest cities had the biggest current expenditures per pupil.



AVAILABLE AGAIN . . .

THE Office of Education has a new supply of the publications listed below. While it lasts, single free copies are available from the Publications Inquiry Unit, Office of Education. Washington, D. C.

The Advisory Council for a Department of Vocational Agriculture. **1951. 28 p. (Voc. Div. Bul. 243.)**

Core Curriculum Development Problems and Practices, **by Grace S. Wright. 1952. 194 p. (Bul. 1952, No. 5.)**

Educating Children in Grades Seven and Eight, **by Gertrude M. Lewis. 1954. 99 p. (Bul. 1954, No. 10.)**

Educational Changes in Reorganized School Districts, **by C. O. Fitzwater. 1953. 53 p. (Bul. 1953, No. 4.)**

With Focus on Family Living, **by Muriel W. Brown. 1952. 248 p. (Voc. Div. Bul. 249.)**

The Forward Look—The Severely Retarded Child Goes to School, **by Arthur S. Hill. 1952. 54 p. (Bul. 1952, No. 11.)**

Home Economics in Colleges and Universities of the United States, **by Beulah I. Coon. 1951. 58 p. (Voc. Div. Bul. 244.)**

Learning to Supervise Schools, **by Jane Franseth. 1951. 50 p. (Cir. No. 279.)**

The Operation of a Local Program of Trade and Industrial Education, **by William P. Loomis. 1954. 166 p. (Voc. Div. Bul. 250.)**

The School Lunch—Its Educational Contribution. **1954. 27 p. (Nutritional Education Series, Pam. No. 6.)**

Some Problems in the Education of Handicapped Children, **by Romaine P. Mackie. 1952. 12 p. (Pam. No. 112.)**

Why Do Boys and Girls Drop Out of School and What Can We Do About It? **1950. 72 p. (Cir. No. 269.)**

To Cherish and Care For . . .

By Effie G. Bathurst and Wilhelmina Hill

OBSERVE, if you will, a whole generation of Americans growing up to cherish and care for the *body* of their country—for its soil and forests, its waters and wildlife.

Against the charred slopes of Tillamook Burn, in Oregon, the schoolchildren of Portland are spending thousands of hours a year helping to make a forest grow again. Each high school of the city is responsible for a particular 40 acres. Supervised by State foresters, the students gradually grow expert in tree planting and pass their skill on to seventh and eighth graders, who serve as apprentices in the plots of the high schools they expect to attend. Someday, when the forest is tall and dark again, the men and women of Portland will use and enjoy it with special pride and respect, remembering that with their own hands they helped to make it so.

In their very own 5-acre forest, the pupils of the Traverse Heights Elementary School at Traverse City, Mich., have found spots that the birds like to visit. Quietly, one by one, or in little groups, the children go there to listen and to watch, and so learn to identify many of the local birds both by appearance and by song. They have become knowing in such matters as the habitat and favorite seeds of the ruffed grouse, or partridge, and many have lovingly gone to work to supply his wants in other places, too—in corners of fields, along fences and hedgerows.

The school forest at Traverse Heights is not unique in Michigan. There are at least 600 others, all established as the result of an act passed by the State legislature in 1931. Some schools already have sold timber from their acreage, but most of the tracts are being developed slowly. No matter what their condition, all of them give the teachers and children a chance to plan, to plant, and to watch things grow.

Dr. Bathurst is educational specialist and Dr. Hill is specialist for social science, both in the Elementary Schools Section of the Office of Education.

The activities that Dr. Bathurst and Dr. Hill tell about here are described in greater detail, together with nearly 200 others, in their forthcoming bulletin, Conservation Experiences for Children, *expected off the press next month.*

To gather their material, the authors have gone directly to more than 150 schools in 28 States representative of every section of the country. The schools were selected in consultation with State departments of education, which consider them among those outstanding in their States for the conservation experiences they provide children.

The authors point out that their bulletin cites city schools as well as rural schools for their work in conservation education. Cities, they say, seem to be rising above the obstacles of urban environment and are showing commendable ingenuity in bringing nature to children and children to nature.

When they really need help in their perennial campaign to keep their grounds beautiful, the children of Landover Hills School in Maryland call on the experts.

They have called on a State forester for assistance in clearing a woods, laying out nature trails, and building a pool. They have turned to him again on what to do about an eroded hillside: and, to build the diversion ditch he suggested, they have sought the services of their county agent and many other adults besides their teachers.

But all the work they can do themselves, that they have done. They have planted hundreds of seedling trees, and heeled in some extra ones to take the place of those that die. They have planted lespedeza as cover for the seedlings: to hold the soil while the lespedeza rooted, they thatched it with straw and twine. They have planned their gardens not only to bloom in spring, summer, and fall, but to give delight even in winter.

The beauty the children have kept in the woods, the beauty they have made—all of it speaks of their persistence and enthusiasm. Even their failures they have turned into successes: when their little dogwood trees died, they planted mimosa and triumphed.

America may have had only one Johnny Appleseed, but it has thousands of Johnny Grass-Seeds, who rarely step forth without a packet of grass-seed in their pockets and the intention of scattering it on any deserving spot they see.

The Johnny Grass-Seed movement began in Mesa County, Colo., as a means of reseeding overgrazed rangeland, and through the efforts of The Izaak Walton League it has developed also in many other parts of the United States. Several other organizations have joined to make the project a success, but the schools have always played a central role and from the very beginning many of the most ardent participants have been children.

For the children in school the project has become more than a

planting exercise. It has become the reason for finding out why grasses should be planted, why soils blow away, what role wildlife plays in the problem. It has given the children a real reason for having some part or interest in demonstration plots, seed farms, and the campaign to put seed packets into the hand of everyone who buys a hunting or fishing license.

Every sixth-grader in the Highline, Wash., schools gets to spend a week at Camp Waskowitz, high in the Cascade Mountains.

The week flies by on wings, for the children have never been busier. They build nature trails, tagging the trees and shrubs; they collect specimens of all kinds and label them for the camp museum. They visit a fish hatchery, have an "experiment" of their own to study eggs, fingerlings, and larger fish. In between times they take turns caring for the orphan fawns and bear cubs the camp has adopted, some so small that they must be tenderly fed from a bottle. The children watch demonstrations, too—of good forestry practices, of fire-fighting equipment. As the days pass they show signs of growing initiative and resourcefulness and are gradually weaned from their first heavy dependence on the teachers, parents, and technical experts who accompany them. Each child plants a tree, and the seedling tree he takes home at week's end becomes a lifetime reminder of the useful lore he has gained directly from nature.

Washington is not the only State in which schools are using camps to give children first hand experiences with nature's resources. Among others are Arkansas, California, Indiana, Kentucky, Pennsylvania, Michigan, North Carolina, Ohio, Tennessee, West Virginia, and Wisconsin. In some, the conservation camp is already a well-established institution; in others it is still in pilot-plant stage. From camp to camp the activities and programs vary widely, yet are alike in that they introduce children to local conservation problems.

In other States, children are just as active. In Kansas, a fourth grade puts wildlife programs on the air. In Wisconsin, all grades are helping to remodel and equip a camp in a school forest. In Nebraska, children of a one-room school, with cooperation from the entire community, resodded and beautified an eroded ground. In Tennessee, children gave the school board a diagram showing "paths where most of us walk," to help the board decide where to lay new walks that really protect the grass.

In ways like these—and there are hundreds more just as appealing—American children are learning about the resources in their communities. These are the ways that State Departments of education call "good ways" of teaching conservation.

What is it, precisely, that makes them good?

In the first place, they are real experiences.

Realness has its own vivid appeal. It's one thing to read in a textbook about "balance of nature" and quite another to help the gamewarden count the deer so that he can determine whether they are numerous enough to justify a hunting season. It's one thing to discuss erosion as a national problem, and quite another to tackle it as a threat to one's own dooryard.

The realness carries over to associated school activities. The child eagerly searches his textbooks and references for the answers to his real problems, or to questions arising out of real experiences; he makes other inquiry for the same reason. If he is soon to go off to camp, his studies in preparation have real purpose. He writes enthusiastically about his experiences because their realness grips his imagination. When he wants to win other people over to his particular conservation cause—the protection of quail, for instance, or the control of brush fires—he makes a poster or writes a letter; and his motivation towers above the artificial stimulation of a poster or composition contest.

They develop concepts that can find room anywhere in the educational program.

This virtue ties in closely with realness, for it is the realness of these activities that make them valuable in almost every teaching situation. They can make use of any or all of the school subjects.

No child is too young; no child is too old; and conservation experiences like these can extend from kindergarten all the way through the elementary grades.

They provide knowledge that children can put into immediate use outside of school.

When children *live* conservation, it becomes a way of life, to be followed both in school and out. They plant their flowers and gardens at home, pause in their play to listen to a bird or watch it swoop by, put out their picnic fires with special care, do even their fishing in conservationwise ways. If they are old enough, they have good reason for joining their parents or neighbors to set out windbreaks, plow the hills along the contours, plant the cultivated crops in strips; even before they are old enough to do the work, they understand the why of it.

They invite cooperation from the whole community.

Not many of the activities described here can be carried out by the school alone. They need the help of parents and friends. They draw on the technical experts provided by State and Federal governments, and on the resources of many organizations—the National Audubon Society, The Izaak Walton League, 4–H Clubs, the Garden Club of America, Keep America Beautiful and its many State auxiliaries, and dozens of others. By attracting everyone's support, these activities not only become more zestful

and satisfying for the participating child but advance the cause of conservation itself throughout the Nation.

They grow out of planning by both teachers and pupils.

There's no room for a hit-or-miss approach to any of these activities. Their value, educators agree, is closely related to the teacher-pupil planning that goes into them.

When teachers and children plan together they share experiences and knowledge and cut down on trial-and-error and wasted effort: they fit each child's wishes and projects into a big plan so that all the children can gain perspective and the end result will be the best for the whole school. They also resolve differences of opinion well in advance and establish the advantages of working together.

They bring out interrelationships.

Every natural resource is bound to other resources: and experiences that reveal these interrelationships are well worth having. The beaver's dam restrains the stream: a tree's roots hold the soil and its leaves give off water; the birds carry seeds and prey on harmful insects—on and on goes the story, and in the center of it all stands man. It's a wise child that feels himself a part of the great cooperating processes of nature: and it's a wise teacher who can show him that he is.

85TH CONGRESS

Continued from page 7

fected areas (Public Law 815, 81st Cong., as amended).

- $50,000 for the President's Committee on Education Beyond the High School ($650,000 requested to assist and encourage State committees was not appropriated).
- $7 million for salaries and expenses of the Office of Education—an increase of $1,730,000 over last year. Includes funds for cooperative research in education under the provisions of Public Law 531, 83d Congress.

The total amount appropriated for all programs of the Office of Education for the current fiscal year, 1957–58, was about $46 million less than last year, owing to the decreased requirements for school construction in federally affected areas.

THE STOLEN YEARS

Continued from page 2

The closer we look, the longer the list of deprivations grows.

Even reading, writing, and arithmetic, which the schools work hardest to preserve in the curtailed curriculum, are hurt by the change. Already we have impressive evidence that children in half-day sessions do not make the same gains in these subjects as full-time pupils.

In fact, the half-time pupil may not ever really know the exhilaration of being expertly taught: for the double-shift school system, if it does not completely discourage the talented teacher, is certain to curb his art.

We rob them of serenity.

Whether they attend in the mornings or in the afternoons, half-day children know the frustrating fatigue that follows on a tight schedule. They feel hurried: they are rarely relaxed: they never have quite enough time to finish a job. They have no time to dream, to linger with a thought.

They share their desks and materials with the children in the shift that precedes or follows them. Not only do they miss the many small satisfactions of ownership and privacy, but they are often upset by the inevitable conflicts over property.

The tensions pursue them even into their homes, where their unusual hours disrupt the family routines and build up stresses and strains in their family circles.

We rob them of guidance.

Both at home and at school, half-day children miss the reassurance that comes from a firmly guiding hand.

They miss it at home if their mothers work, as many do in this country, where every third married woman holds a job outside her household. Even on a full school schedule, the children of working mothers spend some unsupervised time at home; on a half-day schedule they spend even more. For too long each day they have no one to see that they use their time wisely and well. They get into mischief, develop bad habits, and all too often lose their feeling of security.

At school they miss the advantages of supervised study, of supervised play. In the mass-instructed classroom they are neglected and submerged. The teachers, preoccupied with the complications of their double loads, cannot get to know their pupils individually. Thus the child who is not adjusting well to school, who has trouble making friends, is likely to be overlooked at the very time when sympathetic attention and wise supervision could still save him from unhappiness and failure.

We rob them of *learning, serenity, and guidance.* We accuse ourselves: and we stand aghast at the magnitude of our theft. Without *learning*, this coming generation will be poorly equipped to work, to think, to serve their fellows. Without *serenity*, they will know no joy. Without *guidance*, they will find no wisdom.

Lawrence G. Derthick

U. S. COMMISSIONER OF EDUCATION

EUROPEAN SCHOOLS

Continued from page 6

served one new school in London where the foyer could be used to supplement the assembly hall by folding back the entire intervening wall. In general, Europeans provide more spacious and attractive entrances and lobbies than we do.

Teachers' rooms

In almost all of the new European school buildings, generous provision has been made for teachers' workrooms and for teachers' lounges with comfortable furniture and cloak storage and toilet facilities. Often the teachers' lounges include coffee-making and snack-bar facilities.

Teachers' living quarters

After the war, teachers in Hamburg could not find suitable living quarters at prices they could afford. The city solved the problem by erecting four large beautifully landscaped garden-apartment buildings especially for teachers. Urban centers do not usually supply such accommodations, but I believe that many European villages provide living quarters for their headmasters as part of their school plants.

Caretakers' living quarters

It is usual throughout Europe to provide a comfortable house or apartment on the school grounds for the caretaker or chief custodian. Many of these quarters constitute a kind of gatehouse to the grounds. This practice is commendable: it protects school property, discourages vandalism, and encourages high standards of housekeeping.

Some technical practices

I found certain features to be more common in European schools than in ours: Radiant floor panel heating; hot-water heating through hollow metal baseboards; prefabricated components, including precast concrete elements; prestressed concrete; and provision for footscraper grills and mats in entryways.

School building costs

To compare unit costs of school buildings within the same country is difficult enough. It is even more difficult when francs and marks per square meter must be translated into dollars per square foot. But judging from the new buildings I saw in Europe and the data given me there, I conclude that for comparable facilities their costs per square foot are about the same as ours. Their costs per pupil probably run somewhat lower than ours because they generally provide a little less gross building area per pupil. The States or central ministries of education pay about 60 percent of the cost of building a school: the rest comes from local sources.

Standardization

Centralization of school administration at the Federal level in European countries has probably tended toward prototypes, stock plans, and re-use of plans to an extent that we would consider excessive, though in this respect we should compare a European country with one of our States rather than with our Nation as a whole. I was interested to learn that the use of prefabricated component parts, now extensively practiced in England, need not lead to overstandardization: I observed quite different functional layouts achieved with standardized prefabricated elements. If such elements are too large, however, there is a danger that they will handicap good space planning.

Modernization and renovation

In London I asked to see an old school building considered as borderline—too obsolete for continued service, too good to scrap. Officials said they had 100 such schools, known as the London 3-deckers. To establish a policy, they are experimenting with one of these—an elementary school with a 1,000-pupil capacity. It is well located for the area served, is structurally sound, but lacks modern teaching facilities, sanitation, and emergency exits. As far as feasible, these shortcomings are being corrected by remodeling, and the entire building is getting modern lighting, acoustical ceilings, new floors, attractive color, and refinished furniture. The total cost is estimated to be about 70 percent of the cost of a new plant. In the long run, authorities believe, it would be better to scrap the school and build a new one; but the small site is surrounded by apartment buildings, and no alternate site is available. What to do with the children while the old building is being demolished and a new one erected is the problem—a problem that many American cities also face.

Vacation use of school plants

I would have preferred to visit schools while they were in regular session, but my trip coincided with the summer "holiday." As for plants in use during vacation, I saw only two—one in Belgium, one in France. The one in France is about 15 miles from downtown Paris. Each morning children from congested low-income sections of the city, where parks and playgrounds are not available, are carried by bus to the suburban school, where they enjoy supervised recreation and a free lunch. In the late afternoon they are brought back home.

Experiment in Coventry

In general, European countries provide three types of secondary schools for children in the 11–17 age bracket: (1) a grammar or classical school, (2) a technical school not too different from our technical high school, and (3) a "modern" or vocational school.

The English tradition has been to build separate boys' and girls' secondary schools in each of these categories. But in Coventry, where most school buildings were destroyed during the war, they have taken a fresh start and are experimenting with the comprehensive secondary school, incorporating all three of the above types. The authorities realize that such schools may become excessively large. To take some of the curse off the largeness, Coventry has been de-

veloping an interesting pattern known as the "house plan." A typical 1,500-student school has a 3-story academic building, a 1-story skylighted shop building, an administration building, a hall, and 5 student houses. Each of the 5 houses is really a double house accommodating 150 girls on one side and 150 boys on the other. Each side has a dining room, a study room, toilet facilities, cloak-hanging space, and counselor's office. The 2 dining rooms are served from a common kitchen, and a connecting social area is used by both girls and boys. To each of these houses is assigned a house master and a house mistress, both of whom are also part-time teachers.

This house plan accomplishes what we are attempting to achieve in this country by the "little school within a school." However, the Coventry student houses do not provide instructional areas except a homecraft or foods laboratory for the girls. In order to preserve the British tradition of "old-boy" relationship to the younger children, each group of 150 includes children of all ages.

The Bouwcentrum

Probably the most remarkable thing I saw in Europe was reconstructed Rotterdam, whose very heart had been destroyed by the war. Not only have the people rebuilt their buildings, but they have rebuilt their city, including streets, parks, playgrounds, stores, industrial plants, churches, dwelling units, and schools. A major factor in this remarkable program has been the Bouwcentrum, or building research center, a nonprofit private corporation that does research and provides consultive services for private industry and the Federal and municipal governments of Holland. Its physical plant includes two large buildings devoted to exhibits of building materials and equipment and to floor plan layouts and designs for various types of structures. One of the Bouwcentrum's seven divisions is concerned entirely with school grounds, buildings, and equipment. To our view, this central service has probably tended to overstandardize facilities, but it is doubtful if such remarkable results could have been achieved in any other way.

International cooperation

My visits to new school buildings in Europe, my discussions of planning techniques with administrators and architects, and the recommendations of the 1957 Geneva Conference on Public Education—all lead me to this conclusion: The United States should take a leading part in establishing an International School Building Council. Under an appropriate international organization, such a Council could serve as a clearinghouse for ideas, research, and literature; could arrange for international seminars; and could sponsor the interchange of visiting teams of school administrators and architects concerned with planning and designing school facilities.

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for Developing International Understanding

CLASSROOM teachers—hundreds each year—ask the Office of Education for help in teaching about other nations. To meet their needs, the Office prepares and issues the series of selected references *Teaching Aids for Developing International Understanding.*

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Both series are the work of three staff members of the Educational Materials Laboratory, Division of International Education: Delia Goetz, Laboratory chief, Stella Louise Ferreira, and Edith Harper.

For free copies write to the Laboratory; in requesting *Teaching Aids*, please name your school.

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CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: LARGE CITIES, 1955–56, by *Lester B. Herlihy*. 1957. 25 pp. 15 cents. (Cir. No. 500.)

CURRENT EXPENDITURES PER PUPIL IN PUBLIC SCHOOL SYSTEMS: SMALL AND MEDIUM-SIZED CITIES, 1955–56, by *Lester B. Herlihy*. 1957. 27 pp. 25 cents. (Cir. No. 501.)

EARNED DEGREES CONFERRED BY HIGHER EDUCATIONAL INSTITUTIONS, 1955–56, by *Mabel C. Rice* and *Hazel Poole*. 1957. 182 pp. $1.25. (Cir. No. 499.)

FACULTY IN INSTITUTIONS OF HIGHER EDUCATION, NOVEMBER 1955, by *M. Clemens Johnson* and *Leah W. Ramsey*. 1957. 40 pp. 30 cents. (Cir. No. 504.)

FINANCIAL AID FOR COLLEGE STUDENTS: GRADUATE, by *Richard C. Mattingly*. 1957. 151 pp. 50 cents. (Bul. 1957, No. 17.)

HANDBOOK, OFFICE OF EDUCATION. 1957. 28 pp. 15 cents.

LET'S RECOGNIZE ADULT EDUCATION DURING AMERICAN EDUCATION WEEK—HERE'S HOW! 1957. Folder. 5 cents each, $3.00 per 100 copies.

RETENTION IN HIGH SCHOOLS IN LARGE CITIES, by *David Segel* and *Oscar J. Schwarm*. 1957. 29 pp. 20 cents. (Bul. 1957, No. 15.)

TEN QUESTIONS ON PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS, by *Elsa Schneider*. 1957. 29 pp. 15 cents.

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STATISTICS OF COUNTY AND REGIONAL LIBRARIES SERVING POPULATIONS OF 50,000 OR MORE: FISCAL YEAR 1956, by *Mary M. Willhoite*. July 1957. 4 pp. (Cir. No. 506.)

U. S. GOVERNMENT PRINTING OFFICE: 1957

SCHOOL LIFE

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

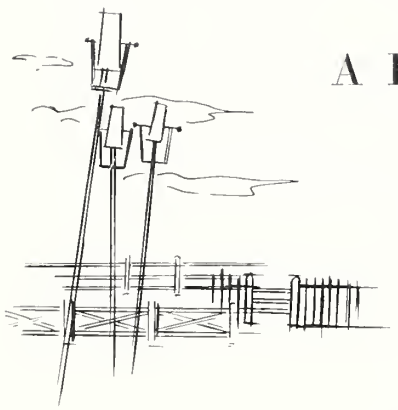
OFFICE OF EDUCATION

The Commissioner Reports to the Nation

AMONG THE CONTENTS

December 1957

ACROSS A HIGHER FENCE



COMMUNICATION has never been a simple matter—even the old-fashioned visit over the back fence sometimes led to neighborhood misunderstandings. But communication in this day and age is very complex. The fence is getting higher!

Today, communication techniques are expensive and intricate; information is complicated; more people are seeking to communicate more items; and messages are dulled by an impersonal tone. To make matters worse, facts are sometimes distorted in an effort to win support for a particular viewpoint.

Yet, clear, honest communication is essential to all of our efforts to improve education. Some of our school problems may be attributed to the fact that, in the past, educators have spent too much time talking to each other and not enough time talking with the public.

If we are going to obtain adequate financial support for our schools, we must step up communication with the taxpaying citizen. Our story must be told clearly and continuously, if we are to compete with all of the other messages beamed to the eye and ear of the parent and the man on the street.

Fortunately, we are doing a better job of getting our message across to the public. The work of the National School Public Relations Association, the new radio-TV efforts of NEA, and the generous public service time contributed by both national and local broadcasting companies are doing a great deal to open up communications with vast numbers of people.

When the public knows the school story and when it is convinced of the vital contribution of education, it will respond with typical American generosity.

But in our efforts to communicate with the public, we must not neglect our efforts to communicate within the profession. The Office of Education, for example, needs to communicate better and faster with its counterpart in each State, if it is adequately to "promote the cause of education."

We in the profession would be well advised to put more effort, more personnel, and more money into communication. The public and the profession have a right to know what's going on!

Lawrence G. Derthick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . . . . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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Educational news

EVENTS AND DEVELOPMENTS

of national significance

Human Rights Day

ON the 10th day of this month the United States will join 57 other nations—all signers of the Universal Declaration of Human Rights—in observing Human Rights Day.

President Eisenhower has issued a proclamation to the people of the United States, calling attention to the ninth anniversary of the adoption of the declaration. He asks all Americans to join citizens of other nations of the world in recognizing this special day, saluting, as it does, the humanity and brotherhood of all men.

Emphasis in the celebration this year is on educational institutions and organizations and teachers. The U. S. National Commission for UNESCO, planner of the observance, hopes through educational agencies to lay the groundwork for next year's anniversary celebration. Many educational organizations and professional groups of educators have indicated their approval of the observance.

Among the materials prepared for distribution to individuals and organizations for Human Rights Day use is the Office of Education publication *How Children Learn About Human Rights.*

Adults in the classroom

IF your household was one of the 35,000 over the United States responding to the questions of the October Sample Population Survey of the Bureau of the Census, it took part in a "first" for the Bureau and for educational statistics. For this sample included two questions never before asked of the public by the census taker. The Fund for Adult Education financed their inclusion in the October Sample Population Survey:

- In what type of adult education activity did you take part in the past 12 months?
- By what institution was the activity conducted?

Two groups of adults answered these questions: Those 14 through 34 years of age not enrolled in regular classes and *all* adults over 35.

To find how many adults were in school and where they took courses, the Bureau's sample asked many specific questions. For instance, it inquired into the type of classes. Were they cultural? Recreational? Were they taken to further a career or to acquire a skill? The sample then asked about the organization sponsoring the courses. Was it the public school system or the public library? An employer or a trade union? A civic agency? Or a private business or technical school?

From a study of the replies the Office of Education believes it will obtain the first "head count" of adults pursuing education outside regular schools. It should learn, too, the types of classes adults take and where they take them.

The Office estimates that it can report next April on what it has found on adult education through the Bureau of the Census sample.

Should the results of the questions prove worthwhile, the Office would like the questions to become recurring and to be included in the 1960 general census.

Report to the Nation

CITIZENS of the United States will hear, via radio and television in mid-December, the first annual report to the Nation from Commissioner of Education Lawrence G. Derthick about the problems and progress of education in 1957.

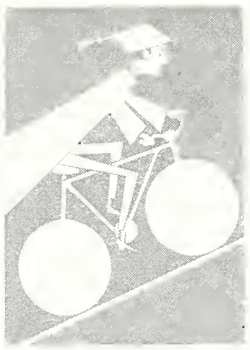
Commissioner Derthick will discuss, for instance, good and bad school plants; teacher and classroom shortages; the use of teacher aids; the dropout problem; and the effects of Federal aid for school construction in communities where United States Government activities have increased the population.

To produce the program, staff members of the Westinghouse Broadcasting Co., sponsor of the 45-minute presentation, and specialists in the Office of Education are working with Rod MacLeish, WBC, and Carroll Hanson, OE. They are also preparing a 30-minute version of the program, for the use of other commercial stations, educational TV stations, and interested groups.

Radio stations of the Westinghouse network are WBX and WBZA, Boston; KDKA, Pittsburgh; KYW, Cleveland; WOWO, Fort Wayne; WIND, Chicago; and KEX, Portland (Oreg.). Its television stations are WBZ–TV, Boston; KDKA–TV, Pittsburgh; KYW–TV, Cleveland; KPIX, San Francisco; and WJZ–TV, Baltimore.

A Year at College

What Does It Cost?



LAST MONTH the Office of Education published *Costs of Attending College: A Study of Student Expenditures and Sources of Income*, by Ernest V. Hollis. The half of the report that deals with expenditures is briefly summarized here.

The publication itself (Bul. 1957, No. 9, 91 pages) is available from the Government Printing Office, Washington 25, D. C., for 45 cents a copy.

TO the prospective student's question, "How much will it cost me to go to college?" a conscientious man, even though he had all the data at his disposal, probably would preface his reply with, "It all depends."

And he would be right. It *does* depend.

It depends, for one thing, on the school the student chooses. If it's a public college, especially if it's in his own State, it will probably cost him less than if it's private. If it's located in New England, it may well cost more than schools in other sections of the country, partly for the simple reason that private schools predominate in northeastern United States.

It depends on the income of the student's family. If it's low, he's likely to go to a low-cost college in the first place, and, once there, to keep the careful spending habits he grew up with.

It depends, too, on where the student lives during the school year. Living at home will probably give him some cost advantage over the other students; living in a club or in a fraternity house is just as likely to give him none. Living in a dormitory or in a private home other than his own usually places him somewhere between the two extremes.

It depends even on the student's sex. Generally speaking, men spend more than women in college—partly because they spend more for a little item called "entertainment" but chiefly because a larger percent of the women attend low-cost institutions. Only in families with incomes over $15,000 are the daughters more likely than the sons to go to expensive schools.

ALL these qualifying statements are only generalizations, it is true; and as such they have their exceptions. But they are based on thousands of student budgets and they reflect the findings in the first comprehensive study ever made in the United States of what undergraduates spend during a year in college and where they get the money.

This study was made in 1953, by Ernest V. Hollis, director of the College and University Administration Branch in the Office of Education, and his associates. They asked 15,316 single, full-time undergraduate students at 110 colleges in 41 States and the District of Columbia to itemize their expenditures and income during the school year 1952–53. They asked not only for current expenses but for the amount of money spent on capital goods—items that would have more than 1 year's use, such as typewriters, slide rules, and scientific and musical instruments, as well as radios, record players, television sets, musical instruments, automobiles, and expensive jewelry.

When they had the replies to their questionnaire, Dr. Hollis and his staff grouped current expenditures under two heads: (1) Educational costs, for tuition, fees, books, and instructional supplies and equipment; and (2) living costs, for room, board, clothes, travel, and so forth. With this breakdown they make it possible for any user of the data to project the 1952–53 costs into 1957–58 by just adding enough to match the price increases of the intervening years—15 percent for educational costs, 5 percent for the ordinary costs of living.

The 110 colleges covered by the survey represent both privately controlled and publicly controlled institutions, and each of the two groups include universities, technological schools, liberal arts colleges, teachers colleges, and junior colleges. They therefore are fairly representative of the 1,886 colleges in the United States. But the men who made the study say that their student sample was somewhat weighted in favor of less expensive schools and suggest that the reader add $85 to the average total cost figure to bring it closer to the true national average.

WHAT the students said they spent during 1952-53 for current items varied widely. The smallest annual expenditure reported was $200; the largest was $5,500, though only a few went above $3,000. Half of the students spent less than $1,219; half spent more; and the middle half ranged somewhere between $815 and $1,708.

Above the seemingly endless variety, however, one fact stands out clearly: College costs are at the highest point in history. And out of all the variety there emerge some means, or averages, that may serve as guideposts, not only to prospective students and their parents but to college administrators, foundation officials, private donors, and others concerned

with the college student's financial dilemma:

▶ For the *Nation as a whole*, the average student spent $1,300 for current expenditures, less than one-sixth of it for educational costs. In addition, he spent $88 for capital goods (actually only 55 percent of the students reported spending anything for capital goods; for those who did, the average was $163). If he lived at home, his current expenditures were about $1,000; if in some other private home or dormitory, about $350 more; if in a club or fraternity house, still another $300.

▶ *Each region* had its own average current expenditure per student. In the Northeast it was $1,676; in the South, $1,164. In between were the West's $1,209 and the North Central States' $1,262.

▶ In the *publicly controlled institution* the average current expenditure per student was $1,120. About 18 percent of it went for tuition and fees. If, besides, the student spent the average $163 for capital expenditures, his total budget in 1952–53 was $1,283. Add to this figure the price increases that since have occurred—roughly, $200—and you will arrive at a fair estimate of what the student in a publicly controlled college is spending on the average this year: $1,483.

His cost figures depend somewhat on the *kind* of public college he attends. In 1952–53 they were highest at the technological institution ($1,283); lowest at the junior college ($868); and somewhere in between at the teachers college ($951), the liberal arts college ($1,022), and the university ($1,255).

▶ In the *privately controlled institution*, on the other hand, the average annual current expenditure per student in 1952–53 was $1,671. All along the line—for board, room, clothes, travel, and the rest—the private-college student spent just a little more than his counterpart at the public college; but it was what he spent for tuition and fees (one-third of his budget) that was most responsible for the $554 difference between public and private averages.

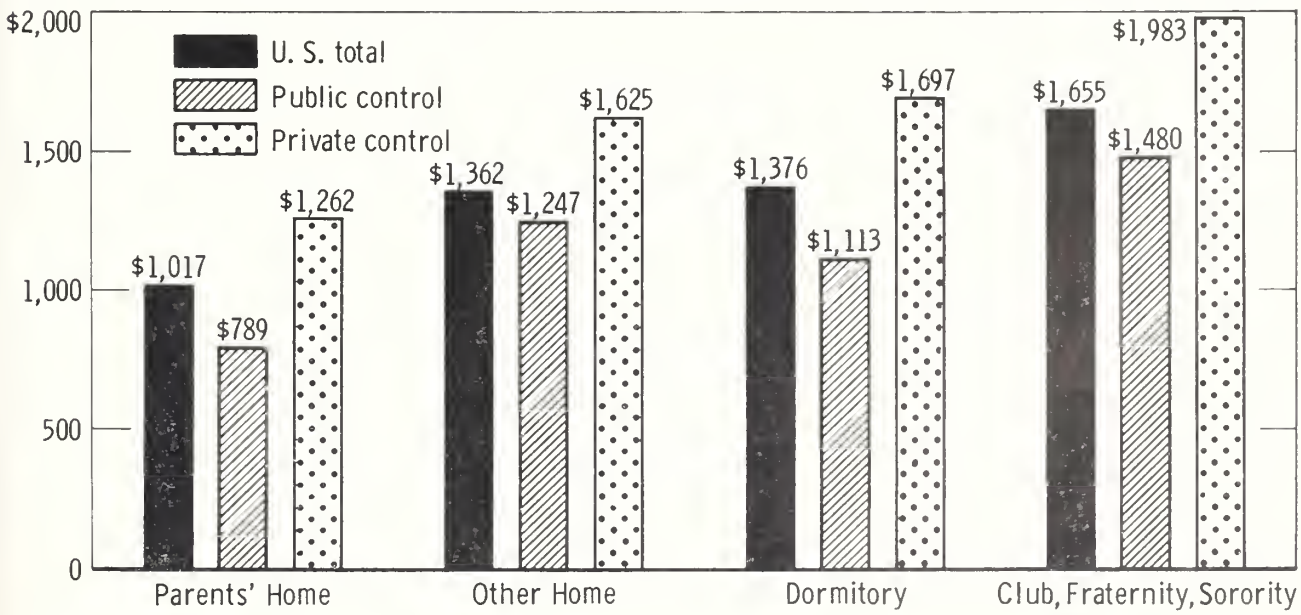
Now, 5 years later, the average annual expenditure per student in privately controlled institutions is estimated at $2,037, including both current and capital expenditures.

For the private-college student, too, the kind of college makes a difference in the cost. In 1952–53 his current expenditures were above the average for private schools if he attended a junior college ($1,762) or a university ($1,751) but below the average if he attended a technological institution ($1,532) or a liberal arts college ($1,432).

FROM these averages," say the researchers in the Office of Education, "individual student expenditures vary widely. What constitutes an acceptable budget is also complicated by the fact that there are economy expenditure colleges, average expenditure colleges, and high expenditure colleges. . . .

"These variations, essentially similar to the variations among the homes from which the students come, compose the pattern most acceptable in a free society. One precaution is necessary, however, if we are to maintain and spread the doctrine of equality of opportunity. Since economy budgeters are in the majority and increasing, they must be made to feel at home on enough campuses to provide them with a high quality education. Society must be constantly aware that only as these capable young people are enabled to develop their talents can the United States maintain its place of leadership among the free nations of the world."

In both publicly and privately owned colleges, current expenditures per student vary with the type of residence



Concentrated attention on science and mathematics throughout the elementary-secondary grades is one feature of

EDUCATION IN THE USSR

WHEN the Office of Education in November published the report of its 2-year study on *Education in the USSR*, the Soviet Union had just sent the first two manmade satellites spinning around the earth; and Americans everywhere were turning to each other with an uneasy question: "Why *they*, and not *we?*"

Thus they came out together: the question, and a book that perhaps holds part of the answer. For the book tells the story of an educational system shaped, from beginning to end, to serve the ambitions of a State, particularly as those ambitions point toward world supremacy in science and technology.

The juxtaposition of events naturally draws the Soviet emphasis on science and technology into sharp focus, although the Office study presents it as only one feature—certainly as a significant feature—of a complex system. However, because current events have given it exceptional prominence, *School Life* here reviews a few of the details which describe how that emphasis is being achieved.

To specialists of the Office of Education who are familiar with the Soviet system, the single-minded concentration that the Soviet State is expending on the production of scientists and technicians shows itself not so much in counts of children studying the sciences and mathematics as in the way those subjects are being taught.

In the USSR, elementary-secondary education consists of a 10-year program for youth between the ages of 7 and 17 or 18 years; it is compulsory through grade 7 and available in cities and industrial centers through grade 10. By 1960 the Soviets hope to have the 10-year program available throughout the USSR. The State decides what the curriculum will be, and there are no electives. Systematic attention to science and mathematics begins in the first grade.

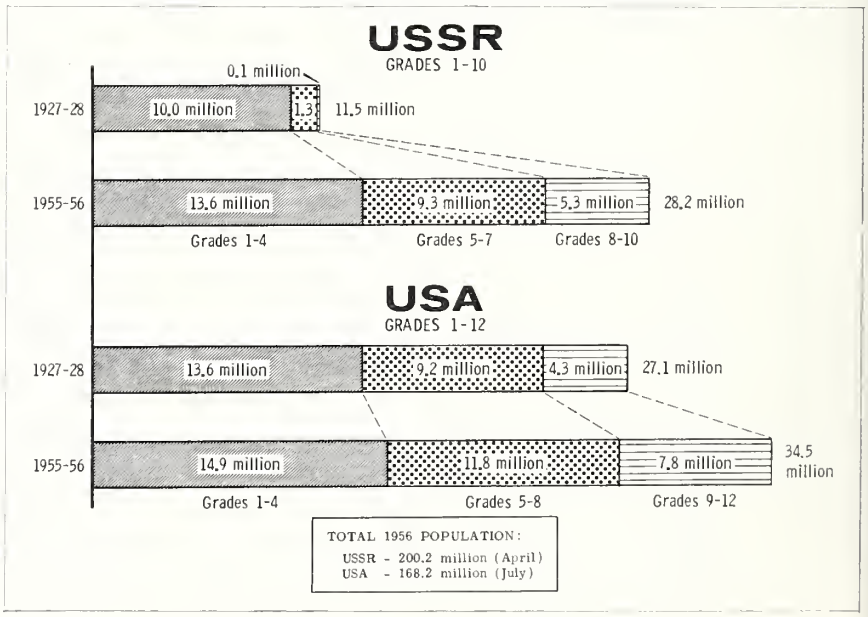
For the first 5 years, mathematics is only arithmetic; but it is arithmetic so intensively taught, 1 hour a day, 6 days a week, that by the end of those 5 years the pupil is expected to be able to manage fractions, decimals, percentages, and proportions, and to know what to do with a slide rule and an arithmometer. In grade 6 he is introduced to algebra and geometry, which he continues to study—at first along with arithmetic—for the remaining 5 years. Gradually he moves from simple concepts to complex; and he stays with each subject so long that his understanding of it becomes a permanent part of his mental equipment. At last, in grades 9 and 10, he takes both trigonometry and calculus—2 hours of each every week.

In natural science the pattern is the same. For the first 3 years instruction is informal; but thereafter natural science becomes a separate subject, with no less than 2 hours and as many as 8 devoted to it every week each year. A systematic presentation of inanimate nature comes first, in grade 4; botany takes over in grade 5, to show the anatomy and physiology of vegetation, and continues in grade 6, to give a survey of the basis of systemization. Even these first 3 years of science as a separate subject include laboratory experiments and observation by microscope, as well as homework in the summers to give practice in applying techniques and methods. In grade 7 the pupil moves on to zoology, hygiene, and sex instruction; in grade 9, to the principles of Darwinism; in 10, to general psychology.

Physics is studied over a period of 5 years, beginning with the rudiments of mechanics and hydrodynamics in grade 6 and ending with a detailed and systematic approach to aerodynamics in grade 10. Chemistry starts in grade 7, as a short outline of the main chemical conceptions, and ends in grade 10 as an introduction to organic chemistry. In grade 10 the whole science spiral is crowned with a year of astronomy.

The Soviet State seeks continuity of instruction not only through the curriculum but also through the use of teaching staff. It is the custom for the primary-school teacher to advance with her class, from grade 1 through grade 4. After that, teachers

Total enrollments, elementary-secondary grades, USSR and USA, 1927–28 and 1955–56 (U. S. figures include private and public schools)



Enrollment in U. S. public high schools in certain science and mathematics courses expressed as the percentage of pupils in grades where course is usually offered; fall 1956

COURSE	PERCENT OF PUPILS ENROLLED
General Science (9th)	67.3
Biology	74.0
Chemistry	34.4
Physics	24.5
General Mathematics (9th)	43.1
Elementary Algebra	67.0
Plane Geometry	41.6
Intermediate Algebra	32.2
Trigonometry	9.2
Solid Geometry	7.6

SOURCE: Offerings and Enrollments in Science and Mathematics in Public High Schools (OE Pamphlet No. 120)

of specialized subjects take over; they, too, as a rule, follow their classes from grade to grade. In many schools, for example, the same teacher teaches all physics classes, from grades 6 to 10.

All these courses in science and mathematics add up to a big share of the work required for graduation from the Soviet elementary-secondary schools. In 1955–56, *Education in the USSR* reports, they came close to taking up one-half of the time allotted to all subjects in the 10-year program:

Subject	*Percent of time allotted*
HUMANITIES	
Russian language and literature	28.3
History	6.7
Constitution of USSR	.3
Geography	4.9
Foreign language	6.7
TOTAL	46.9
SCIENCES AND RELATED TECHNICAL TRAINING	
Mathematics	20.1
Biology	4.0
Physics	5.6
Astronomy	.3
Chemistry	3.5
Psychology	.3
Drafting	1.3
Practicums	2.0
Visits to industrial and scientific sites	1.9
Technical practice	3.4
TOTAL	42.4
OTHER TRAINING	
Physical and military training	6.7
Drawing and singing	4.0
TOTAL	10.7
GRAND TOTAL	100.0

Whatever the virtues of the Soviet emphasis on science and mathematics, the fact remains that it has been accomplished at the expense of the humanities. And in the Soviet Union the term "humanities" is used to include subjects that lend themselves more to political indoctrination than to a freeing of the human spirit. It is to this very point—the sacrifice of the free mind, which seems inherent in the Soviet educational program—that Commissioner Derthick referred in a statement he made on November 11, when he released the report, *Education in the USSR:*

"I believe the American concept of education, and the resources available to American young people for the pursuit of learning, are unsurpassed. We in America know that freedom is indispensable to good education, that liberty of mind accomplishes more than regimentation.

"It would be tragic, therefore, if the evolution of education in the USSR should be considered as any cause to question our basic concepts of freedom in education. Rather, it should challenge every American to reexamine the extent to which we as a people support our democratic system of education. It should, in fact, challenge Americans to take new interest in meeting the needs of our schools, colleges, and universities as they serve the purposes of our society: Freedom, peace, and the fullest development of the individual."

Changes in enrollments in mathematics and science in U. S. public secondary schools (grades 9–12) and related data, 1948–49 and 1956–57

ITEM	TYPICAL GRADE	ENROLLMENTS 1948–49	ENROLLMENTS 1956–57	PERCENT OF INCREASE
SUBJECT				
General Science	9	1,074,000	1,518,000	41.3
Biology	10	996,000	1,430,000	43.6
Chemistry	11	412,000	520,000	26.2
Physics	12	291,000	310,000	6.5
Other Science	9–12	155,000	265,000	70.9
TOTAL	9–12	2,928,000	4,043,000	38.1
Elementary Algebra	9	1,042,000	1,518,000	45.7
Intermediate Algebra	11	372,000	484,000	30.1
General Mathematics	9	650,000	976,000	50.2
Plane Geometry	10	599,000	788,000	31.6
Solid Geometry	12	94,000	160,000	70.2
Trigonometry	13	109,000	200,000	83.5
Other Mathematics	9–12	91,000	275,000	202.2
TOTAL	9–12	2,957,000	4,401,000	48.8
POPULATION				
Age 14		2,126,000	2,556,000	20.2
Age 15		2,140,000	2,393,000	11.8
Age 16		2,231,000	2,292,000	2.7
Age 17		2,206,000	2,300,000	4.3
Age 14–17		8,703,000	9,541,000	9.6
ENROLLMENT				
Grade 9		1,641,000	2,254,000	37.4
Grade 10		1,491,000	1,933,000	29.6
Grade 11		1,242,000	1,513,000	21.8
Grade 12		1,026,000	1,263,000	23.1
Grade 9–12		5,399,000	6,963,000	29.0

SOURCE: Offerings and Enrollments in Science and Mathematics in Public High Schools (OE Pamphlet No. 120)

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THE COOPERATIVE EDUCA

approache

Ten New Projects are Recommended

OUT of the 47 research proposals that the Office of Education's Research Advisory Committee met to review on October 24–25, it selected 10 to recommend to the Commissioner as projects to receive support under the Federal Government's Cooperative Educational Research Program. Most of the research will probably start within the next 3 months.

At present the program's project count stands at 93. No. 93, the only project not already reported in *School Life*, was signed into contract on October 2, 1957, with the Wyoming State Board of Education. Its goal is to discover the extent to which children of the State are misplaced, either as normal or as mentally retarded, and to demonstrate that the State can have a systematic program for objectively identifying all mentally retarded children. Director of the project, which is planned for completion within a year, is Velma Linford, State Superintendent of Public Instruction.

Of the 10 proposals just now recommended by the Advisory Committee, one would deal with mentally retarded children. The others would explore such various subjects as language development in children, personality changes wrought by a college education, relation between teacher behavior and pupil achievement in elementary grades, fiscal relations of State departments of education, compatibility of personal goals and organizational requirements in a school system, identification and development of unusual talent in high school students, definitive criteria for junior college community-service programs, and the use of both prediction and classification methods in counseling students in their choice of college majors.

The 9-member committee that made the recommendations has a somewhat different roster for this second year of its existence. Three vacancies occurred at the end of the first year, owing to the fact that three members had been appointed for 1 year only; and appointees named for 3-year terms now take their places. One, Ralph W. Tyler, director of the Center for Advanced Study in Behavioral Sciences, Stanford, Calif., was reappointed. The others are Finis E. Engleman, executive secretary of the American Association of School Administrators and formerly Connecticut's commissioner of education; and Chester W. Harris, professor of education at the University of Wisconsin and editor of the 1960 *Encyclopedia of Educational Research*, formerly editor of the *Review of Educational Research*.

The Committee next meets in January 1958, when it will review all proposals received in the Office between September 1 and January 1. It is possible that some proposals recommended at that meeting will be negotiated into contract in time for research to begin during the second semester. Anyone planning to apply for Federal support of a project should write for instructions, addressing themselves to the Cooperative Research Program of the Office of Education, Washington 25, D. C.

During its first 16 months OE's Cooperative Research Program has accumulated these totals (from July 1, 1956, to Nov. 1, 1957)

Proposals reviewed by the Research Advisory Committee	363
Proposals recommended to the Commissioner by the Committee	118
Projects signed into contract:	
In education of the mentally retarded*	46
In other fields	47
Total	93
Federal funds obligated through 1957–58:	
For education of the mentally retarded*	$1,695,002
For other fields	$1,089,071
Total	**$2,784,073

*Projects on education of mentally retarded are singled out here because of special emphasis that has been placed on this field.

**Most of the contracts signed are for projects that will run more than 1 year—some, for as long as 5 and 6 years. Thus, in addition to the $2.8 million obligated through 1957–58, another $2.5 million in Federal funds will be required for projects continuing beyond this year—making a total of more than $3.5 million Federal dollars for the first 93 contracts. After 1957–58, of course, each year's payments are contingent on Congress' appropriating funds for that year.

In addition to the Federal funds, there are contributions from the participating institutions and agencies, usually in the form of services and facilities. In the first 93 contracts, it is estimated, these contributions defray about 37 percent of the total cost.

t year

NAL RESEARCH PROGRAM

s100th project, produces its first findings

The First Project Reports Its Findings

MENTALLY retarded children are markedly inferior to normal children in the way they use their hands and bodies to perform the basic skills believed to be important in the games and sports of childhood.

This is what two professors of education at the University of Wisconsin concluded after 6 months of testing the motor performance of mentally retarded children and comparing it with published standards for normal children. Their research was supported as one of the projects under the Federal Government's cooperative research program in education: and their report of work completed was the first to be accepted by the Office of Education under the program.

To 284 mentally retarded children in the public schools of Madison and Milwaukee, Wis., Robert J. Francis and G. Lawrence Rarick gave a battery of 11 motor performance tests designed to measure such attributes as muscular strength, speed of running, power of jumping and throwing, body balance, and body agility. In addition, to 25 institutionalized children with very low IQ's they gave 6 performance tests within the range of ability of normal preschool children. Among the results were these, none of which could be attributed to body size, since at each age level the retarded children had weight and height equal to the published norms for normal children:

- In general body ability, mentally retarded 11-year-olds failed to reach standards set for normal 8-year-olds.
- In running speed, mentally retarded 11-year-olds were at the level of normal 10-year-olds.
- In strength, mentally retarded children were 1 to 3 years behind normal children.
- In dynamic power of the muscles, slow learners were retarded as much as 4 years.
- Motor achievement of the institutionalized children, although they had an average age of 10 years, fell within the performance range of normal 3- and 4-year-olds.
- Not only in motor skills of reasonably high organization but also in activities that require primarily brute strength only, mentally retarded children were markedly subnormal; and at each advance in age level their deviations from the normal tended to become greater.

"These data," Drs. Francis and Rarick say, "provide rather definite evidence of the extent of motor retardation of the slow learner." In fact, the extent is perhaps greater than has been previously supposed. However, the factors underlying the retardation must await further investigation. The fact that at certain age levels the motor performance curves showed some unusual peaks indicates that the sample at those age levels contained some high-quality performers, and suggests that under conditions well suited to motor learning the slow learner can attain higher levels. While it is likely that the slow learning child has difficulty in profiting from his experience and does not possess the native talent required for continued growth in motor skills, it is also possible that adequate learning opportunities are not being provided. The fact that the study found a greater lag in skills of a complex nature than in those involving natural movement patterns suggests that at least minimum intelligence is of considerable importance in the execution of certain skills.

The findings clearly indicate that such qualities as strength, speed, power, balance, and agility show practically the same interrelationships in mentally retarded children as in normal children: and they strongly suggest that any instructional procedure designed to improve performance probably should be basically the same as that now used with normal children.

To the researchers the results of the study "clearly demonstrate that all too little information is available on the potential of the mentally retarded child for acquiring greater proficiency in motor skills." Certainly systematic study is needed, not only of conditions under which motor learning may be effectively accomplished, but also of what improved motor proficiency means in the lives of these children.

Some preliminary measurements

THE BEGINNING TEACHER

By WARD S. MASON

FOR every 10 people in the United States who entered teaching last year, only 8 planned to come back for a second year, and only 5 planned to make it a continuous lifetime career.

Such turnover among beginning teachers—nearly 20 percent after the first year and 50 percent by the end of 5 years—is one of the findings emerging from the preliminary analysis of a current Office of Education study. This is high turnover, even for the teaching profession, which is accustomed to counting its annual losses—including those from death and retirement—at something like 7½ percent. It is high for a Nation that sees its enrollments constantly on the rise, and last fall before school opened counted its shortage of qualified teachers for elementary and secondary schools at 135,000.

What is back of heavy losses among beginners? This is one of the questions that last spring prompted the Office to send a questionnaire to approximately 10 percent of the country's first-year teachers, reaching into every State of the Union and into schools of every size. It inquired into the teacher's qualifications, his economic status, his working conditions, his job satisfaction, and his commitment to a teaching career. The figures given here are based on the first 4,065 replies—only about half the number that will substantiate the final report, but fairly representative nonetheless.

The replies indicate a rate of loss even higher than the Office researchers expected. Of the 1,523 men in the preliminary sample, 18 percent aren't going back for a second year. In terms of long range career plans, only 28 percent plan to make classroom teaching their life's work, but another 49 percent plan to remain in education although they hope eventually to move out of the classroom into "some other area." For the 2,542 women, the corresponding percentages are 15, 14, and 8. Fifty-five percent of the women, however, despite plans to leave teaching for homemaking, say they want to return to it some day. For the group as a whole, only 42 percent plan to stay with education for good.

No assessment of the importance of salary as a factor in such losses is available from this preliminary data. However, the figures on average salaries are perhaps instructive. The median salary for all beginning teachers in 1956–57 was $3,600. Some parts of the country set higher records, as the map below shows, but most did not do as well.

Lack of preparation for the job also may help to explain why so many beginners are dissatisfied with teaching. Twenty percent have only emergency or substandard certificates; and 13 percent of the others spend part of their time teaching subjects or grades they are not qualified to teach. A bachelor's degree is usually considered a minimum requirement for teachers, but 14 percent of the beginners last year did not have one. In elementary schools, where the teacher shortage is greatest, the proportion of beginners without degrees is highest: 21 percent in the Nation as a whole; 71 percent in school districts enrolling fewer than 300 pupils; and 61 percent in the Plains States, where one-room schools are still numerous. In the secondary schools, 4 percent have no degree.

In the sample that yields the foregoing information, women predominate, about 6 to 4. Most of the men (65 percent) are married; most of the women (56 percent) are single. Median age of the men is 25.5 years; of the women, 22.8. Most of the men (68 percent) teach in secondary schools; most of the women (71 percent), in elementary.

A preliminary report of the study is now being prepared and will be published as Circular No. 510 shortly after the first of the year.

In 1956–57 the average salary for beginning teachers was highest in the West, lowest in the South (preliminary report)

Dr. Mason, Office of Education specialist in teacher personnel statistics, conducted the study he describes here, with the assistance of survey statisticians Robert J. Dressel and Robert R. Bain.

In its Study Commission

the Council of Chief State School Officers has

A Policy-Developing Agency

By FRED F. BEACH, *chief, State School Administration*

WHEN the Council of Chief State School Officers at their annual meeting in 1942 created a Study Commission, no one could foresee that it would become one of the most significant educational policy-developing agencies in the Nation. Although the original purpose of the Commission was to furnish information for the annual meeting of the chief State school officers, this purpose did not remain paramount for long. The Study Commission soon focused its attention on developing the underlying philosophy and basic principles and policies that should guide State school systems. The time had come for crystallizing the experiences of the 48 State educational systems into most desirable practices.

Taking advantage of its strategic position, the Study Commission began to perform this task. Because of its composition and its relationship with the Office of Education and State departments of education, the Commission has developed policies and principles and pointed out desirable practices to guide State school systems that would have been extremely difficult to obtain in any other way.

AT ITS NINTH annual workshop, held at Gatlinburg, Tenn., Nov. 17–22, the Study Commission of the Council of Chief State School Officers had the services of seven consultants from the Office of Education. Five served on the four project committees:

ON INSTRUCTION
John R. Ludington, *chief*
Secondary Schools
Helen K. Mackintosh, *chief*
Elementary Schools

ON CURRICULUM
Edith S. Greer, *specialist for curriculum coordination*

ON GUIDANCE
Frank R. Sievers, *chief*
Guidance and Student Personnel

ON SCHOOL FINANCE
Clayton D. Hutchins, chief
School Finance

The other two were E. Glenn Featherston, *acting assistant commissioner, Division of State and Local School Systems*, who was general working consultant; and Fred F. Beach, *chief, State School Administration*, who acted as secretary to the Study Commission.

Organization

The pattern of organization of the Study Commission especially fits it for policy development and for obtaining the solutions to crucial nationwide problems in State school administration. It is composed of 48 members—one from each State. Each member is designated by his chief State school officer to represent the State department of education and to serve as liaison between the department and the Study Commission. Members are usually deputies or assistant chief State school officers with overall departmental responsibilities. They gather information for meetings and workshops, prepare interim reports, bring back to the Commission suggestions and evaluations obtained from their departments, and, when necessary, obtain approval of their chief State school officer for any materials to be cleared or actions to be taken. In one way or another, every staff member of every State department of education sooner or later participates in the Study Commission's work.

General leadership of the Study Commission is held by a Planning Committee of nine members, appointed by the president of the Council of Chief State School Officers, in consultation with the Board of Directors. Terms are for 3 years, with 3 new members appointed each year, thus insuring an experienced majority at all times.

The Planning Committee maps out the ongoing program of the Study Commission and is responsible for the general direction of its work. It determines the projects to be undertaken, outlines regular and special procedures for conducting them, selects a chairman and consultants for each project, and makes detailed plans for national workshops. All its activities, of course, are subject to the approval of the Council of Chief State School Officers, of which it is an instrument.

To carry on its work, the Planning Committee meets at least twice a year. One meeting is held during the regular workshop of the Study Commission and the other is held in the early spring—usually in Washington, D. C.—to plan the program for the year ahead. Members of the Planning Committee conduct interim activities that are necessary to further the progress of policy-developing projects. Generally, members are also designated to serve as the chairmen of important policy-developing projects.

The executive secretary

The executive secretary of the Council works closely with the Study Commission. The Commission relies on him to (1) furnish consultative services; (2) assist in keeping individual chief State school officers informed on the activities of the Study Commission and encouraging them to give their active support to

its projects; (3) act as liaison between the Council and the Study Commission; (4) arrange for publication and distribution of reports and statements from the Commission's work.

Role of Office of Education

Between the Study Commission and the Office of Education a happy cooperative relationship exists that is certainly beneficial to each and to education generally. This relationship, which has grown ever since the Study Commission was established, has been a major factor in recent advances in State school administration. Each agency conducts those activities which it is particularly qualified to perform and which are essential in the development of the most forward-looking policies and principles. An Office of Education staff member, designated by the Commissioner of Education, serves as secretary to the Planning Committee and the Study Commission and as liaison with the Office of Education.

The staff of the Office of Education are invited by the Planning Committee to contribute to the goals of the Study Commission in many ways. Regardless of the project being undertaken—and the activities of the Commission extend through the gamut of education—the Office of Education specialist whose field is involved is usually invited by the Commission to perform many services. Most of the policy-developing projects are preceded by a nationwide study of the various policies, procedures, and practices that prevail in the several States. Such information is considered necessary as a basis for evaluation and for determining practices that are most desirable. The Office of Education specialist involved in a particular project conducts the necessary background status study and provides other information necessary for the Study Commission's use; moreover, he continues as a consultant until the policy document is finally completed and edited, and approved by the Study Commission for consideration by the Council of Chief State School Officers.

Project procedures

The project procedures now followed by the Study Commission are a result of 16 years of tested experience. For the first several years, the Study Commission functioned almost wholly through its Planning Committee, which met 2 or 3 times annually to plan studies, draft reports, and agree on recommendations. Since 1949, however, the Study Commission has accomplished the major part of its program through annual 1-week workshops of members and invited consultants, and through periodic meetings of the Planning Committee and special committees set up to carry out specific projects.

The successful methods now in use may well be classified as inventions. Procedures are designed to bring to bear on each project the best thinking of recognized authorities in the area under study. Although the process allows for flexibility and varies with different projects, the typical procedure involves a number of steps.

For each project to be undertaken, the Planning Committee usually selects a special committee of a chairman and three members well qualified in the area under study. Membership of this committee is augmented by Study Commission members who elect to serve and by a number of State department of education specialists outside the Commission whom the Planning Committee invites to participate. All together they make a committee of between 12 and 20 persons.

This project committee works intensively, usually within the period of two annual workshops, planning the projects, preparing materials needed to accomplish the task, and cooperating with the Office of Education in completing a status study. Once the status study is available and other materials are assembled, the project committee, working at the national workshop, evaluates the different practices of the 48 States and prepares a preliminary policy report. This report constitutes a crystallization of the most desirable proven practices in the Nation in the project area.

The preliminary report is then submitted to the entire Study Commission workshop for suggestions and modification. Following this review, the report is revised, if indicated, and a copy is sent to each chief State school officer for careful examination and for testing of the proposals by his staff.

The interval between two annual workshops affords committee members the time and the opportunity to prepare any additional materials that are needed to further the completion of the project. Taking advantage of the results of interim committee work and the suggestions of chief State school officers and their staffs, the project committee and the Study Commission carefully rework the report at the second national workshop.

Again it is submitted to the Study Commission. The action the Commission takes at this time determines whether the report is to be approved as prepared; is to be submitted, with minor modifications, to the Council; or must undergo major modification requiring further study. In the last case, the report may again follow the same steps that it took at the end of the first workshop.

If approved by the Study Commission, the report is edited by a small group appointed by the Planning Committee and is then submitted to the Council. A copy is sent to each chief State school officer for examination prior to the next annual meeting of the Council.

At its annual meeting the Council formally considers the report. The report may be adopted as submitted, or it may be merely received by the Council. Major policy statements adopted by the Council are usually published and serve as basic guides for State school systems.

Advantages

One of the most significant implications of this process is the decrease in the time lag between the identification of desirable practice and its adoption and use in a State. The policies of the Council have the advantage of having been developed

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The forming of a National Commission brightens the hope

FOR A MORE LITERATE NATION

By Ambrose Caliver

Assistant to the Commissioner and chief, Adult Education Section

THE National Commission for Adult Literacy is a non-Government agency established by the Adult Education Association of the U. S. A. Its purpose is to stimulate action at local, State, and national levels to give every adult an opportunity to acquire the basic skills of reading, writing, and arithmetic. Its chairman is Murray D. Lincoln, president of the Nationwide Insurance Co. and president of CARE; its vice chairman, Paul A. Witty, professor of education at Northwestern University, who helped to develop the Army's literacy program during World War II.

ITS BACKGROUND. In the early thirties a National Literacy Committee under the chairmanship of Ray Lyman Wilbur, then Secretary of the Interior, gave incentive to the development of the WPA literacy education program. Since that time, however, the Nation has made no concerted and sustained attack on adult illiteracy. Many agencies have been concerned but efforts in general have been sporadic. The Armed Forces literacy program was significant, but it was limited and of an emergency nature. Those responsible for it conducted it as a necessity, but they always felt that it was a civilian responsibility.

The Office of Education for years has recognized this responsibility and, within the limits of its resources, has attempted to meet it. During the 1930's it lent staff members for part-time service in developing the WPA educational program. Since, it has made studies, held conferences, and issued publications on the problem; and during the past 5 or 6 years it has cooperated with the Adult Education Association through its Committee and Section on Fundamental and Literacy Education. Through these efforts the National Commission for Adult Literacy has come into being.

ITS PROBLEM. We have a free, universal, and compulsory educational system, but illiteracy among adults still blots our record. The problem has always been serious, but with today's scientific and technological advances it becomes even more so. If we are to keep up with the advances, if we are to maintain our democracy, we must have a literate citizenry.

Our last decennial census counted nearly 10 million adult citizens 25 years of age and over who were functionally illiterate, i. e., had had fewer than 5 years of schooling (approximately 1 million native whites, 3 million foreign-born whites, and 3 million Negroes). The count revealed a national problem, for practically every State in the Union has large numbers of illiterates. A high proportion of them are concentrated in the ages over 45, but every year about 60,000 functional illiterates reach age 14.

Illiteracy is decreasing gradually, but not rapidly enough to meet increasing demands upon adults. No longer can we afford to wait upon time either to eliminate the adult illiterate or to bring us a generation of adults free of illiteracy. The nature of the problem is such that we must seek a solution *now*—and seek it in a coordinated nationwide effort.

ITS PURPOSES. To spark such an effort, the National Commission for Adult Literacy has been formed, with the following purposes:

1. To alert the American public, particularly its opinion-forming leaders, to the magnitude and importance of the problem and the need for constructive action.

2. To collect and study facts about adult illiteracy, and about programs now working to correct it.

3. To stimulate factfinding, research, and pilot programs.

4. To build public opinion so that all communities will include literacy education in their regular educational program.

5. To stimulate more action—perhaps new types of action—against adult illiteracy.

In achieving its objectives the Commission expects to be promotional rather than operational. The program it has designed includes the following objectives:

1. Identifying and highlighting the problem among the various population groups and in the different regions, through collecting and disseminating facts.

2. Calling attention, through its own publications and the mass media, to the effects of illiteracy on our Nation.

3. Enlisting the support of Federal officials, governors, mayors, school superintendents, businessmen, labor leaders, and officials of organizations.

4. Sponsoring national, regional, and local conferences.

5. Preparing and distributing newsletters, leaflets, pamphlets, and study guides.

6. Establishing a clearinghouse of information on literacy education.

7. Sponsoring fact gathering and research on such subjects as good programs now in operation, motivation of potential learners, instructional materials, methods of teaching, retention, organization of programs, and continuity of interest.[1]

The Commission expects to achieve

[1] In keeping with the promotional nature of the Commission, most of the factfinding and research will be done on a contractual basis, by consultants and specialists borrowed from universities, colleges, school systems, industry, government, foundations, and voluntary agencies. Some of these will be employed by the Commission for brief periods; in other cases contractual arrangements will be made with the institutions, school system, or agency.

its purposes with a small staff, including an executive director and an associate director, and expects to do so within 3 years, with a budget of $450,000. Plans are underway now for a financial campaign, with headquarters in Washington, to raise the funds by 1958.

ITS LIAISON WITH THE OFFICE. The Commission plans to maintain close liaison with the Office of Education in the reasonable hope that the Office will carry on the work when the Commission concludes its activities. For the Office of Education has recently recognized its obligations to all age groups, in all stages of development, by establishing the Adult Education Section. One of the major concerns of this Section is fundamental and literacy education. It interprets literacy education in the same way as the Commission does: As a tool for providing those rudiments of communication that man needs in his simple day-to-day functions. By working together and cooperating with all other interested agencies, the Commission and the Office can help to diffuse literacy and its effective use more widely throughout the adult population, and arouse popular enthusiasm for the concept of literacy as a rich, positive thing, conducive to lifelong and life-related learning. These are essential accomplishments in an economy that is becoming increasingly inhospitable to the illiterate.

They are essential also in terms of our need for more scientific and technological manpower. Among our illiterates there is about the same proportion of intelligent persons as in the general population. If they are properly trained, they can provide a source of supporting manpower, both as semiskilled and skilled technicians; some may even be potential scientists and technologists. They can contribute further to the manpower pool by providing an atmosphere at home and in community more conducive to intellectual activity and the holding power of the schools.

The enterprise to which the Commission commits itself should appeal to all persons who are interested in the welfare of the Nation, and who believe that our social and economic progress and the maintenance of our free Republic rests upon an enlightened citizenry. The kind of decisions we most need today require our citizens to understand many issues. Since they can gain understanding only if they are literate, we must do what we can to make them so. The needs of a world in which we seek to lead and in which half of the people are illiterate, demand that we develop a "crash program" of literacy education. This is the task the Commission undertakes. This is the task for which it solicits help.

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Study Commission

Continued from page 12

cooperatively by theorists and practitioners concerned with the problems in their day-to-day activities, and represent the composite judgment of Study Commission members, chief State school officers, staffs of the State departments of education, and Office of Education consultants. The process facilitates greatly the incorporation of these principles into the fabric of State systems of education.

Major policy statements

Among the major policy statements already adopted by the Council and published by them are these:

- *Our System of Education*—The overall policy guide for the improvement of education programs throughout the Nation, with particular attention to responsibilities of State departments of edueation for such improvement.
- *The State Department of Education*—The basic prineiples and polieies for a State department's legal status, its functions, and the organization of its service areas.
- *Responsibilities of State Departments of Education and Health for School Health Services*—Fundamental policies which determine the relationships of education and health agencies at local and State levels, including desirable practices for improving school health services.
- *Responsibilities of State Departments of Education for Teacher Education*—Basic principles relating to the role of the State department of education in the improvement of teacher education and certification.
- *Responsibilities of State Departments of Education for School Plant Services*—Basic policies and principles that determine the leadership role of the State department of education in planning, conducting, and evaluating a comprehensive program for suitable school plants. Includes policies that should govern relationships among State and local agencies in this field.
- *Responsibilities of State Departments of Education for Pupil Transportation*—A policy document emphasizing the functions and services of the State department of education and its relationships with other agencies in the development and improvement of the State's program for pupil transportation.

The ongoing program

The ongoing program of the Study Commission seeks the development of an authoritative body of basic policies and principles that denote most desirable practice in State school administration. The rapid growth and rise in leadership of State departments of education, particularly in the last decade, have brought a host of new problems. As a consequence, high priority is being given to problems arising from the new role of State departments of education in the drama of American education. At the national workshop in Gatlinburg, November 17–22, 1957, four project committees attacked four such major problems: State department of education responsibilities for (1) instruction services; (2) curriculums of the schools; (3) guidance counseling and pupil personnel services; and (4) school finance and business management services.

Future plans are focused on the organization and services of the State department of education and on the department's role in planning and developing the State program of education. They include projects on internal organization and staffing; public relations; educational research; relationships with colleges and universities, lay and professional organizations, State legislatures, and Federal, State, and local agencies.

The Study Commission has a sound record of achievement. In 16 years it has become firmly established as a vital force in American education.

Over Three Million in College

FOUR percent more students this year than last have swelled total enrollments in institutions of higher education past the 3 million mark, although our college-age population is at its lowest in 25 years. The number attending college for the first time is up 3 percent over last year, totaling 745,000.

This estimate of the 1957 college enrollment moves in the direction of realizing an Office of Education projection that college attendance will double in the next 13 years. With larger and larger proportions of our young people going to college, and with the influx of both "war" and "post-war babies" on the campus, college enrollments are likely to reach 3.5 million by 1960 and at least 6 million in another 10 years.

The Office arrived at its estimates for fall 1957 by tabulating the first 65 percent of the returns to requests for enrollment data sent to 1,391 colleges and universities in continental United States, its territories and possessions. Last year's estimates, similarly arrived at, were accurate to within 0.3 percent for full enrollments and 1.6 percent for first-time.

Final report by the Office on enrollments in colleges and universities for the academic year 1957–58 will probably show higher figures than the final fall enrollment. In the past, the Office has found the academic-year enrollment to be at least 10 percent greater than the total fall enrollment.

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CAREERS IN ATOMIC ENERGY, by *Walter J. Greenleaf.* 1957. 36 pp. 25 cents.

COSTS OF ATTENDING COLLEGE, by *Ernest V. Hollis & Associates.* 1957. 91 pp. 45 cents. (Bul. 1957, No. 9)

FINANCIAL AID FOR COLLEGE STUDENTS: GRADUATE, by *Richard C. Mattingly.* 1957. 151 pp. 50 cents. (Bul. 1957, No. 17)

FINANCIAL AID FOR COLLEGE STUDENTS: UNDERGRADUATE, by *Theresa Birch Wilkins.* 1957. 232 pp. $1.00. (Bul. 1957, No. 18)

GERMANY REVISITED, EDUCATION IN THE FEDERAL REPUBLIC, by *Alina M. Lindegren.* 1957. 107 pp. 55 cents. (Bul. 1957, No. 12)

GUIDANCE WORKERS CERTIFICATION REQUIREMENTS, by *Royce E. Brewster.* 1957. 58 pp. 25 cents. (Bul. 1957, No. 22)

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SPECIAL EDUCATION PERSONNEL IN STATE DEPARTMENTS OF EDUCATION, prepared by *Romaine P. Mackie* and *Walter E. Snyder.* 1956. 49 pp. 30 cents. (Bul. 1956, No. 6)

STATISTICS OF PUBLIC-SCHOOL LIBRARIES 1953–54, by *Nora E. Beust.* 1957. 73 pp. 30 cents. Biennial Survey of Education in the United States—1952–54: Chapter 6.

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

AIR TRANSPORTATION AND MANAGEMENT COURSES, A PARTIAL LIST OF OFFERINGS IN COLLEGES AND UNIVERSITIES. October 1957. 8 p.

COORDINATING 2-YEAR COLLEGES IN STATE EDUCATIONAL SYSTEMS, A REPORT OF A CONFERENCE, Washington, D. C., May 16–17, 1957, edited by *S. V. Martorana.* October 1957. 86 pp.

DIRECTORY OF COUNSELOR TRAINERS, INDIVIDUALS ENGAGED IN PREPARING PROFESSIONAL GUIDANCE WORKERS, by *Royce E. Brewster.* September 1957. 30 pp.

DIRECTORY OF PERSONS IN CHARGE OF GUIDANCE SERVICES IN THE VARIOUS STATES, compiled by *Royce E. Brewster.* September 1957. 8 pp.

MODERN FOREIGN LANGUAGES IN THE HIGH SCHOOL, by *Marjorie Johnston.* Reprint from *School Life.* June 1957. 2 pp.

STATISTICS ON PUPIL TRANSPORTATION, 1955–56, by *E. Glenn Featherston.* September 1957. 1 p. (Cir. No. 507)

TEACHING HOMEMAKING AS A CAREER IN THE NATION'S SCHOOLS. A leaflet. 4 pp. (Mics. 3528)

USEFUL REFERENCES FOR TEACHERS OF FOREIGN LANGUAGES, prepared by *Marjorie Johnston.* September 1957. (Cir. No. 509)

U. S. GOVERNMENT PRINTING OFFICE: 1957

SCHOOL LIFE

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

OFFICE OF EDUCATION

AMONG THE CONTENTS

January 1958

School Building "Frills"

MUCH has been said recently about school building frills and gold-plated school palaces. What *are* these so-called frills?

Throughout architectural history design has attempted to follow function. So it is with our school buildings today. A frill in a school building is something not needed to implement the educational program. Are adequate and well-equipped science laboratories frills? Are counseling rooms for the guidance of today's youth frills? Are facilities for serving hot lunches for the health and well-being of young Americans frills? Is a gymnasium for body building and coordination a frill? Are facilities for self-expression through art and music frills? Are facilities for community forums frills?

These things are not frills. They are the tools we need for shaping an educational program fundamental to the American way of life and our leadership role in this modern age.

With rare exceptions our recently constructed school buildings have been stripped to the bare necessities. Frills of bygone days have been eliminated. Gone are the basements and attics, the towers and belfries, the decorative columns and arches, and the expensive and difficult-to-maintain filigree that ornamented our school buildings of a generation ago.

There are a few communities in the country fortunate enough to afford school facilities beyond the minimum. Certainly we would not deny them the right to spend their money for housing their children in a manner they consider satisfactory for their needs. It is unfortunate, however, that these rare exceptions have been publicized as the common practice in school design.

School officials and architects are conscientiously searching for ways to stretch the school building dollar and at the same time to provide safe and sound school facilities for housing the educational programs and community services necessary to meet the demands of today's world. Evidence of their effort is clear in the fact that during the past 20 years, while the cost of building materials and labor has increased 200 or more percent, the cost of a classroom and related facilities has increased only 150 percent. While our planners have concentrated on utility *with* economy, they have also given us beauty: clean lines and uncluttered surfaces make today's schools a pleasure to see.

Lawrence G. Derthick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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Highlights from the Office of Education's 1957 Calendar

January

STATES started sending to the Office of Education their plans on how, with Federal aid under the Library Services Act, they would bring books and better library service to 30 million rural Americans.

WITH 83 projects recommended for approval, the cooperative educational research program of the Office began its second half year.

FIVE national organizations and the Office inaugurated a project to establish nationwide standards for reporting and recording information about school buildings, sites, and equipment.

February

THE Office announced its first national survey of beginning teachers.

March

BY the end of the month, 32 States had submitted plans under the Library Services Act . . . and 21 States had received payments.

April

NATIONAL Stay-in-School campaign was launched by the Departments of Defense, Labor, and Health, Education, and Welfare.

OFFICE-SPONSORED Workshop brought State supervisors of public school guidance service together to determine basic needs and define terms.

BIG-CITY supervisors of elementary schools spent a week in sessions with Office staff to reevaluate goals and ways to reach them.

May

McCALL'S Magazine's Teacher of the Year, chosen with the cooperation of the Office of Education, was honored at the White House in the name of all American teachers.

VOCATIONAL educators participated in a week-long conference in the Office to develop ways of promoting training programs to increase the supply of technicians needed by industry and the professions.

RESPONSIBILITY for the education of migrant children was clarified at two Office-sponsored conferences in the path of migrant streams.

THE need to refashion foreign language programs in our high schools brought school administrators to a national meeting called by the Office.

June

CONGRESS approved an appropriation of $2.3 million to the Office of Education for cooperative research during fiscal year 1958.

July

AD HOC committee of outstanding educators and statisticians was organized to review certain aspects of the statistical program of the Office of Education.

THE United States participated in the 20th International Conference on Public Education at Geneva, Switzerland; sent an exhibit on school building design in the United States.

COMMISSIONER Derthick announced allocation of $1.3 million to construct elementary and secondary schools for children whose parents will be employed in the construction and operation of the Glen Canyon reclamation dam, Flagstaff, Ariz.

PRESIDENT'S Committee on Education Beyond the High School submitted its final recommendations to the President.

August

SECRETARY Folsom appointed a Departmental Task Force on Higher Education, with Commissioner Derthick as chairman, to follow up the work of the President's Committee on Education Beyond the High School.

September

OVER 300 educators from 53 countries reported to the Office for orientation, lectures, and group discussions before assignment to 11 American colleges and universities under the teacher-education program sponsored by the International Cooperation Administration and the Office.

October

ABOUT 30 distributive education specialists from State departments of education and universities met in the Office of Education to prepare a guide for distributive education in the coming year.

November

FEDERAL funds allocated to build first units of schools for approximately 1,500 children of military personnel assigned to the Air Force Academy at Colorado Springs, Colo.

FIVE regional meetings brought together 225 vocational educators from 43 States to study implications of technological change in modern industry to vocational education.

AMERICAN Education Week, with assistance from the Office, for the first time gave emphasis to adult education.

December

COMMISSIONER Derthick gave his first state-of-education report to the Nation, over the Westinghouse radio and television network.

School Laws of 1957

Major Enactments in 20 States

THIS report by the Laws and Legislation Branch of the Office of Education presents a brief description of school enactments by 20 of the 46 State legislatures in session during 1957. Only a few of the thousands of enactments—those considered to be of the broadest general interest—are reported; thus much important legislation of more local interest is excluded. Information from other States was not ready for publication in this issue.

Matters Receiving Most Attention in State School Enactments During 1957

FINANCIAL SUPPORT. ***New foundation programs, higher minimums, more local tax power, more State aid.***

SALARIES. ***Increases for teachers and superintendents; higher minimums, more State aid.***

SCHOOL CONSTRUCTION. ***New State programs, higher bonding limits, State loan funds and more State aid.***

JUNIOR COLLEGES. ***New or increased State aid, more local tax support, new construction authorized.***

HIGHER EDUCATION. ***Scholarships, study commissions, bond issues for buildings.***

SPECIAL PROGRAMS. ***More State aid, expanded programs for exceptional children and driver training.***

RETIREMENT. ***Liberalized provisions, more benefits, systems integrated with Federal Social Security.***

ARIZONA

Increased State aid to junior colleges from $100,000 to $150,000 annually.

Authorized school districts to establish departments and employ teachers for deaf and blind students.

Increased disability retirement allowance and teacher retirement pension, the latter from $38 times the number of years of service to $50 times the number of years of service.

ARKANSAS

Enacted new foundation program based on a weighted ADA, making possible an increase in State aid from $19,552,000 to $32,300,000.

Established a minimum annual salary for teachers, based on professional training—$2,700 minimum for bachelor's degree and $3,000 for master's.

Raised sales tax from 2 percent to 3 percent and broadened personal income and severance taxes to provide $14,300,000 more for elementary and secondary education and $4,500,000 more for the University of Arkansas.

Increased State aid for transportation, textbooks, and other items.

Amended school attendance law to make attendance in racially integrated schools not compulsory.

Authorized teacher retirement credit for active duty in military service to a maximum of 5 years.

COLORADO

Changed basis of foundation program from aggregate days of attendance to classroom units.

Amended provisions for the organization of junior college districts.

Raised maximum bonded debt limit to 10 percent of assessed valuation for new districts, and provided for an additional 5 percent emergency increase.

Raised property tax levy limit for county and union high schools, from 8 to 10 mills.

Increased teachers' retirement benefits from $75 to $100 per month, and established retirement procedures for professional employees of State institutions of higher learning.

DELAWARE

Raised beginning teachers' salaries by $400; and raised the amount that a teacher's salary may be increased from State funds, from $300 to $900 annually in addition to increments.

Provided $32 million to pay 60 percent of the cost of construction of 45 school buildings.

Established a teacher-training scholarship program for the University of Delaware. Provided for 20 scholarships for each of the next 2 years at Delaware State College at Dover. Provided for financial assistance to needy residents qualified to matriculate or continue courses of study in State institutions of higher learning.

Increased from 40 to 120 days the unused sick leave that school employees may accumulate.

FLORIDA

Increased by $300 per unit the foundation program allocation for instructional salaries and allowed an additional $300 for 10 or more years of continuous teaching in the State and for each instructional unit on continuing contract.

Appropriated $23 million to provide counties, on a matching basis, with State aid for school building construction of $200 per pupil in ADA in grades 1 to 12.

Made public junior colleges part of the local school system under the supervision of State Board of Education, and provided funds for their operation under the minimum foundation program.

Authorized establishment of 6 new junior colleges in addition to the 5 now operating, and appropriated $8 million for construction at new and existing junior colleges.

Provided over $5 million for nuclear research at State universities.

Increased minimum salary for county superintendents by $1,200.

Increased educational appropriations for the biennium 1957–59 by more than $115 million.

Appropriated $600,000 for the establishment of an educational television commission to design, construct, and operate a television network and to supervise the operation of television in the State's 12 college communities.

Increased the minimum disability allowance; permitted retired teachers to be employed a maximum of 200 hours per school year in adult education or similar programs, and provided survivor benefits for members of the teachers' retirement system.

IDAHO

Amended minimum foundation program to provide an across-the-board increase of $300 in the minimum salary apportionment schedule, and an increase of 20 cents per month in the allowance per pupil in ADA.

Extended 1955 enactment raising the school district bonding limits to 10 percent and 15 percent, depending on the district classification.

Authorized junior college trustees to levy up to 8 mills without an election.

Created public corporation for the construction of dormitories in each junior college district and authorized revenue bonds for such construction.

Expanded legislation relating to the education of mentally and physically handicapped children in the public schools, providing for employment of teachers, establishment of classroom units, and education outside the school district.

Provided for a State tax commission to establish by August 1958 the ratio of real valuation to assessed valuation in each county and to keep the ratio up-to-date thereafter.

Increased salary of the State superintendent of public instruction.

Provided for a Social Security referendum for State employees and authorized teachers to elect to come under the Federal Social Security program instead of Teachers' Retirement System.

ILLINOIS

Raised minimum teachers' salaries in 3 classes of the schedule.

Created school building commission with authority to acquire, construct, remodel, lease, or sell school building facilities to school districts.

Appropriated $10 million for the commission's operations, and authorized school districts to levy a tax to pay rental for school buildings owned by the State.

Authorized school boards in cities of 500,000 or over to issue $50 million in bonds, at not more than 6 percent interest, for school building purposes.

Authorized district tax levies for school building purposes, and provided for increases in Chicago school tax rates for building purposes.

Increased State aid for junior colleges from $100 to $200 per resident pupil, and provided for the establishment of, and a tax levy for, a junior college in certain districts.

Authorized 2 or more districts to join in the establishment, management, and maintenance of junior colleges.

Created Illinois Commission of Higher Education to study present and future needs of higher education in the State.

Provided for increasing the district tax levy to 1.25 percent in certain districts and 2 percent in others, and for the levy of a 1-percent tax without referendum by school boards maintaining grades 1 through 12.

Provided for a pupil transportation tax not to exceed 0.02 percent without referendum or 0.10 percent with referendum.

Reclassified and redefined types of handicapped children, and prescribed method for determining per capita costs of educating exceptional children, requiring school district to meet per capita expenses. Authorized 2 or more school districts to establish joint program for handicapped children.

Authorized school districts maintaining high schools to offer a driver-education course to residents between ages of 15 and 21 and provided $30 in State aid for every person enrolled.

Authorized retired teachers to accept temporary employment up to 60 days in any school year without affecting their pension rights; and provided that time spent in substitute teaching may be allowed for credit toward longevity.

Increased tax levy for teachers' pension fund from $9 million to $9.5 million for 1958.

Provided for the establishment of a research department in the State department of education, to be staffed with full-time personnel, under the supervision of the superintendent of public instruction.

IOWA

Provided that, as a condition for receiving supplemental State aid, high school districts must assess a 15-mill levy ($170 per high school student), and elementary districts a 10-mill levy ($120 per elementary school student).

Increased State aid for junior colleges from 25¢ per student per day to $1.

Facilitated school district reorganization by requiring that all areas of the State not in a high school district by 1962 shall be attached to the county board of education.

MAINE

Enacted a comprehensive minimum foundation program based on allotment per pupil in ADM, with State support ranging from 18 percent to 66 percent of the cost of the program depending upon the State valuation per resident pupil in the school administrative units.

Provided State aid for school construction in reorganized districts, granting the district the same percent of State subsidy on capital expenditures—including cash payments and interest and principal payments—that the district is entitled to receive for regular operational subsidy.

Increased minimum teachers' salaries by $600 to $800 per year in all classifications.

Enacted comprehensive plan of school district reorganization aimed at the organization of larger administrative districts, and established a school district commission to assist in developing efficient administrative

districts. Made supplemental State aid available for reorganized districts approved by the school district commission.

Increased the biennial appropriations for education more than $10 million over the previous biennium.

Amended teachers' retirement law increasing pensions for teachers who have retired under the old pension plan.

MARYLAND

Authorized State department of education to study means of accelerating educational programs for superior students and the possibility of developing a program for the education of preschool handicapped children.

Approved county authorizations for bond issues of over $46 million for school construction.

Authorized the creation of a State debt of over $16 million for construction at State teachers colleges.

Authorized county commissioners to increase the supplementary payments to retired school teachers.

MINNESOTA

Amended foundation program to distribute State aid under a single formula.

Authorized school districts with over 1.000 children and an outstanding debt of 95 percent of the debt limit to issue bonds without regard to limit and to levy additional taxes. Appropriated $2 million for a school construction loan fund administered by the State board of education.

Authorized State aid of $200 per student in ADA in junior colleges maintained by school districts.

Provided for an interim commission to study the needs of higher education in the State.

Authorized State Teachers College Board to issue revenue bonds up to $9.8 million for building dormitories.

Made the establishment of programs for educating handicapped children mandatory and changed State-aid formula.

Amended retirement laws to bring additional members under OASI provisions of the Federal Social Security Act.

MONTANA

Amended foundation program to provide for increase of approximately 10.5 percent, and accordingly increased the state equalization fund nearly $4 million for the biennium.

Increased salaries of county superintendents.

Provided for a constitutional amendment to be submitted in 1958 to permit each elementary and each high-school district to have separate bonding limitation of 5 percent of the total assessed valuation rather than a combined limitation of 5 percent as at present.

Created a commission to make comprehensive study of the State tax structure and educational system.

Extended power of counties to tax up to 20 mills for defraying current expenses and provided for a 1958 referendum for an additional 6-mill levy for 10 years to maintain and improve university units.

Provided for a referendum to permit the issuance of bonds up to $10 million in excess of the constitutional indebtedness limit for construction at 6 university units, and for a property tax levy of 1¼ mills annually to pay principal and interest.

Authorized State superintendent of public instruction to appoint an elementary school supervisor.

Authorized 6-year high schools.

NEBRASKA

Recodified the teacher certification laws, reducing from 68 to 12 the number of teaching certificates issued and permitting the granting of certificates to teachers from other States provided they meet specified requirements.

Established the position of reserve teacher for retired teachers who have passed their 65th birthday and have taught not less than 25 years. Appropriated $300.000 for payment of such teachers at the rate of $30 per month.

NEW YORK

Raised the flat grant of State aid per pupil in ADA.

Raised the salary of district superintendents from $7.200 to $8.000.

Proposed a constitutional amendment authorizing a State debt of $250 million for expanding higher education facilities.

Enacted new Regents scholarship program to include 5 percent of high school graduates during preceding year, basing scholarships on financial need, and including the study of nursing, engineering, science, medicine, and dentistry. (Will make possible over 6.000 scholarships with annual stipends ranging up to $500 per student.)

Established 1.200 additional war service scholarships of $350 each annually.

Authorized State income tax deduction of $800 for each dependent over 18 who is in college.

Created a higher education assistance corporation with authority to make loans to college students up to $1,000 per year from funds acquired through private sources.

Raised to $1.800 the maximum annual amount a retired teacher may earn from sources other than substitute teaching of adult education and increased the total annual income limit to $3.500.

PENNSYLVANIA

Proposed a constitutional amendment to increase the total borrowing capacity of school districts from 7 percent of assessed valuation to 15 percent, and to increase from 2 percent to 5 percent the indebtedness which may be incurred without voters' consent.

Increased the biennial appropriations for education by more than $135 million over the preceding biennium.

Authorized State board for vocational education to formulate and adopt a Statewide plan for technical school attendance areas.

Authorized the Joint State Government Commission to conduct a thorough study of the problems of higher education.

Increased number of days of sick leave with pay from 5 to 10 per year and accumulated sick leave from 20 to 30 days.

Provided that sabbatical leave of one-half school term may be extended for another one-half year if employee

is unable to return because of illness, increased the maximum salary payment while on sabbatical leave to $3,000 for a full school term, and extended these benefits to recipients of fellowships or grants.

TEXAS

Established a new minimum salary schedule based on a 9-month period, and appropriated $64 million to finance the program.

Established 24-member education study committee to make comprehensive study of State educational needs and to make recommendations.

Redefined categories of exceptional children teacher units to provide additional services for exceptional children for whom regular school facilities are inadequate.

UTAH

Increased the basic program under the Uniform School Fund by approximately $800 per distribution unit, and increased the amount by which the basic program may be exceeded through local taxes, from 16 percent to 25 percent of the basic program.

Continued State aid for school construction, and extended for 10 years the authorization for districts to levy up to 12 mills for school construction.

Created a coordinating board of higher education to make a comprehensive study of the needs of higher education.

Levied a 1-dollar tax on motor vehicles to be credited to the automobile driver education fund.

Amended State retirement law to permit members to receive the full amount of increased benefits under the Federal Social Security Act.

WEST VIRGINIA

Enacted an automobile driver training program and authorized the use of school funds therefor.

Provided for a study of the needs of higher education.

Created scholarship fund for teacher trainees and established 100 scholarships of $500 each.

Authorized county boards of education to impose a $10 head tax and a property transfer tax not to exceed $2.25 for each $500 consideration.

Established procedures for State and local cooperation to reevaluate property and equalize taxes.

Proposed a constitutional amendment to be submitted in 1958 providing for appointment of the State board of education by the governor and appointment of the State superintendent by the board.

Amended teacher retirement law to provide a maximum retirement allowance and to limit allowance for prior service to three-fifths of the average final salary.

WISCONSIN

Increased flat State aid payments and the guaranteed valuations per resident pupil.

Amended laws relating to the education of physically and mentally handicapped children, and raised the maximum State reimbursement for instruction of homebound handicapped children from $100 to $200 per pupil per year.

Required the coordinating committee for higher education to establish a State committee to provide scholarships on a Statewide basis for all university and State colleges.

Established scholarship program for Indian residents and for the deaf or hard of hearing.

Increased State aid for county teachers' colleges.

Established a commission to study the utilization of school buildings and proposals for creation of intermediate school districts.

Provided for combining Teachers' Retirement System and Federal Old Age and Survivors' Insurance.

WYOMING

Amended foundation law, allowing fractional units for kindergarten.

Established a $1 million fund to aid emergency school construction.

Established 200 scholarships of $250 each for high school graduates studying to be teachers.

Provided that election for school district annexation to junior college district may be called upon petition of 10 percent of qualified electors.

Established uniform system of pupil transportation cost accounting.

Raised prior service credit for retirement from $1.50 to $2.50 per year.

WORKING WITH THE ATOM

SO new is the industry that has grown out of splitting the atom, many youngsters weighing their talents and interests against possible careers may be unaware of the opportunities open to them in atomic energy.

Though only an infant, the atomic energy industry already employs more than 100,000 Americans. It will require more and more help as it expands. Because of its newness, the student's parents, teachers, and counselors may not be able to answer his questions about atomic energy as a field of employment. But they and the student himself are likely to find the answers to many questions in the new Office of Education publication, *Careers in Atomic Energy*, by Walter J. Greenleaf, formerly Office specialist in occupations.

To the question, "What can I do in atomic energy?", *Careers in Atomic Energy* answers, in effect —

The boy or girl with a scientific bent can readily find a place in the atomic energy program with the proper training. The range of scientific jobs is wide. The industry needs chemists, engineers, geologists, physicists, metallurgists, biologists, mathematicians, and meteorologists. For the scientist in atomic energy a college education and graduate work are mandatory.

But not only scientists are essential to the production of atomic energy. Like many another industry, it needs clerks and administrators; secretaries and service personnel; skilled and semi-skilled craftsmen. Office workers and service personnel need have no other training than that required for similar positions in other industries.

The 36-page booklet, *Careers in Atomic Energy*, costs 25 cents a copy, and may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Exceptional Years for Exceptional

by Romaine P. Mackie,

With the faces of Janus looking both back to 1957 and forward to 1958, each face sees an *exceptional year* for *exceptional children*. There is promise that the unprecedented advances made in 1957 toward solving some of the most crucial problems in special education will continue in 1958. Even though States and local school systems still have much to do before programs for exceptional children will reach all those who need them, the year 1957 saw major progress toward (1) extending school programs to serve more exceptional children, (2) acquiring more knowledge about exceptional children and the kind of instruction they need, (3) securing more and better qualified personnel to teach the pupils and to give leadership in State and local school systems and in colleges and universities preparing teachers of exceptional children.

Extension of programs

Activities in 1957 reached in several directions to meet the pressing need for extension of educational opportunity for exceptional children. The year was characterized by mounting school enrollments in special education, studies of the rural problem, multistate activities, and renewed efforts to coordinate the work of national organizations individually concerned with one of the various types of exceptional child. State education agencies, many of which had increased resources in funds and personnel, played a major leadership role in these developments.

Many new educational programs for exceptional children were launched in 1957, according to reports coming to the Office of Education from many parts of the Nation. The extent and direction of this growth cannot be determined until the results of the current statistical survey of special education for exceptional children becomes available. The sharpest gains were undoubtedly made in the urban areas, but there were also increases in the less populated areas, reflecting a growing interest in the unsolved problem of educating the rural handicapped child. Activities in a number of States illustrate such interest. Wyoming recently began a statewide study which will form the basis of an educational plan for handicapped children in the entire State, much of which is sparsely populated. Similarly, Idaho has appointed a committee to work with the State Board of Education to study the problem in that State. Research undertaken in 1957 in both Georgia and Kansas is aimed at determining the best way to meet th educational needs of mentally retarded children in the le densely populated parts of those States.

Preliminary reports indicate that, of all the handicappe the mentally retarded have made the largest gain in scho enrollments. In general this development can be credite to an evolving social conscience, but it is not likely th such rapid advances would have been made without th organized support of parent and other lay groups at th local, State, and national levels, particularly as these grou have been encouraged by the National Association for R tarded Children.

Through multistate (or regional) efforts special educ tion made advances in 1957. To illustrate, a study o special education is being conducted under the auspices the Southern States Work Conference. This is a 3-yea project, the first phase of which is a status study and th second the consideration of realistic plans for special ed cation in the future. Another illustration is the Great Plair Conference held in Billings, Mont., in August 1957. In sense, it was an international conference, composed of re resentatives from 4 States and 3 Canadian provinces. The chose to meet because they felt they could benefit by e change of ideas on many problems common to their regio

A number of the specialized national agencies concerne individually with specific areas of the handicapped an gifted have recently renewed their efforts to work togethe for increased educational opportunities for exceptiona children. In the fall of 1957 representatives from suc organizations convened in New York City at a meetin sponsored by the International Council for Exceptiona Children. Conferees explored the possibilities for coopera tive consideration of major issues and problems affectin exceptional children and focused some attention on pe tinent Federal legislation. They agreed to hold 4 meeting in 1958 through which they hope to further their coopera tive efforts.

The spirit of these and other activities on behalf o exceptional children was reflected by the Congress in 1957 The spotlight which had been so sharply focused on th mentally retarded, began to turn also on children wit speech and hearing impairment. Evidence of Congressiona interest was seen in the spring of the year when the Ap

HILDREN

xceptional Children and Youth

FOR THE EXCEPTIONAL CHILD 1957 was a bright year. The surge of interest and effort that brought richer educational opportunities within his reach, promises to carry over into 1958 and the years beyond.

propriations Committee of the House of Representatives aked the Office of Education to report on its program for te mentally retarded and to make recommendations fr a Federal program of educational services for children yth impaired speech and hearing.

lesearch in education

It has been quite generally recognized that there is a earth of scientific knowledge about the various aspects of ducation of exceptional children. This accounts, in part least, for the fact that only about one-third of the esti- ated 1 or 5 million children needing some kind of special ducation are receiving such help from the schools.

The education of exceptional children, then, is a fertile fld for educational research. Through the efforts of indi- vlual schools, clinics, and research centers in universities ad large school systems, some information has been ac- cmulating. However, the progress of valuable studies has o en been hampered by lack of funds to carry forward the r earch.

The 1957 appropriation to the Office of Education for operative research* included $675,000 earmarked for studies in the education of the mentally retarded. This provision for research was a real turning point in the quest for knowledge about education of the handicapped. Within one year's time—between October 15, 1956, and October 15, 1957—46 contracts for studies in the education of the mentally retarded were drawn between the Office of Education and a State education agency or a college or university.

The resources being used for these 46 studies are spread widely across the Nation. Seventeen colleges are conducting 38 of the projects and 8 State education agencies are conducting 8. As the map shows, they are concentrated in the densely populated Northeastern and in the Central and Midwestern States. But many are being conducted also in the Southeast, the Southwest, and the Far West.

Most of the 46 research designs call for samples of mentally retarded children. According to progress reports, 39 of the researchers are drawing all or part of their samples from public school systems, and 21 from residential schools. In addition, at least 12 studies report the cooperation of other community agencies as sources of children. Thus it

*Administered under the provisions of Public Law 531, 83d Congress, 2d Session.

Colleges, Universities, and State Departments of Education Conducting Research in Mental Retardation Under the Office of Education Cooperative Research Program

(Public Law 531, 83d Congress)

appears that hundreds of persons not on the research staffs are contributing to these investigations and thousands of children are involved.

While these projects cover a wide range of topics in the education of mentally retarded children, most can be roughly grouped around (1) definition and identification of mentally retarded children, (2) learning processes, (3) language and communication difficulties and certain physical limitations as they relate to mental retardation, (4) effects of different types of school orgnization, (5) teaching methods and procedures, and (6) effects of school programs on postschool adjustment; and other miscellaneous problems.

It has often been pointed out that there are too few longitudinal studies on the effect of educational programs for handicapped children. Among these 46 projects in mental retardation, several are longitudinal. One of these extends for as long as 5 years. Furthermore, among the short-term projects, some have been undertaken as the first phase in a larger design.

The year 1958 should see the completion of a number of the shorter studies and the findings made available for use in programs for retarded children. But even before results are available, many favorable byproducts can be observed. One example is the recent meeting called by the Research Division of the New York City Board of Education. It brought together some directors of projects supported by funds under the Office of Education's cooperative research program so that they could discuss the "instruments" being developed to test and evaluate mentally retarded children. Another byproduct is the current interest in mental retardation shown by research investigators who had not previously worked in this field. Furthermore, the stimulation of this cooperative research program has acted as a leavening agent and is putting new vitality into efforts to provide suitable educational programs for retarded children.

While a large proportion of the funds appropriated in 1957 under the provisions of Public Law 531 were earmarked for research in mental retardation, some funds were provided for study of educational problems in the fields of giftedness and delinquency as well as in general education. Each one of the projects is a story in itself and cannot be fully told until the reports of the investigators become available. In the meantime, information on the studies in mental retardation will soon be available in an Office of Education publication on cooperative research in the education of the mentally retarded. Among other matters, this publication will include an author's abstract for each of the 46 projects.

Well-qualified personnel

On the crucial issue of securing adequate numbers of qualified educators, some advances were made in 1957. Since 1950 the Office of Education has prepared an annual directory of special education staffs in State departments of education. The 1957 edition of this list showed by far the greatest annual increase in such personnel. Since 1950 there has been an average yearly increase of about 5 percent. In 1957, there was a 22-percent increase. The area which commanded the largest increase of supervisory personnel was mental retardation. The next largest gain was for the crippled (or physically handicapped), and the third largest for the visually handicapped.

This rise in numbers of staff members at the State level suggests a similar increase of supervisory personnel in local school systems as well as more teachers to instruct the children. Trends cannot be definitely established, however, until the 1957–58 statistical survey of special schools and classes is completed. Even with these advances, *only a few* States have specialized staffs to serve all of the areas of exceptionality. Here again, if the State staffing pattern can be regarded as a clue to the current personnel situation in local school systems, there is still a wide gap between the numbers needed and those available. In planning for the expansion of programs, administrators find this shortage of qualified specialized personnel is still their greatest obstacle.

The personnel problem was also recognized by the action of some members of the 85th Congress. Several bills were introduced which would enable the Federal Government to assist in the development of educational personnel to work with exceptional children. These in general seemed to be aimed at providing traineeships for promising graduate students who would prepare to head programs for special teachers in colleges and universities, direct or supervise special education programs in State or local school systems, or direct research in these fields. Of the 11 bills introduced in the House of Representatives and the 2 in the Senate, 9 were concerned solely with mental retardation, and 3 included mental illness as well as mental retardation. One included the field of exceptional children as a whole. Of these bills, one, Senate bill 395, was passed by the Senate on August 20 and referred to the House of Representatives. If enacted, it would authorize the Commissioner of Education to make grants to institutions of higher learning and to State education agencies to assist them in preparing professional personnel to work in the field of mental retardation.

Summary

It is too soon to determine the trend these developments will take in 1958, but the forward-looking face of Janus is almost sure to see the momentum of some of these 1957 movements carried into the future. Mankind's social conscience dictates that each human being shall have opportunity for the best possible development of his powers; furthermore, mankind in general will profit by the increased happiness and usefulness of those members who are, or have been, exceptional children.

Local voters choose the man, but the States pass regulating laws

THE LOCAL SCHOOL BOARD MEMBER

By Morrill M. Hall

LOCAL school boards are the agencies through which local control of the schools is maintained, but in a legal sense a local school board is a State agency. State law creates and defines its powers; and State law governs its membership.

What the State statutes prescribe for local school board membership, except for boards covered by special legislation, is the subject of a recent Office of Education study. It finds that these laws vary widely, both within and among the States. But it finds also many similarities—enough to permit a brief sketch here of what may well be called the typical school board member.

He serves on a board of 3 to 7 members.

The great majority of school boards in the United States have 3 to 9 members: Most of those in small districts have 3; in large districts, 5 or 7. Only a few have more than 9.

Eight States prescribe a uniform size for all boards, except where special legislation applies. The general statutes in all other States provide for boards of more than one size.

His term of office is 3, 4, or 6 years.

Most school board members hold office 3 to 6 years per term. This range takes in all the terms provided by 41 States for all districts covered by the general statutes and by 5 others for a majority of their districts.

Usually, districts select one or more board members every year, though 11 States make all regular changes every other year. Where selections are biennial, the term of office is 2, 4, or 6 years; where they are annual, 3- or 5-year terms are common.

Most commonly, less than half of the members are chosen at one time, but this is not true for some boards in 14 States and all those in 6 others.

He is nominated by petition and is elected by popular vote in a separate, nonpartisan election.

More than 95 percent of all school districts select their boards by popular vote; 33 States use this method exclusively except where special legislation applies; 9 others use it for most boards. In only 6 States are board members appointed, and 5 of these have special legislation providing for an elected board in one or more districts.

Where boards are elected by popular vote, candidates are nominated in various ways. The most common method is petition by qualified voters.

Nonpartisan election methods are prescribed for most boards chosen by popular vote. Most boards are chosen in elections held specifically for that purpose on nonpartisan ballots. Others are chosen in partisan elections but on separate nonpartisan ballots. In some States, however, either all or at least some boards are elected on a partisan basis.

He represents the district at large.

No matter how he is chosen, the board member should represent all the people in the school district; that is a generally accepted principle. Some States divide their districts into areas, such as wards or trustee zones, and require at least one board member to come from each area; or in some other way they limit the number of members from each part of a district. Most school districts choose their board members from the district at large; that is, they may choose any qualified citizen living anywhere in the district.

In all districts where board members are elected from the district at large—and also in many districts that have some type of area representation—all voters are entitled to help elect all board members. In a few States, however, the voters may vote only for the candidates living in their own subdivision; thus, in a 5-zone district with a 5-member board, the voter can help elect only one of the members.

He is a qualified voter.

The most common qualification prescribed for board members is that they be qualified voters. However, all or at least some board members in nearly half the States must meet additional requirements; among them are specifications about age, length of residence in district or State, education, character, payment of property tax, and parenthood.

He receives no salary.

State laws on salaries for school board members vary. One State may prohibit pay entirely; another may specify a certain amount; a third may specify only a range or a maximum; a fourth may leave all decisions about salary to the districts. Most districts, however, pay no salary at all.

If he leaves the board before his term is up, the remaining members name someone to take his place.

When interim vacancies occur on elected boards, usually the remaining members appoint someone to complete the term. On appointed boards—though not on all—the original appointing agency fills the vacancies that occur.

Dr. Hall at the time of writing was assistant specialist for local school administration, Office of Education. He is the author of *Provisions Governing Membership on Local Boards of Education*, published by the Office last fall (Bul. 1957 No. 13, 66 pp., available from the Government Printing Office, Washington 25, D. C., for 30 cents).

Two Library Collections on Education

RESEARCHERS and educators seeking information on the subject of education will find in Washington, D. C., a library and an educational materials laboratory whose collections may well answer their needs.

THE FIRST OF THESE is the Department of Health, Education, and Welfare Library with its educational collection of over 300,000 volumes. On its shelves are the "classics" of education together with books only yesterday off the press. Development of education in the United States receives special emphasis. Both historic and current collections have materials on all levels of education: Preschool, kindergarten, elementary, secondary, vocational, and higher.

Within the education library are several special collections: Yearbooks of educational associations; annual reports, directories, courses of study, and publications of State and city school systems; educational periodicals, old and new; all Office of Education publications; and many professional books on all phases of education.

Domestic college catalogs—not less than 80,000 of them—compose one of the special collections. Begun under the first Commissioner of Education, the collection reflects changes in American colleges in curriculum, admission and scholastic requirements, textbooks, and student life.

Some earlier catalogs have particular historic value. Bound into them are addresses given at special ceremonies by distinguished Americans. Some have illustrations of campus buildings, offering comparisons with modern sites. Among the collection's earliest catalogs is the first issued by the "Female Seminary," Mount Holyoke (1837).

The collection is as up to date as the last yearly issue of catalogs, for the 1,800 colleges and universities listed in the Office of Education's *Education Directory (Part 3)* are requested each year to furnish current issues.

Another collection is the one of current curriculum material—teachers' guides or courses of study—for elementary and secondary schools. Curriculums from all 48 States (State, county, and city systems) and several Territories, in a wide range of subject matter, make this collection a source of information representative of current practices in the United States.

The arrangement of material in a special alcove is a timesaver for the researcher. In one place he may compare school systems in a particular grade and subject, or select sample courses to compare with those of his own system. Or, if he is constructing curriculum guides, he can study the practices of other school systems for suggestions and leads.

To keep the collection current, the Library, from time to time, writes to the various school systems, requesting latest teachers' guides.

Material on theory and practice includes matter on systems of education, teaching principles and methods in all subjects, school administration, finance, teacher training, certification, supply and demand, and liberal, technical, and professional education. The collection covers material in the special areas of interest of Office of Education specialists, such as adult education, guidance and personnel services, library science, education of exceptional children, radio, television and other subjects.

The Department's library, designed for reference and research, lends its material on an interlibrary basis only.

THE OTHER COLLECTION is in the Office of Education itself: the Educational Materials Laboratory. A part of the Division of International Education, the Laboratory was originally designed to serve particularly the foreign educator. But it invites and welcomes the American teacher, student, or educational organization representative to its door.

The term "laboratory" is not an idle one. Here the Navy Department drafted the courses of study for its dependents' schools. Here educational groups may gather to discuss their problems with the Laboratory's staff and use its materials to help solve them. Here curriculum committees from school systems in nearby States have held meetings, and may do so again whenever they wish.

The Laboratory's outstanding collection is of textbooks in current use in American schools. At present, it has some 5,000 representative elementary and secondary textbooks, all on permanent loan from their publishers, through arrangements with the American Textbook Publishers Institute. Books are latest editions and cover all secondary and elementary school subjects.

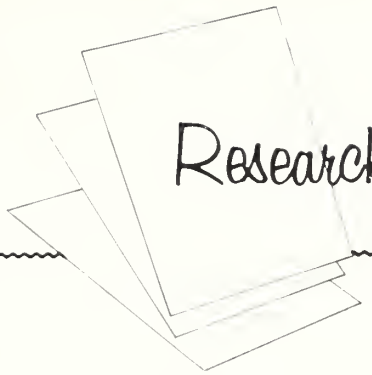
The Laboratory is working toward the day when it will have a complete collection of all the teaching aids that accompany the textbooks.

The Laboratory also has a 1,000-volume collection of professional books in education published in the last 10 years.

A special attraction of the Laboratory is its material for use in the teaching of English as a foreign language. It offers, also, such reference materials on foreign lands as bibliographies and pamphlets, and from time to time issues references for teaching about other countries.

Texts and teaching aids prepared in the educational missions of the International Cooperation Administration in 40 or more countries, make up yet another Laboratory collection.

Although the Laboratory is first a reference and research collection, it will lend, to teachers for class or school exhibits, photographs of children at school around the world and examples of work by schoolchildren in other lands.



Research Findings

HERE *School Life* continues its reporting-in-brief on projects that have been completed under the Office of Education's Cooperative Research Program, now in its second year. By the first of December 1957 the Office had received and approved the final reports from five research teams. The first of these was in time for last month's *School Life:* the fifth must wait for next month's: the intermediate three are summarized here.

POSTSCHOOL ADJUSTMENT OF THE MENTALLY RETARDED

TO COMPARE the postschool adjustment of mentally retarded persons who have spent some time in a special class with the adjustment of those who have not, William R. Carriker, consultant in special education for the Nebraska State department of education, made a 9-month retrospective study of 2 groups of mentally retarded young adults. Each group consisted of 49 persons, all former pupils of the public schools of Lincoln or Omaha who had left school sometime between 1947–48 and 1951–52 at an age of at least 14 years. In one group were persons who had spent at least 1 school year (on the average, 4 years) in special classes; in the other, persons who had never been served by such classes. The groups were evenly matched on the basis of intelligence quotients determined by individual test while the persons were still in school.

As his data mounted, Dr. Carriker found that his groups had similarities of background other than those of IQ—similarities in the marital status of parents, the extent of parents' dependence on welfare agencies, the occupational level of fathers, the rate of absenteeism from school, and the major reasons for absenteeism (illness, and neglect by parents).

In some ways, however, Dr. Carriker found, the special-class group on the average seemed to have begun their postschool lives with more disadvantages than the other group. Their fathers had a worse record of law violations; the subjects themselves had left school at a younger age (four-fifths of a year younger); they had spent $1\frac{1}{2}$ years less in school; and their grade level at the time of leaving had been a half grade lower.

Moreover, Dr. Carriker concluded, factors other than mental retardation had operated in the selection of the children for placement in the special classes. He found evidence that during their school years the special-class group had been more unstable emotionally than the other group, and more maladjusted; More of them had left school for reasons indicative of emotional instability; more than twice as many of them had been referred to juvenile court, and $1\frac{1}{2}$ times as many had been placed in institutions or homes for dependent children. These facts "appeared to substantiate both schools' policies of attempting to serve first, in their special classes, mentally handicapped youngsters who tend to be less adjusted when in school."

Despite early disadvantages, however, Dr. Carriker found, the special-class group made a record of postschool adjustment close to that of the other group. He reports that there was no statistically significant difference between the two groups in the number of their law violations, or in the mean weekly wages of the known employed men. Four married men in each group were buying homes; and men in both groups seemed to be fairly comparable in providing housing for their wives and families. In terms of employment Dr. Carriker found each group to have fared about as well (not counting housewives, 52 percent of the special-class group and 49 percent of the other were employed full time) most of them in unskilled or semiskilled occupations. Although the non-special class group had more members employed at higher occupational levels, members of the special-class group got a higher average rating from their employers. In neither group did the members belong to or participate in many community activities.

What the special-class subjects managed to achieve, Dr. Carriker believes, leads back to the attention they received in special classes: "That members of the experimental group have adjusted as well as they have . . . indicates that individual attention has been worthwhile especially since . . . they seemed to have been less adjusted during their school years."

In closing his report, Dr. Carriker notes that, at the time his subjects were in school, the teachers responsible for education of the mentally retarded had not been able to obtain in Nebraska colleges any courses designed for teaching such children. And he raises the question of "how much better adjusted these individuals [the special-class subjects] might have been . . . had they been served by teachers who had been better trained."

HOW CHILDREN PERCEIVE

HOW do children of different mental abilities "perceive" learning tasks? To know the answer would be to know much about how the learning process works and would have tremendous consequence for school practices everywhere.

Seeking the answer, Virgil E. Herrick and Theodore L. Harris, professors of education at the University of Wisconsin, have carried out a project in which they set a handwriting task for 30 children from the public schools of Madison, Wis., all about 9 years old but of different mental levels: 10 were normal, 10 superior, and 10 retarded.

The ways in which the children responded to the task indicate that mentally retarded children differ from normal and superior children in "perception of form and meaning." They find it difficult to match their product with other samples on a scale of handwriting. They find it difficult to judge which sample of several in their own handwriting is the best. As Drs. Herrick and Harris put it: "They do not appear to have a very clear picture of their own handwriting and of what they want their own handwriting to look like." Their emotional responses to learning situations also seem to differ: they seem more prone to "either anxiety or relative indifference regarding the task."

Since the project was set up to explore also the feasibility of making a more extensive study on perception, Drs. Herrick and Harris measure many of their results in terms of progress in techniques and direction; and they conclude that they have developed recording equipment and an experimental situation with great potential for dealing with the problem. Already they are being supported by the Cooperative Research Program in a second project, which builds on the results of the first and includes not only handwriting but reading, spelling, and arithmetic. It is concerned especially with improvements in the test situation and in the samplings of children, as well as in more detailed analysis of the kinds of perception that need study, especially perception of form and meaning.

FACTORS IN SOCIAL SUCCESS

TO EXAMINE the effects of a child's intelligence and social power on his interpersonal relations, Alvin Zander and Elmer Van Egmond, director and research assistant at the Research Center for Group Dynamics, University of Michigan, have studied data on 230 second-graders and 188 fifth-graders with different combinations of intelligence and social power: High-high, low-low, high-low, low-high (social power was defined as the ability to influence the behavior or beliefs of others). For each child they determined degree of social success on the basis of (1) how his teachers saw him, (2) how his peers saw him, and (3) how he behaved in a "standardized" social situation.

Among the conclusions the researchers made at the close of their study, there are several that should throw light on the problem of how to teach children to work together and be comfortable in group settings:

- Intelligence by itself is not an important determinant of social relations.
- Taking boys and girls together, highly intelligent children behave about the same whether they are high or low in power, but highly intelligent *boys* with high power clearly behave in a manner that might create strong stress in social relations.
- Less intelligent children behave differently according to the power they possess. Those with more power—boys especially—indicate sympathy, understanding, and vigorous social interaction. Those with little power tend to be passive and withdrawn.
- Children identified by their peers as having the most social power are generally most successful in convincing others in a discussion group and are also described by teachers as most successful in influencing the regular activities of the classroom.
- The various combinations of social power and intelligence seem to have the same effects in second-grade children as in fifth-grade children.
- A child's power seems to be based more on attractiveness and expertness than on ability to threaten.
- Amount of social power is more of a determinant for a boy's social relations than for a girl's.

STATE SCHOOL SYSTEMS, 1955–56
Advance Information

A PRELIMINARY report by the Office of Education on the statistics of State School Systems for 1955–56, giving estimated totals for the Nation based on returns from 35 States and the District of Columbia, indicates that education in the United States is a giant enterprise. All along the line—in numbers of pupils, graduates, and teachers, in income and expenditures—the figures were higher than those reported for any earlier year by the Office.

When complete returns are in from all States, the Office will publish its final report on State school statistics for 1955–56 as chapter 2 of the *Biennial Survey of Education*. Meanwhile, persons interested can refer to the preliminary report, Circular 508 (October 1957), prepared by Samuel Schloss and Carol Joy Hobson. Free copies are available from the Publications Inquiry Unit, Office of Education, Washington 25, District of Columbia.

In the table that follows, figures for 1955–56 are from Circular No. 508. Those for 1953–54 are from *Statistics of State School Systems: Organization, Staff, Pupils, and Finances 1953–54*.

Statistics of public elementary and secondary day schools, continental United States, 1953–54, and preliminary 1955–56

Item	1953–54	1955–56 (estimated)	Percent of increase
School-age children (5–17 years inclusive)	34,500,000	37,300,000	8
Total enrollment	28,800,000	31,100,000	8
High-school graduates	1,129,000	1,256,000	11
Total instructional staff	1,098,000	1,217,000	11
Income:			
Revenue receipts	$7,867,000,000	$9,694,000,000	23
Nonrevenue receipts	1,824,000,000	2,362,000,000	30
Expenditures:			
Current	6,791,000,000	8,193,000,000	21
Capital outlay	2,055,000,000	2,581,000,000	26
Interest	154,000,000	209,000,000	36

Public School LIBRARIES
Growth and Needs

By MARY HELEN MAHAR
Specialist for School and Children's Libraries

FOR the fourth time, public school libraries have a chapter of their own in the Office of Education's *Biennial Survey of Education*—a chapter in which they are presented as the subject of a statistical study for the school year 1953–54.* The chapter presents both evidence of growth in public-school libraries and areas in greatest need of development.

Service in elementary schools

Of special concern to educators are the statistics on library services in the elementary schools. Although modern methods of education require the services of school libraries and professional librarians in both elementary and secondary schools, of the 104,365 elementary schools included in the study, only 24,908, or 24 percent, were served by centralized elementary school libraries. The percent of elementary schools with centralized libraries showed an increase of 8 percent from 1941–42 to 1953–54. Nevertheless, 73,265 of the elementary schools studied in 1953–54 were without centralized libraries and received service from classroom collections or other types of library service. As many as 6,192 elementary schools were without library service of any kind.

*Chapter 6 of the *Biennial Survey of Education in the United States, 1952–54*, "Statistics of Public School Libraries, 1953–54," was prepared by Nora E. Beust, who until her retirement a few months ago was Office of Education specialist for school and children's libraries, and by Emery M. Foster, head of the Reports and Analysis Unit. Copies are available at 30 cents each from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Previous chapters in the *Biennial Survey* devoted to public school libraries were for the year 1934–35, 1941–42, and 1947–48.

Service in secondary schools

For high schools, the ratio of centralized libraries is high. Of the 16,785 schools studied, 15,924, or 95 percent, were served by centralized libraries. Of the rest, 180, or 3 percent, were served by classroom collections only; 171 had other types of library service; and 210 had no library service at all. Together, these schools employed 11,393 librarians, but some had as many as 3 or 4, while others may have had only a part-time librarian, possibly untrained.

Service in combined schools

An interesting side to school library development in recent years is seen in the increase of combined elementary-secondary schools, some of them 12-grade. Most of these schools have centralized libraries, which often serve all grades. Of the 7,681 combined schools included in the 1953–54 study, 6,018 had centralized libraries, 1,002 were served by classroom collections, and 459 had other types of service. The 1941–42 study included 1,068 of these schools, of which 3,310 had centralized libraries; 617, classroom collections; and 117 other types of library service. The increase of consolidated schools has been accompanied by a decrease in 1-room schools, many of which had no library service.

The combined schools studied in 1953–54 were served by 8,284 librarians. This is a large number for 7,681 schools, but some schools might have employed, as part-time librarians, several teachers with little or no library training.

Trained librarians

It is important that this study points up the need to strengthen programs for recruiting and training professional school librarians. The numbers of trained and untrained librarians in 1952–53 show that the need for trained librarians is felt in all schools, but especially the elementary:

Schools	*Professionally trained librarians*	*Librarians with little or no training*
Elementary	3,116	7,660
Jr. and sr. high	8,118	2,975
Combined elementary and secondary	4,137	4,117
Total	15,971	11,782

Thus, only 52 percent of the school librarians included in the study were professionally trained. The fact that only 3,116 professional school librarians were available for service to 104,365 elementary schools in 1953–54 is strong evidence of the necessity for special attention to elementary school library service.

Expenditures

Schools reporting library expenditures for 1953–54 spent $25,222,207 on library materials (books, pamphlets, periodicals, newspapers, audio-visual materials, binding and rebinding) for an enrollment of 24,017,371 students, or $1.05 per pupil. This is 74 cents more per pupil than was reported in the 1941–42 study, but changes in the purchasing power of the dollar between 1941 and 1953 made the gain less significant. An appropriation of $1.05 per pupil is far below the minimum recommended in the 1945 American Library Association school library standards, currently under revision by the Standards Committee of the American Association of School Librarians, a division of ALA.

The study, and the report

To compile their data the authors of *Statistics of Public School Libraries, 1953–54* used a sampling technique. They collected data from 64 percent of all city systems and 50 percent of all county and rural systems and then enlarged them to represent all systems. The report includes a breakdown of data by regions, States, and cities.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

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ADMINISTRATIVE FACILITIES IN SCHOOL BUILDINGS. by *James L. Taylor*. 1957. 52 pp. 45 cents. (Special Publication No. 6)

EDUCATION DIRECTORY 1956–57. PART 4. EDUCATION ASSOCIATIONS, by *Edith Haswell Rogers*. 1957. 79 pp. 30 cents.

EDUCATION IN THE USSR. 1957. 226 pp. $1.25. (Bul. 1957, No. 14)

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INSTRUCTION IN FARM MECHANICS, by *A. H. Hollenberg*. 1957. 63 pp. 35 cents. (Voc. Div. Bul. No. 267)

LOCAL SCHOOL CONSTRUCTION PROGRAMS, by *N. E. Viles*. 1957. 80 pp. 55 cents. (Bul. 1957. No. 20)

SUPERVISORY PERSONNEL DEVELOPMENT, by *Earl M. Bowler*. 1957. 40 pp. 25 cents. (Voc. Div. Bul. No. 266)

FREE

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

LIST OF EDUCATIONAL AM AND FM RADIO AND TELEVISION STATIONS BY STATE AND CITY, by *Gertrude G. Broderick*. November 1957. 19 pp.

NEW SCHOOL BUILDINGS IN EUROPE. by *Ray L. Hamon*. Reprint from *School Life*. November 1957. 4 pp.

PRELIMINARY STATISTICS OF STATE SCHOOL SYSTEMS 1955–56, by *Samuel Schloss* and *Carol Joy Hobson*. October 1957. 4 pp. (Cir. No. 508)

TO CHERISH AND CARE FOR . . . . by *Effie G. Bathurst* and *Wilhelmina Hill*. Reprint from *School Life*. November 1957. 4 pp.

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OFFICE OF EDUCATION

AMONG THE CONTENTS

February 1958

Look Now

at YOUR OWN CHILD

INEVITABLY the problems of American education come back to the local community. If the problems are there, we must start there to find the answers.

I ask you now, you as a member of *that local community*, to look carefully and appraisingly at *your own children*—at the other children around you, and at your schools.

How do you want these youngsters to grow up? Mass-taught because there isn't sufficient classroom space for them? Indifferently taught because the teaching profession may fail to hold its outstanding people? Half-taught and prepared only for mediocrity because no one encouraged them to stay in school?

Any or all of these things could happen to the children in your community—unless you take an active interest in your school—in *all* schools—and express that interest meaningfully.

Express it in letters to your school board, city and county officials, State and national legislators. Express it in active support and encouragement of teachers, in personal participation in school affairs.

Express it with understanding and with vigor.

School problems cannot be solved by magic but only by vigorous action on the part of informed citizens who care enough to work hard enough for good schools.

Only you can do it.

If you fail to act by voicing your concern as a citizen, then you have failed in citizenship itself.

Look now at your own child and see if the effort is worth it.

An excerpt from Education '57, *first radio-television report on education to the people of America by the U. S. Commissioner of Education, December 1957.*

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

CARROLL B. HANSON
Director
Publications Services

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Before you discuss it, define your term:

"Direct Teaching by Television"

By Ronald R. Lowdermilk

EVERYBODY, educator and layman alike, seems to have an opinion about direct teaching by television. Many are all for it, many against it. Few are neutral. Some classroom teachers welcome it as a highly versatile teaching aid; others see it as a threat to job security. One school administrator hails it as the long-sought answer to shortages in school housing and qualified teachers; another considers it a stopgap measure, to be used only until a permanent solution is found. One segment of the school community applauds its use as evidence of progressive outlook; another condemns it as a second-rate substitute for regular classroom instruction.

Just where do you, the reader, stand on this question of the academic validity of using television for direct teaching of school and college subjects?

You "think it's a good thing"? Precisely what is it you are endorsing? Is it the use of television as a source of new and vital content materials to *supplement* the basic work of the classroom teacher? The use of it to provide a "master teacher" for every subject? Or the use of it to accomplish the total teaching job for a specific subject?

Conversely, if you are opposed to direct teaching by television, why do you object? Do you question its ability to do more than just "transmit" or "communicate" subject matter? Do you feel it tends to emphasize showmanship at the expense of fundamental education and psychologieal progression? Or do you doubt that it can ever hope to provide the deep intellectual and spiritual stimulation inherent in the true classroom situation?

Actually, the term "direct teaching by television" has come to have so many meanings that it is necessary to define precisely what particular aspect of it is under consideration before we can evaluate its pros and cons. Most of the major differences of opinion among researchers in the TV education field can be traced to their having assumed common meanings for certain terms that differ widely in meaning from one project to another.

A careful examination of the organic structure of more than 100 current experimental projects involving direct teaching by television reveals three fundamentally different classification bases in common use: Character and format of the lesson presentation; intended educational role of the lesson; and responsibility for content and teaching methods.

Lesson-Presentation Format

In terms of the character and format of the individual lesson presentation, any use of television for the direct teaching of a regular school or college subject can be classified into one or another of three categories:

Televised Education

Televised lesson presentations undertake to bring the viewer a picture situation approximating an actual classroom learning experience, with the expectation that the viewer will automatically feel himself an active participant. However, findings from research using this type of presentation tend to indicate that the average viewer, when confronted with a TV picture of a teacher before a group of students, is not so likely to feel himself a participant as to be merely a spectator of action that is happening to somebody else. Instead of paying attention to the TV teacher, therefore, he simply watches another TV drama unfolding before him.

Thus there is a growing tendency to reduce the size of on-camera student groups, or to eliminate use of such groups entirely and to employ a camera angle directly facing the teacher. Lessons originate from a studio set depicting the front of a conventional classroom. The teacher stands or sits behind a typical teacher's desk, turning, from time to time, to point out words or phrases on the chalkboard or to graphic information on maps or charts. Instead of speaking to an on-camera class-group, the teacher teaches the camera directly, maintaining continuous eye-to-eye contact with every viewer.

Lesson Broadcast Production

Whether intended for broadcast over a local television station or for distribution over a closed-circuit TV system to specific viewing groups, any lesson broadcast production is actually a television program. In it, a lesson series is organized around sequentially related topics that lend themselves to TV programing. Each lesson presentation employs professional broadcast television production techniques and showmanship. Those who advocate this type of lesson presentation contend that anything short of this will end only in failure to realize TV's "full educational potential."

It is understandable why courses presented over television broadcast stations employ this type of lesson-presentation. Lessons must conform

Dr. Lowdermilk is the Office of Education's specialist for technical phases of educational radio-television, Radio-Television Services.

to established production practices and programing policies, and usually the station's regular production staff assists the teacher-on-camera. However, even in direct teaching over closed circuit TV systems, there is at least some use of the production tricks and showmanship of professional broadcast television since most members of the system-operations staff are recruited from broadcast television.

TV-Instrumented Teaching

TV-instrumented teaching employs television programing facilities simply to enable the teacher-on-camera to do a more precise job or to accomplish a given set of teaching objectives more quickly or thoroughly than he could in the same time without it. Here, as in the better lesson presentations in *televised education*, the teacher "teaches the camera," taking maximum advantage of the opportunity to employ a variety of illustrative materials, mechanical and electrical analogs, and working models, along with production techniques and devices for directing viewer attention and aiding visual comprehension. Under no circumstance is there an attempt to make the lesson a "show." Emphasis is on expediting comprehension—not on entertaining. The TV teacher is usually entirely self-directed and, if desired, may even perform necessary camera aiming, framing, and switching operations by pushbutton remote control, thus eliminating cameramen and program director from the immediate set.

Intended Educational Role

Considered in terms of the precise educational role each lesson presentation is intended to serve, any direct teaching by television can be classified under one of four categories:

Supplementation Programing

Supplementation programing undertakes simply to present educationally significant material on a succession of interesting topics in any given subject. Showmanship and emphasis on human interest are used to attract the widest possible audience. No series of programs is intended to serve as the basic structural sequence for teaching any course; instead the individual classroom teacher accepts or rejects each program in a series on the basis of its applicability to the classwork in progress. In short, any program series of this type is intended to supplement the basic teaching of the local classroom teacher, not to dominate it.

Much of the educational programing initiated by local commercial TV stations tends to fall into this category, as does some of the local school-of-the-air programing.

Basic Teaching Job, Supplemented Locally

Another type of teaching by TV attempts to teach the basic essentials of a given course, leaving it to the local classroom teacher to adapt the TV lessons to the needs and interests, the comprehension level, and the experience of her class.

Of the hundred or more experimental TV teaching projects currently in progress, a majority are using this type of lesson presentation. It is also found in much of the local TV school-of-the-air programing.

Communication Only

Yet another type of TV education extends only through the communication phase of the total teaching process, leaving the classroom teacher with full responsibility for the application phase.

Advocates of this type of TV teaching hold that most research findings showing TV teaching to be more effective than conventional classroom teaching are based wholly on achievement type tests and thus do little more than establish TV teaching's some what greater effectiveness in performing the communication phase of teaching—that, in the final analysis, research so far has produced no objective evidence that direct TV teaching can make learning functionally operative in the intellectual processes and disciplines of students. Until research proves otherwise, they contend, we must proceed on the assumption that responsibility for the application phase of teaching properly rests with the classroom teacher. However, inasmuch as the communication phase of teaching occupies somewhat over three-fourths of the average teacher's working time, the use of television for the communication phase alone may be a means whereby more able teachers can direct a greater portion of their time and energies to the application phase.

This type of TV teaching has been adopted as the basic teaching pattern for the closed-circuit television project in the public schools at Hagerstown, Md., and is finding increasing use elsewhere.

Total Teaching Job

A small but vocal minority of educators contend that, if we are ever to find a solution to our schoolhousing and teacher-shortage problems, we must ultimately permit direct teaching by television to take over the total teaching job—at least in general courses of the orientation type. They argue that, although achievement tests are the only basis for current research findings favoring TV teaching, the findings do not preclude the possibility of intangible learning gains; that, after all, learning gains from conventional teaching are predicated on the same kind of achievement measurement. Besides, they say, with more experience in direct teaching by television, methods are bound to improve; and the improvements may eventually enable psychologically precise TV lesson-presentations to do the total teaching job.

So far, however, such all-out use of television is being made only in limited experiments in selected school and college subjects and in a number of college extension courses offered to off-campus students.

Responsibility for Content and Methods

Finally, on the basis of who decides what will be taught and how it will be treated, any direct teaching by tele-

vision can be classified into one of three categories:

Master Teacher

The "master" teacher approach to direct teaching by television means selecting the most skillful local teacher in a conventional classroom situation to serve as the teacher-on-camera and making her wholly responsible for deciding lesson content and method of presentation. Most of the earlier attempts to teach regular school and college subjects by television employed this approach, which sees television extending the classroom to take in student groups located elsewhere and enables the teacher-on-camera to reach unlimited numbers of students at once—an approach that still finds wide acceptance.

Teacher-Producer Team

The teacher-producer team approach is based on the theory that the full educational potential of television cannot be realized unless the teacher-on-camera (selected for a thorough knowledge of his subject and ability to project himself on television) is teamed up with an experienced television producer, each considered professionally equal to the other. The two decide jointly *what* will be taught, but *how* it will be presented is held to be a production matter, properly referable to the director. On camera, the teacher performs on cue from the director.

This is the approach most widely used today for broadcast of lessons over local TV stations. Even in closed-circuit projects, where there is no necessity to conform to broadcast-television usage, this approach is usual; system-operations personnel, most of whom are recruited from television broadcast stations, are inclined to favor it.

All-Teacher Team

Through another approach, all teachers of a given subject whose classes are to use a particular series of TV lesson presentations share in determining *what* will be taught and *how* it will be treated. Having delegated to one or more of their number responsibility for preparing and making the on-camera presentations, the teachers must be prepared, as soon as the TV lesson is over, to proceed directly with whatever teaching may be needed to complete the learning experience of their classes.

This approach, developed expressly for the closed-circuit project at Hagerstown, Md., appears to be spreading, with various modifications, to other television teaching projects.

TO SUM UP: No attempt to categorize any given television-teaching experiment is acceptably definitive unless it classifies the teaching three ways, once for each of the three variables—*lesson-presentation format, intended education role,* and *responsibility for determining content and method.*

So what was it you were saying about "direct teaching by television"? Before you start arguing either for it or against it, take time to define precisely what aspects of it you have in mind.

Handbook for School Activities

EVERY year this country's schools spend hundreds of millions of dollars on such activities as athletics, entertainment, clubs, and food services; but about these funds, no comparable or reliable nationwide information exists.

As a step toward gathering such information, the Office of Education on December 9 began a project to prepare a handbook that will be the basic guide for accounting for school activities in the United States. Aims of the handbook will be to—

- Establish for the first time nationwide standard accounts, terminology, and classifications for school activities primarily supported by nontax funds.
- Suggest procedures to secure efficiency, economy, and safety in the handling of such funds.
- Prepare a system of accounting for these funds adaptable for use throughout the United States.

These objectives were established at a meeting of members of the National Advisory Committee for Financial Aecounting for School Activity Funds, a group appointed by Commissioner Derthick to assist in the production of the handbook, and members of the Office staff. Members of the committee are Finis E. Engleman, American Association of School Administrators; Charles W. Foster, Association of School Business Officials of the United States and Canada; Edgar Fuller, Council of Chief State School Officers; Robert W. Eaves, Department of Elementary School Principals, NEA; Paul E. Elicker, National Association of Secondary School Principals; and Sam M. Lambert, Director of Research, NEA.

Five Office staff members make up the steering committee for the project: Fred F. Beach, chief, State School Systems; John R. Ludington, chief, Secondary Schools; Helen K. Mackintosh, chief, Elementary Schools; Clayton D. Hutchins, chief, School Finance; and Paul L. Reason, specialist in educational reports. Everett V. Samuelson and Virgil R. Walker of the Office staff will compile the manual, but hundreds of members of the organizations represented on the National Advisory Committee will share in its development.

Participating organizations plan to adopt the handbook on completion.

Training the Practical Nurse

The changing role of the practical nurse challenges educators and administrators at 7 conferences across the Nation

By the Practical Nurse Education Section, Vera P. Hansel, Chief

IN RESPONSE to the Nation's growing need for more and better prepared nursing personnel, vocational educators with responsibility for training the practical nurse for her role are evaluating their progress and resetting their goals.

Such review went on intensively during the latter half of 1957, when 7 intraregional work conferences across the country, called by the Vocational Division of the Office of Education.* drew representatives from 44 States, 3 Territories, and the District of Columbia—all for the common purpose of helping States more effectively make and carry out plans for practical nurse training program. Those who attended made up a cross section of many groups concerned with such programs under public auspices **; and they focused their attention on subjects which they themselves ranked high in terms both of wide interest and of program need:

A changing role . . .

Graduates of practical nursing programs are being assigned more responsible duties and their changing role is basic to every training program.

Nursing homes and private duty still call for many practical nurses, but only a small number are entering this area of employment. Many practical nurses are being asked to remain in the general hospital after graduation; and many continue to work in the hospital where they had been assigned for experience in patient care. Some are finding employment in special hospitals, such as psychiatric hospitals and sanitariums for chronic diseases and tuberculosis. A few are working in public health agencies such as visiting nurse services or clinics under the auspices of nursing bureaus; and doctors are utilizing the practical nurse to a greater extent in their offices.

. . . and the curriculum

Thus more is being expected of the practical nurse, and the programs under which she is trained must keep pace with the change. The conferees centered much attention on what ways can be found to give the trainee, in the limited time now allotted for her education, not only the information and skills usually accepted as necessary for her work but also the depth of understanding she needs for her new role. Everyone agreed that all her learning experiences, both in the classroom and on the hospital ward, need to be related to the increased responsibility that the hospitals and other health agencies are placing on her.

Although it was agreed that psychiatry has need for well-prepared practical nurses, there was some disagreement as to what constitutes the best preparation. Some educators expressed the belief that the practical nurse should first get a sound and broad background through wide experience in a general hospital, where concepts of mental health are integrated with the total nursing care of medical, surgical, obstetrical, and pediatric patients; and that she could then build upon this base through an in-service education program in the mental institution that employed her. There were some, on the other hand, who felt that selected and guided experiences with patients in a psychiatric service would enrich the program for the student and still leave time for adequate experience with the various types of patients now being cared for by the practical nurse during her hospital practice program.

Certainly the question of which is the better course emphasizes the need for careful scrutiny of the curriculum to determine where it should be revised to make it meet the objectives growing out of the changing function of today's graduate.

. . . selection of students

The conferences also pointed up the importance of a carefully planned recruitment program. This type of program places in training only those students who are capable of satisfactorily completing the training. Poor selection results in a high attrition rate

*The Office of Education administers the practical nurse education program authorized by Public Law 911, 84th Cong., Title III (George-Barden Act).

**The Office of Education was represented by the Assistant Commissioner for Vocational Education and by members of the Trade and Industrial Branch and the Practical Nurse Education Section.

States and localities were represented by directors of vocational education, supervisors of technical and industrial education and practical nurse education, teacher trainers, school principals, chairmen of practical nursing departments, nurse coordinators, and classroom and clinical instructors.

Other groups represented included boards of examiners of nurses, hospital administrators and nursing directors, advisory committees, university faculty in general and nursing education, directors of visiting nurse services, education consultants from psychiatric departments, operators of nursing homes, and practical nurses.

and a high cost of educating each nurse. Preentrance tests as well as careful study of the candidate's health and home background will do much to prevent dropouts.

. . . *training facilities*

Several of the conferences considered physical facilities and clinical practice areas. The size and type of classrooms needed will be affected by many factors, such as the availability of nutrition and science laboratories, the number of laboratories that can be shared with other students, the number of students, and the distance between the school and affiliating hospitals. Some programs operate in large vocational high school buildings; others have only a small building separate from the home school, or space assigned to them in a grammar school or academic high school. In some cities the program is completely housed in classrooms provided by the affiliating hospital. In some, the school furnishes all classroom equipment; in others, the hospital provides some. Conferees agreed that uniformity of facilities was not necessary; the important thing was to have the kinds and quantity of equipment, the physical space and the patients necessary to provide for the maximum learning experience for all students.

. . . *instructors*

Discussions about the preparation of faculty for teaching practical nurses revealed some of the complexity of the teaching situation.

Classes for the most part are heterogeneous groups, ranging in age from 16 to 60; in education, from completion of the eighth grade or its equivalent to a college degree; in experience, from a sheltered home life to one of responsibility, decision making, and community activity.

Added to all this is the instructor's need to understand the principles underlying the nursing of patients in modern society. The practical nurse's knowledge of nursing care is almost as broad as that of a professional nurse but does not have the same depth. Instructors in schools of practical nursing must understand the scope and depth of professional nursing and be able to determine how much of that scope and depth should be passed on to the practical nurse trainee in preparing her to function adequately in the many situations facing today's graduate. The instructor in a school of practical nursing needs a broad preparation in two professional fields—nursing and teaching.

At present there is a serious shortage of well-qualified professional nurses in practical nursing programs. Especially severe is the shortage of instructors in the clinical area, where there is the greatest opportunity for student learning related directly to patient need. A concerted effort must be made to help well-qualified nurses prepare themselves for teaching and supervising students in the hospital.

. . . *program patterns*

The conference participants had an opportunity to gain a clearer understanding of the different organizations and operational patterns found in the various types of programs. Represented were the adult post-high-school programs accommodated in several different physical facilities, some providing housing and/or stipends for students; programs offered to high school students during the last 1 or 2 years of a 4-year program; and programs in which both high school pupils and adult students attend the same classes and have their clinical experiences together in the same hospitals.

For the future

Topics that were rated important for further study in the near future included curriculum revision and methods for assisting instructors to improve their teaching. State supervisors felt they need an opportunity to explore as a group new ways in which they can assist local communities to improve and expand programs.

A 5-day national conference on practical nurse education is being planned for February as a direct result of the wide interest and desire expressed by those concerned with practical nurse education in the States. At this meeting, the conferees will search for those practices that contribute most to successful planning and operation of practical nurse education programs in the States.

NOTE: Reports on the 7 intraregional conferences may be obtained free by writing to the Practical Nurse Section, Division of Vocational Education, Office of Education, Washington 25, D. C.

"les girls"

A NE

By Mary S. Resh, program speci

THROUGH THE AGES, woman has been a topic of conversation. Eve and Helen of Troy came in for their share of publicity; Joan of Arc and Florence Nightingale are remembered for their vision and dreams. But woman's chief claim to fame has always been her function as wife and mother, even as it is today.

However, a changing cultural concept of woman's role in our society has added a second dimension to the destiny of many homemakers—that of wage-earning. Today countless numbers of women are assuming this dual responsibility.

Never before in our history—not even in the crucial years of manpower shortages during World War II—have women played so important a role in our labor force as they do today. Moreover, predictions for the years ahea emphasize the unprecedented extent to which the wome of America will be needed in industry and business i we are to maintain and increase our economy an productivity.

Ever alert to socioeconomic trends, vocational educa tors have been giving some serious thought to woman power—to the figures that have been gathered, the studie that have been made, the reports that have been written and the statements that have been broadcast. To analyz their role in meeting our manpower needs through th effective utilization of womanpower, vocational educator have raised all kinds of questions—and they have have come up with some good answers.

What's New About Women Workers' Figures?

In 1956 There Were 20.9 Million Women In America's Labor Force

. . . there are more women workers today than ever before.

. . . nearly one-third of our labor force is made up of women.

. . . women are employed in a wider range of jobs than ever before.

. . . one out of 3 women (14 years of age and over) works outside the home.

. . . the average jobholding woman is 39.5 years old.

. . . three out of every 5 women who work are married.

By 1956 There Will Be 26.3 Million Women In The Labor Force, An Increase of 5.4 Million

. . . the 14 to 24 age group is expected to increase by 1.8 million.

. . . the 35 to 44 age group will increase by nearly 1 million.

. . . the 45-plus age group will increase by 2.6 million.

Why So Many Needed?

Our expanding economy and productivity require increasing numbers of skilled workers.

Serious shortages already exist in many occupations.

These shortages grow even more acute as our 18- to 24-year-olds become less available for work:

. . . more young people are staying in school beyond high school graduation.

. . . many enter the armed services.

. . . girls marry and rear families at an earlier age.

Are Vocational Educators Responsible for Women?

Vocational educators know that our labor supply must be well-trained; that's why they have geared training programs to prepare today's workers with today's skills for today's jobs.

Girls and women constitute a reser voir of labor supply that must b trained to fit into today's employmen market:

. . . many of the 5.4 million girls and women who will join the labo force between now and 1965 are al ready being trained through public vocational education programs.

. . . but many more will have to be trained; and vocational educators must provide them with training opportunities.

. . . ongoing programs will have to be expanded and new ones will have to be inaugurated so that girls and women can meet their increasing employment opportunities.

Who Are These Women?

They Are Young Women

. . . who plan on working after they complete high school.

. . . who work intermittently after marriage.

. . . who leave college and need job skills for employment.

Illustrations by Leslie Jacobs, reprinted from
CHARM: The Magazine for Women Who Work, March 1957

CHAPTER IN THE MANPOWER STORY

Trade and Industrial Education Branch

. . who reenter the labor market permanently when their children reach school age.

They Are Mature Women

. . who are homemakers and have never worked outside the home.

. . who find their former job skills are obsolete.

. . who want to enter a different occupation.

They Are Employed Women

. . who can be upgraded to higher level jobs through advanced training.

Is Something New Being Added?

New occupations, particularly in health services, are creating opportunities for qualified women.

We have many new programs to prepare girls and women for these occupations, but we must inaugurate even more training programs to produce an adequate supply of skilled women to work as—

. . . DENTAL ASSISTANTS
. . . DIETARY ASSISTANTS
. . . MEDICAL LABORATORY ASSISTANTS
. . . MEDICAL SECRETARIES
. . . SURGICAL ASSISTANTS
. . . X-RAY TECHNICIANS
. . . INSTITUTIONAL HOUSEKEEPERS FOR HOSPITALS AND HOTELS
. . . NURSERY SCHOOL ASSISTANTS
. . . FACTORY PRODUCTION
. . . NEEDLE TRADES
. . . OFFICE OCCUPATIONS
. . . PRACTICAL NURSING
. . . SALES WORK
. . . SERVICE OCCUPATIONS

What Training Will They Need To Do What?

They need training to become the skilled workers now in short supply in the so-called women's occupations.

They need training to help produce the goods and services our rapidly growing population demands.

Educators, therefore, must train more girls and women for jobs in these fields:

. . BEAUTY CULTURE
. . COMMERCIAL FOODS TRADES

How Technical Can Women Be?

Our technology requires a competent workforce. Already in short supply, technicians are more and more urgently needed as our scientific and production tempo steps up.

Industry is hiring an increasing number of women for jobs of a technical nature. Sold on the successful performance of their woman technicians, employers want more and are looking to vocational education to recruit and train them as:

. . . CHEMICAL TECHNICIANS
. . . DRAFTSMEN
. . . ELECTRONICS TECHNICIANS
. . . INDUSTRIAL TECHNICIANS
. . . OPTICAL TECHNICIANS

How Do Educators Generate Womanpower?

They Survey Community Needs

. . . to determine what occupations need workers now and in the future.

. . . to find out what skills and knowledge these workers must have.

They Analyze Present Training

. . . to see if preemployment, retraining, and upgrading courses are available to girls and women.

They Inaugurate or Expand Programs

. . . to meet demands for skilled workers in occupational areas for which training has not been given.

. . . to satisfy growing needs not being met by present programs.

. . . to train girls and women for their new technical opportunities.

Education for School Librarianship

. . . Some Recent Developments

By Mary Helen Mahar and Willard O. Mishoff

THE PREVAILING demand for school librarians to fill positions in new schools and in schools initiating or expanding library programs has increased pressure on colleges and universities offering library education to recruit and train greater numbers of school librarians. It has also resulted in the organization of new departments of library education in teacher education institutions. An examination of official announcements issued by nearly 1,900 higher educational institutions in the United States in 1956–57 finds that 563, or nearly one-third, were endeavoring to meet this demand through programs in school library education. Inevitably, such a growth of programs has led to some confusion about standards for the professional preparation of school librarians, and has raised some questions on the accreditation of these programs.

THE SCHOOL LIBRARY profession has agreed generally that preparation for school library service should be threefold: General education, philosophy and methods of education, and librarianship. The profession also agrees that the curriculum in librarianship should include both general courses and courses special to school library service. If the school librarian is to fulfill his functions effectively, his professional education should give him a status equal to that of other members of both the library and the teaching profession. He cannot adequately meet these requirements in professional education in a 4-year undergraduate program; such requirements point to 5 or 6 years of undergraduate and graduate study. Because of the increasing opportunities in teaching, supervisory, and administrative positions and the demand for professional leadership in the school library field, there is also need for study and research by school librarians on the doctoral level.

Programs in school librarianship, in general, aim at developing in students (1) knowledge of various school library and instructional materials, (2) competence in school library administration, (3) recognition of the library's place in the school program, (4) understanding of the library's function in the educational development of children and young people, and (5) appreciation of librarianship as a profession.

THE BASIC PROGRAM of the graduate library school usually consists of approximately 30 semester hours of study, or the equivalent of one academic year or more, and leads to the master's degree. Course work beyond the fifth-year level is dependent upon the individual student's background and elected field of study. In general, graduate professional studies aim at (1) analyzing the functions of libraries in society and education, (2) investigating the field of communications (print, film, radio, and television) in its relation to school librarianship, (3) emphasizing the underlying principles and problems of school library service, (4) exploring the literature and bibliography of library science, and (5) familiarizing the school librarian with methods of research applicable to his problems. Library schools offering such graduate programs encourage students to broaden their scholarship and professional outlook through advanced courses in library science and related courses in education.

The American Library Association, through its Committee on Accreditation, has developed standards for the accreditation of graduate library schools. Many of these schools accredited by the American Library Association are offering professional education for school librarians and are contributing significant numbers of professional librarians to the school library profession. However, they represent only 29 of the 563 institutions offering library education, and they cannot begin to meet the needs for school librarians.

A LARGE PART of the responsibility for the professional education of school librarians has, therefore, devolved upon those teachers colleges and liberal arts colleges which offer library education. Some offer courses in library education at the undergraduate level, some at the graduate level; and some have programs that combine undergraduate and graduate courses.

For some time the school library profession has recognized the advantages in beginning professional courses in librarianship at the undergraduate level—for example, the provision of temporarily certified school librarians at the termination of 4 years of undergraduate work, and the possibility of coordinating undergraduate programs with graduate programs in librarianship, education, and general studies.

Standards for Library Science Programs in Teacher Education Institutions, prepared by the Board of Education for Librarianship of the

Miss Mahar is specialist for School and Children's Libraries and Mr. Mishoff is specialist for College and Research Libraries, both in the Library Services Branch, Office of Education.

American Library Association (now called the Committee on Accreditation)[1] in 1952, based its standards on the assumption that "the basic program of education for school librarianship is legitimately to be given at the undergraduate level but the amount of such work in library science should not be so great as to limit the amount of general and professional education common to all teachers; therefore, these standards are intended to accredit only undergraduate curriculums totaling not less than 15 and not more than 18 semester hours." According to the standards, "There should be articulation between the undergraduate programs in library science and the graduate library school programs in the same area."

These standards were prepared for the use of the American Association of Colleges for Teacher Education. Since the function of accrediting teacher education institutions has now been committed to the National Council for Accreditation of Teacher Education, these standards are no longer in effect. However, they represent professional opinion on undergraduate education for school librarianship, which may well be considered in the development of future standards.

The technical preparation of school librarians is provided at the undergraduate level through basic courses in library methods. This instruction emphasizes the techniques of selecting, acquiring, classifying, cataloging, and using books and other library materials suited to a school library, as well as school library administration. Supplementing these fundamentals of librarianship are other courses, useful alike to teachers and librarians, in children's and young people's literature, storytelling, audiovisual materials, and methods of using school library materials in teaching. Students are usually given practical opportunities for observation and supervised work experience in centralized school libraries. In colleges for teacher education, these activities are usually integrated with student-teaching programs.

ALTHOUGH LIBRARY education programs for school librarians were available in 1956–57 in 563 institutions of higher education in continental United States and its outlying parts, their distribution by Census regions varied widely. There were 62, or 11 percent, of these institutions in the 9 Northeastern States; 197, or 35 percent in 12 North Central States; 208, or 36.9 percent in 17 Southern States; 95, or 16.9 percent in 11 Western States; and 1, or 0.2 percent in 5 outlying parts of the United States. A majority of the programs for school librarians were administered in a department of library science, but in at least 65 institutions such courses were administered or offered in the department of education.

PROGRAMS OF SCHOOL library education varied widely in scope. At the top were 121 colleges and universities that provided courses totaling 24 or more semester hours, or the equivalent, and representing approximately an academic year of graduate or undergraduate study. Below this level were 270 institutions that offered, as a part of the teacher education curriculum, programs of 6 to 23 semester hours in school librarianship. Included in these two groups were 178 institutions that provided a formal major or minor of 15 or more semester hours in library courses at the undergraduate level for the preparation of school librarians. There were 172 colleges that endeavored to provide the rudiments of library methods for teachers in courses of less than 6 semester hours.

In some States, a relatively large number of institutions offer less than 20 hours of library education; in other States few or no institutions offer such courses.

In colleges of teacher education, programs for school librarianship have been influenced by the common problems of providing professional personnel for public schools. The acute shortage of qualified teachers and librarians in this country has deterred college administrators from extending 4-year teacher education programs to 5 years for students without professional experience, even though a strong trend in professional thinking in this direction existed before World War II. As a consequence, more and more professional courses have been placed in undergraduate curriculums.

TO ASSIST teachers colleges and other institutions in developing their programs in library education in accordance with professional principles, the ALA Committee on Accreditation has recently appointed a subcommittee to develop standards for the accreditation of undergradute programs of library science. It is believed that these standards will be used along with those of other professional groups by the National Council for Accreditation of Teacher Education in evaluating all areas of education in teacher education institutions. Programs in library education, therefore, will be evaluated by the Council not only in terms of standards of professional librarianship but in terms of their relationship to the philosophies and purposes of the institutions under evaluation. This concept of standards should be of value to teacher education institutions in establishing curriculums of library education alined with the total programs of teacher education—programs which are usually designed to meet the special needs of regional and State school systems as well as the requirements for State certification.

This concept of standards should be of value also in facilitating the provision of courses in school library materials and their use in teaching, not only to students training for school librarianship but for students training for school administration and teaching. Although some institutions do give courses in these fields

Continued on page 15

[1] These standards were prepared with the assistance of the American Association of School Librarians, Association of College and Reference Libraries, and State School Library Supervisors.

HERE *School Life* continues its reporting-in-brief on projects that have been completed under the Office of Education's Cooperative Research Program, now in its second year. The project reported below is fifth in the series; the first four were summarized in the issues for December 1957 and January 1958.

RESEARCH METHODS: A CRITICAL REVIEW

INVESTIGATORS in the field of mental deficiency seem to have an "occupational disease"—a predilection for matching. With few exceptions they select variables like mental age, chronological age, and length of institutionalization and, on the basis of those, carefully pair each individual in an experimental group with another individual in the control group; or they match the two groups on the basis of averages, without special regard to individuals.

This is the conclusion reached by Julian C. Stanley, professor of education at the University of Wisconsin, and his coworker Ellen Y. Beeman, after 6 months of surveying the published reports of experimental investigations in that field. They have found many studies that would have been better served if the investigators had forgotten all about matching and had instead selected the individuals for each group at random and then submitted the data to the arithmetical procedure known as analysis of covariance. And they have found many studies in which the investigators matched their groups, some with good reason, but then went on to ignore completely, in their statistical analyses, the effects of the matching.

In study after study Dr. Stanley and Miss Beeman have found evidence of the undesirable effects of matching.

Two of these undesirable effects arise from the fact that the matching of persons from two different populations requires the discarding of certain unmatchable individuals—especially those at the bottom of the lower scoring population and those at the top of the higher scoring population. The effects are these:

1. The population to which conclusions may be generalized is restricted.
2. The dependent variables regress toward the means of the initial populations and thereby bias the conclusions in favor of the initially higher scoring population.

Obviously, matching is almost always inadvisable when an appreciable number of potential subjects must be discarded.

A third disadvantage of matching—loss of "power"—occurs if the investigator does not explicitly take the matching into account when he tests the significance of the difference between positively correlated means. His results may be such that he is unable to declare them significant; and if he cannot do so, he will fail to reject the null hypothesis often enough—a failure that can seriously becloud the interpretation of his findings.

IN A SUMMARY report to the Office of Education, Dr. Stanley translates his basic findings and conclusions into some explicit guidance for the researchers of the future:

★ If your experimental and control groups differ initially in one or more antecedent variables thought to be correlated with the outcome of the study, perform an analysis of covariance instead of matching the subjects.

★ If you are matching subjects from only a *single* group on one antecedent variable in order to increase the power of the significance test, and if you retain *all* subjects, you will probably find the randomized block design superior to the analysis of covariance, and considerably easier to analyze.

★ If you must match individuals or groups, be sure to take the matching explicitly into account in your statistical analysis.

The full report of the Stanley-Beeman study is more than a critique of research design for studies of mental retardation. It is a basic essay on modern research design, procedure, and analysis; and as such it should prove valuable to researchers in every area of education.

RESEARCH DIRECTOR

ON JANUARY 2, Roy M. Hall, formerly director of the Southwest School Administration Center, University of Texas, took over his new duties as head of the Office's cooperative research program, which this year has $2.3 million to spend on research projects throughout the country.

Dr. Hall brings wide educational experience with him to the Office. He has been a classroom teacher, in both elementary and secondary schools, a principal, an administrator, and a college lecturer. In 1956–57 he conducted a study of the utilization of school personnel and facilities for the Texas Education Agency. He holds degrees from Piedmont College, Emory University, and Syracuse University.

Before Dr. Hall's coming to the Office, the research program was under acting directors: Former Deputy Commissioner of Education J. Ralph Rackley, from the inception of the program until October 26, 1956; subsequently, Herbert S. Conrad, director of the Research and Statistical Services Branch.

The State and Nonpublic Schools

A basic text on legislative practices

HOW to insure an educated citizenry and at the same time encourage desirable freedom and initiative for educational institutions is a problem of first magnitude in a free society, say Beach and Will* in their recent publication, *The State and Nonpublic Schools*, a 152-page volume published by the Office of Education. They point out that the problem is particularly pertinent in the United States, where public and nonpublic schools exist side by side.

A previous study by the same authors—*The State and Education*—describes how States have established a governmental structure to keep the control of public schools close to the people being served. The new publication describes the legal framework under which the nonpublic schools can enjoy desirable freedom in their operation and yet be encouraged to provide educational programs in the public interest. It deals with overall State regulation and supervision of nonpublic schools. It also sets forth the legislative plan under which nonpublic schools are regulated as educational institutions.

Since *The State and Nonpublic Schools* is so broad in scope, it is possible to treat only a few highlights in this brief review.

Important Educational Resources

A larger and larger share of American youth are being educated in nonpublic elementary and secondary schools. The Office of Education estimates indicate that, if trends continue, by 1965 the nonpublic schools will enroll 6,840,000, or 14.6 percent of all students in elementary and secondary schools. This will be an enrollment ratio of 1 to 6 as compared with 1 to 11 in 1899–1900 and 1 to 7 in 1953–54.

During the past quarter century, nonpublic colleges and universities have accounted for approximately 1 out of every 2 resident students in institutions of higher learning. These nonpublic enrollments increased from 571,949 in 1931–32 to 1,158,231 in 1953–54.

PUBLIC AND NONPUBLIC SCHOOLS DEFINED

A "public" school is the creature of the State and not only is subject to the State's regulatory controls but is under the immediate operational control of a governmental agency or agent. A "public" school is supported and maintained at public expense.

A "nonpublic" school, while subject to pertinent regulatory controls of the State, is under the immediate operational control of a private individual or organization. A "nonpublic" school exists apart from the public school system of the State. It may be operated as a church-related or nonsectarian institution. It may be operated on a profit or nonprofit basis. A "nonpublic" school is generally supported by private funds as distinguished from public funds raised by taxation.

—from *The State and Nonpublic Schools*

Basic Rights

The authors elaborate on two decisions of the Supreme Court of the United States particularly pertinent in defining and upholding the basic rights of nonpublic schools: The Dartmouth case and the Oregon case.

The Dartmouth College case grew out of an act passed in 1816 by the legislature of New Hampshire which would have voided the original charter of the college and created a new corporation of public character. In its decision, the Supreme Court of the United States upheld the right of an educational institution to exist as a private corporation.

The Oregon case grew out of an initiative measure adopted by the people of Oregon, requiring parents and others having control of children subject to compulsory attendance provisions of the law to send such children to public schools. Two corporations owning and conducting schools in Oregon—The Society of Sisters and Hill Military Academy—sought to restrain State officials from enforcing the measure. The Court, deciding in favor of the corporations, held that it was an unreasonable interference with the liberty of parents and guardians. In making the decision, however, the Court pointed out that "No question is raised concerning the power of the State reasonably to regulate all schools, to inspect, supervise and examine them, their teachers and pupils; to require that all children of proper age attend some school, that teachers shall be of good moral character and patriotic disposition, that certain studies plainly essential to good citizenship must be taught, and that nothing be taught which is manifestly inimical to the public welfare."

State Regulation Through General Legislation

Since the powers not delegated to the United States under the 10th amendment of the Constitution are reserved to the several States, each State has developed a large body of laws to regulate and supervise schools, both public and nonpublic. The authors note that such laws may be general in nature or explicit.

Laws that apply *generally* to nonpublic schools are those which regulate the activities of individuals and organizations conducting businesses

*Fred F. Beach and Robert F. Will are chief and assistant specialist, respectively, State School Administration, Office of Education.

or charitable undertakings within the State. Under the powers and duties delegated by these laws, numerous administrative agencies of the State have direct or indirect regulatory responsibilities for nonpublic schools. For instance, nonpublic schools conducted within buildings are subject to State regulation and supervision through agencies responsible for enforcing building codes, fire regulations, health and sanitation codes, and other codes and regulations pertaining to buildings; nonpublic schools employing workers are subject to regulation as employers of labor; and nonpublic schools that board and care for children are subject to regulation by agencies responsible for the general welfare of children.

State Regulation Through Explicit Legislation

These general laws, however, do not treat nonpublic schools as educational institutions and thus do not serve to accomplish one of the fundamental objectives of the State: insuring an educated citizenry. To achieve this objective, States have established regulations that apply *explicitly* to nonpublic schools as educational institutions. By far the largest number of these laws involve responsibilities of State departments of education.

The authors identify certain common areas of explicit legislation under which nonpublic schools are regulated as educational institutions: (1) Incorporation. (2) State approval of institutions, (3) compulsory education, (4) public support, (5) tax exemptions, and (6) occupational licensing.

✦ *Incorporation:* The State may regulate nonpublic schools as educational institutions through its system of incorporation. The act of incorporation brings the nonpublic school under legislative regulation designed to facilitate self-government. With the powers granted, there are concomitant responsibilities for reporting and for meeting other requirements of the law.

✦ *State approval of institutions:* The State may require approval or grant approval upon request. Legislation requiring approval, which applies most frequently to private trade and business schools and to private institutions of higher learning conferring degrees, does not permit the institution to operate or conduct certain educational activities until it obtains approval. Only a few States have laws that explicitly require approval for schools serving children of compulsory school age.

In many instances, the law provides for granting approval upon request. Institutions that submit voluntarily to State regulation and supervision do so for the advantages official approval affords; for example, private institutions preparing teachers for public schools desire official approval so that their graduates can be licensed or certified under the same conditions as graduates from public teacher-training institutions.

✦ *Compulsory education:* Legislation for compulsory education is the cornerstone of the State's plan to insure an educated citizenry, for its goal is to provide a basic minimum education for every educable child regardless of the school he attends. Under such legislation States may make express requirements of nonpublic schools: To keep records and make any reports that are needed to establish evidence that children are attending school in compliance with the law; to remain in session for a term that compares favorably with the term prescribed for the public schools; and to provide educational programs that compare favorably with the programs required in public schools.

✦ *Public support:* Public funds and services are authorized by statute in a number of States to nonpublic schools and/or children and youth attending nonpublic schools. The statutes provide for payments for operation of a school, program, or project; payments for instruction, care, and other services; buildings; scholarships and tuition allowances; textbooks; health and welfare services. When public funds and services are thus authorized, the law generally includes regulatory provisions.

✦ *Tax exemption:* A State may use tax exemption as a device to regulate educational institutions. The clearest example is found in the laws of Rhode Island, which say that any school receiving aid from the State, either by direct grant or by exemption from taxation, is subject to examination by a State educational agency. By refusing to comply with the law, a school may be denied exemption from taxation.

✦ *Occupational licensing:* Persons seeking to practice certain occupations in a State must receive official approval to do so, usually in the form of a license. Authority to approve is usually delegated to boards established by law, and to these boards may be delegated also the responsibilities for certifying or approving the schools or programs that train applicants for licensure. Professional and trade schools voluntarily seek approval so that they may provide suitable candidates.

THE *State and Nonpublic Schools* is a sourcebook of legislative practice that should be especially useful to State officials, members of State legislatures, officials of schools both public and private, students of political science, and officials of religious organizations. Prepared at the request of the Council of Chief State School Officers and with the cooperation of the Council's Study Commission, the study places emphasis on State department of education responsibilities for nonpublic schools. The basic data, printed as part of the study, consist of a State-by-State compilation of the constitutional provisions of particular concern to nonpublic schools and the statutory provisions that determine State department responsibilities. Pertinent annotations and compilers' notes are included to clarify certain significant sections of the law.

EDUCATION FOR LIBRARIANS

Continued from page 11

to students preparing to be teachers, the usual practice is to offer them exclusively to students in library education departments. As a consequence, the responsibility for introducing administrators and teachers to the use of library materials in school curriculums falls upon the school librarians in service. Teacher education institutions, therefore, have a unique opportunity to prepare elementary and secondary school teachers in the use of a wide variety of books and other materials in teaching, and to contribute to the effectiveness of school libraries as instruments of education.

PROGRAMS OF SCHOOL library education lead to bachelor's and master's degrees in arts, science, and education and may include a concentration in library subjects directed toward the problems of school librarianship. The bachelor of library science degree, or its equivalent, formerly awarded after a postgraduate year of study in a library school, is now generally superseded by a master's degree. Since a master's degree may qualify a school librarian for a higher position on a salary schedule than a bachelor's degree, many schools have found it necessary to eliminate the distinction between library degrees obtained for a fifth year of professional study.

The number of degrees earned or number of years of undergraduate and graduate study completed by school teachers and librarians exerts considerable influence on salary schedules in elementary and secondary schools. Since school librarians commonly have equal status with teachers on school faculties, a school librarian with 5 years of higher education may generally expect to receive the same salary as a teacher with an equivalent amount of education, if both have equal experience. This fact, in addition to certification requirements and desire for professional growth, encourages school librarians with only undergraduate education to work for the completion of 1 or 2 years of graduate study.

Although recruiting programs for the school library profession must give primary consideration to interest in, and fitness for, school library service, the professional status and salaries of school librarians have implications for recruitment. High school and college students alike are attracted to fields which possess possibilities for professional growth and commensurate salaries. Teachers in service and housewives with college degrees desiring to return to teaching recently have shown increased interest in the school library field because of the nature of the work, the opportunity for service to the entire school program, and continuing professional development. Planning for the education of school librarians requires, therefore, the cooperative efforts of the library profession, school administrators, college and university officials, and others concerned with the recruiting and education of competent personnel for school library service.

PUBLIC SCHOOLS: Pupils, Space, and Teachers

PRELIMINARY REPORT, FALL 1957

DATA from State departments of education for our public schools in the fall of 1957 add up to these totals:

- 32.9 million pupils were enrolled—22.8 million in elementary schools and 10.1 million in secondary.
- 1,937,000 of these pupils were in excess of the normal capacity of publicly owned school plants. Again the schools were trying to adjust by crowding their classrooms, by utilizing makeshift facilities, or by resorting to half-day sessions.
- 140,400 more classrooms were needed—63,200 to take care of the enrollment in excess of normal capacity, and 77,200 to replace unsatisfactory facilities still in use. This indicated some improvement over the fall of 1956, when States reported a shortage of 159,000 classrooms.
- 70,800 classrooms are scheduled for completion during this school year, 1957–58, a 3.2-percent increase over last year's record of 68,600.
- 1.3 million teachers, full-time and part-time, were employed. Of these, 91,200 held substandard certificates, an increase of 3,200 over last year.

These totals, together with information on teaching requirements and schoolhousing, have grown out of the fourth annual collection by the Office of data on eight basic items for public schools in the States and Territories. Preliminary report of the findings is now available in Office Circular No. 513, *Fall 1957 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools*, by Samuel Schloss and Carol Joy Hobson. Free copies are available from the Publications Inquiry Unit, Office of Education, Washington 25, D. C.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

FOR SALE

(Order from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

ADMINISTRATIVE FACILITIES IN SCHOOL BUILDINGS, by *James L. Taylor.* 1957. 52 pp. 45 cents. (Special Publication No. 6.)

SURVEY OF STATE LEGISLATION RELATING TO HIGHER EDUCATION, JULY 1, 1956, TO JUNE 30, 1957, by *Ernest V. Hollis, William G. Land,* and *S. V. Martorana.* 1957. 104 pp. 60 cents. (Cir. No. 511.)

TELEVISION IN EDUCATION, by *Franklin Dunham, Ronald R. Lowdermilk,* and *Gertrude G. Broderick.* 1957. 124 pp. 55 cents. (Bul. 1957, No. 21.)

FREE

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ADVANCE REPORT ON ENGINEERING ENROLLMENTS AND DEGREES: 1957, by *Sidney J. Armore, Henry H. Armsby,* and *Leah W. Ramsey.* December 1957. 4 pp. (Cir. No. 515.)

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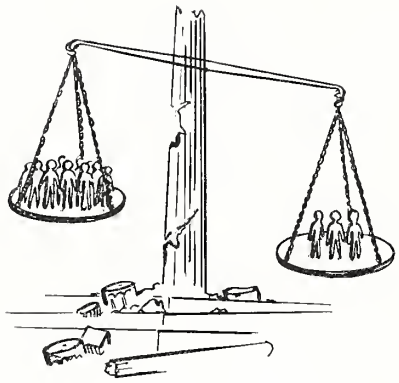
SCHOOL LIFE

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

OFFICE OF EDUCATION

AMONG THE CONTENTS

March 1958



THE TROUBLE WITH SPARTA

LONG before Sputnik, there was a city-state in Greece called Sparta.

Its leaders concluded that permanent power and glory could be attained by creating an elite corps of specialists—in this case warriors.

So a system was established. It was thorough and efficient—it produced brave, merciless, and hardened soldiers.

As part of the system, those who didn't fit were either abandoned or their potential was wasted and lost. The trouble was that this system often eliminated babies with the talents of a Keats or Steinmetz, and failed to discover and use the genius of a Pasteur or Lincoln.

Sparta's elite were served by a mass of nonelite, who were given no training, had no vote, and did as they were told. The trouble was that the elite did not dare to walk alone on dark nights.

At the age of seven the sons of the elite were taken away from home and sent to live in barracks. The trouble was that they grew narrow-minded and would not tolerate youth with the talents of a Steinmetz, Keats, or Lincoln.

On two occasions, Sparta was offered leadership in the Greek community of city-states but failed to respond. The trouble was that the Spartan elite were arrogant and held themselves aloof from outsiders. The trouble was that Sparta lost its power and became, in the words of Toynbee, an arrested civilization, which produced no men like Keats, Steinmetz, or Lincoln.

Such are the troubles that beset any narrow society which makes of any one group or class an elite to the exclusion or neglect of others.

Our society with its schools *for all children*—the gifted, the retarded, and those of every degree between—is the shield of a self-governing people. It recognizes the preeious resource in every individual, whether his talents be few or many. Strong schools in a demoeracy assist each one to attain his maximum potential. Democracy's elite is found in each citizen who is prepared to contribute his best.

Our troubles begin when we fail to support strong schools for all.

Lawrence G. Derthick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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SCHOOL LIFE
March 1958
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I RECOMMEND . . .

In three messages to the Eighty-Fifth Congress, second session, the President of the United States recommends expanded programs for education.

FROM THE *STATE-OF-THE-UNION MESSAGE*, January 9

IN THE AREA of education and research, I recommend a balanced program to improve our resources, involving an investment of about a billion dollars over a 1-year period. This involves new activities by the Department of Health, Education, and Welfare designed principally to encourage improved teaching quality and student opportunities in the interests of national security. It also provides a fivefold increase in sums available to the National Science Foundation for its special activities in stimulating and improving science education.

Scrupulous attention has been paid to maintaining local control of educational policy, spurring the maximum amount of local effort, and to avoiding undue stress on the physical sciences at the expense of other branches of learning.

In the field of research, I am asking for substantial increases in basic research funds, including a doubling of the funds available to the National Science Foundation for this purpose.

But Federal action can do only a part of the job. In both education and research, redoubled exertions will be necessary on the part of all Americans if we are to rise to the demands of our times. This means hard work on the part of State and local governments, private industry, schools and colleges, private organizations and foundations, teachers, parents, and—perhaps most important of all—the student himself, with his bag of books and his homework.

With this kind of all-inclusive campaign, I have no doubt that we can create the intellectual capital we need for the years ahead, invest it in the right places—and do all this, not as regimented pawns, but as free men and women.

FROM THE *BUDGET MESSAGE*, January 13

IN THE FACE of Soviet challenges, the security and continued well-being of the United States, as never before, depend on the extension of scientific knowledge. Our technological progress requires a higher level of support for basic scientific research from both private and public sources. It also demands a growing supply of highly trained manpower—scientists, engineers, teachers, and technicians.

To this end, I am recommending an expanded program for the National Science Foundation and a new program for the Department of Health, Education, and Welfare. These programs will be closely coordinated. The Foundation is promoting science education and training primarily through grants to universities or fellowships to individuals. The program for the Department of Health, Education, and Welfare will strengthen our general edu-

cational base, complement the activities of the National Science Foundation, and be channeled mainly through grants to States.

This budget proposes appropriations of $140 million for the National Science Foundation in 1959, more than three times the amount currently authorized. To permit immediate action in stepping up the Foundation's activities, the budget also includes a supplementary appropriation of $10 million for 1958.

These recommendations will enable the National Science Foundation to proceed vigorously in expanding support for basic research. Of the 1959 appropriation, $58 million, double the 1958 amount, is provided for research grants, for research facilities and equipment, and for related activities.

Assistance to basic research is provided also in physical sciences by the Bureau of Standards and in life sciences by the National Institutes of Health. Expenditures included in other parts of the budget for basic research by the Atomic Energy Commission, the National Advisory Committee for Aeronautics, and the Department of Defense will be higher than in the current year. Most of the expenditures will be for research projects carried on by university scientists and, as a byproduct, will contribute importantly to the education of graduate students.

The second major part of the National Science Foundation program is to help meet the need for improving and extending science education. The 1959 budget for the Foundation provides $82 million, including $3 million of administrative expenses, for this purpose, or about five times the present amount. Most of this is for expansion of programs which have proved their worth in improving high school and college science education. These programs include (1) action to interest able students in science careers, (2) measures to improve the methods of teaching and the content of courses in mathematics and science and to give supplementary training to college and high-school teachers, and (3) provision for fellowships to highly qualified college graduates and scientists for advanced study in science and mathematics.

I am recommending that legislation be enacted to authorize a temporary program for the Department of Health, Education, and Welfare to provide grants to help stimulate the State, local, and private action necessary to meet certain critical educational needs. The major objective of this new program will be to provide matching grants to strengthen State departments of education and local school systems, particularly in the administration and teaching of science and mathematics. The new grant program will also foster improvement of general education through grants to States or educational institutions to extend testing and counseling services for young people, provide college scholarships for outstanding high-school graduates, strengthen graduate schools, expand the teaching of foreign languages, and improve the adequacy and reliability of educational statistics.

These recommendations for the National Science Foundation and the Department of Health, Education, and Welfare are designed to meet our most urgent needs for support of science, to aid in the identification and encouragement of talent, and to strengthen our teaching staffs. In planning these programs, account has been taken of several important considerations.

First, more effective utilization of available scientists and engineers is the most immediately produetive attack on existing shortages in these fields. Action to achieve this is a responsibility of private employers and organizations as well as governmental agencies.

Second, the basic responsibility for science education and training as well as for eonduct of research in our country depends primarily on non-Federal support, and requires a thorough understanding of the problem by all our citizens and their wholehearted support. Therefore, I strongly recommend that this Federal participation in the Nation's educational processes be limited to 4 years (allowing additionally for the completion of scholarships granted within these 4 years), and be considered as an emergency stimulant to encourage the States and local communities to bring their educational systems up to date in the light of our modern scientific age. The proposed Federal assistance is carefully designed to insure against any possible domination by the Federal Government of our education system, which must continue to be locally controlled and operated in accordance with our American tradition.

Third, we must accept the fact that scientists are not trained overnight and science students do not become skilled scientists in a year. New programs in these fields must continue in most instances for a number of years to achieve concrete results. With full awareness of our tradition of not involving the Federal Government in the Nation's public educational processes, this stimulation I have proposed must not be so overemphasized that the programs cannot be later carried on by those who must continue to carry the responsibility—the local school districts, universities, and industry.

Fourth, the need of our free society cannot be met by improving science and technology alone. The national needs require the development through a strong general edueational system of a vast number of aptitudes and skills. Every community in our country should do its level best and if possible more than is now being done to provide better education by the growing number of students. A good deal of improvement in our teaching methods and standards and greater use of our present facilities can be achieved by acquainting the boards of education, superin-

tendents, teachers, parents, and pupils with the needs the country faces.

Schools in federally affected areas: The Federal Government has a responsibility for aiding school districts when it creates serious financial problems for them. It has recognized this responsibility in the past by providing grants to help build and operate schools in districts where enrollment is swelled by Federal activities. Experience with these programs, however, suggests that they should be modified: many of the communities for which grants have been made no longer have problems as acute as those suddenly generated by the migration of workers and families to them during the Korean crisis.

In view of the continued maintenance of a substantial defense establishment with shifting locations, authority for grants for construction and operation of schools should be extended, but the assistance should be restricted to instances where the Federal personnel both live and work on Federal property. However, grants for operation of schools on behalf of people living on taxable property should be gradually reduced during an adjustment period, and then terminated.

SPECIAL MESSAGE ON EDUCATION, January 27

EDUCATION best fulfills its high purpose when responsibility for education is kept close to the people it serves—when it is rooted in the home, nurtured in the community, and sustained by a rich variety of public, private, and individual resources. The bond linking home and school and community—the responsiveness of each to the needs of the others—is a precious asset of American education.

This bond must be strengthened, not weakened, as American education faces new responsibilities in the cause of freedom. For the increased support our educational system now requires, we must look primarily to citizens and parents acting in their own communities, school boards and city councils, teachers, principals, school superintendents, State boards of education and State legislatures, trustees and faculties of private institutions.

Because of the national security interest in the quality and scope of our educational system in the years immediately ahead, however, the Federal government must also undertake to play an emergency role. The Administration is therefore recommending certain emergency Federal actions to encourage and assist greater effort in specific areas of national concern. These recommendations place principal emphasis on our national security requirements.

Our immediate national security aims—to continue to strengthen our armed forces and improve the weapons at their command—can be furthered only by the efforts of individuals whose training is already far advanced. But if we are to maintain our position of leadership, we must see to it that today's young people are prepared to contribute the maximum to our future progress. Because of the growing importance of science and technology, we must necessarily give special, but by no means exclusive, attention to education in science and engineering.

The Secretary of Health, Education, and Welfare and the Director of the National Science Foundation have recommended to me a comprehensive and interrelated program to deal with this problem. Such program contemplates a major expansion of the education activities now carried on by the National Science Foundation, and the establishment of new programs in the Department of Health, Education, and Welfare. I have approved their recommendations, and commend them to the Congress as the administration program in the field of education. This is a temporary program and should not be considered as a permanent Federal responsibility.

PROGRAMS OF THE NATIONAL SCIENCE FOUNDATION

The Programs of the National Science Foundation designed to foster science education were developed in cooperation with the scientific community under the guidance of the distinguished members of the National Science Board. They have come to be recognized by the educational and scientific communities as among the most significant contributions currently being made to the improvement of science education in the United States.

The administration has recommended a fivefold increase in appropriations for the scientific education activities of the National Science Foundation. These increased appropriations will enable the Foundation, through its various programs, to assist in laying a firmer base for the education of our future scientists. More immediately, these programs will help supply additional highly competent scientists and engineers vitally needed by the country at this time.

1. Improvement of the subject-matter knowledge of science and mathematics teachers

First, the administration is recommending an increase in funds to support institutes sponsored by the Foundation for the supplementary training of science and mathematics teachers and a somewhat larger increase to support teacher fellowships. This will provide additional study opportunities to enable more science and mathematics teachers in our schools and colleges to improve their fundamental knowledge and, through improved teaching techniques, stimulate the interest and imagination of more students in these important subjects.

Continued on page 14

SCIENTISTS, TOO, NEED TO KNOW ENGLISH!

By ARNO JEWETT, Specialist for Language Arts

MOST of the many proposals now being made to interest more high school students in science and mathematics are overlooking an important fact—the fact that a student's interest and achievement in those subjects depend heavily on his reading and writing abilities. No nationwide effort to educate more scientists, mathematicians, and engineers can succeed unless students also develop the language skills they need to comprehend and report scientific and mathematical information. Not even the Army can make an effective soldier out of a functional illiterate; it must first teach him the basic skills of reading and writing.

Young people naturally pursue activities in which they can experience some success and avoid those beyond their capabilities. High school students who can read well enough to understand the basic theorems of mathematics and the elementary principles of science are much more likely to elect advanced courses in those subjects than pupils who have difficulty comprehending such material. Students can't be expected to elect courses in geometry, physics, and chemistry when they fear that their reading capacities are below the level required for success.

Nor will a guidance director or counselor benefit poor readers by advising them to register for subjects that require reading skills. Such students, until they drop out of the class, will waste not only their own time, but also some of their teacher's and fellow students' energy and efforts.

Ability to read well, however, is not enough to attract pupils to a scientific or engineering vocation. Students need to feel that in these fields they will lead interesting, rewarding lives. Here the English teacher who is well acquainted with modern literature for adolescents can help. The many biographies about scientists like Albert Schweitzer, Thomas Edison, Walter Reed, William Beebe, Raymond Ditmars, and the thrilling books about science by authors such as George Gamow, Arthur C. Clarke, Roy Chapman Andrews, Jacques-Yves Cousteau, and Rachel Carson can help students realize that scientific study is much more than a series of textbook problems and laboratory experiments. Books such as *Everyday Machines and How They Work* by Herman Schneider and Jeanne Bendick and *Great Adventures in Science* by Helen Wright and Samuel Rapport can open up to students an exciting vista of vocational possibilities in science and engineering. Such books should help to change the unfavorable opinions that some high school students have about science and scientists—opinions revealed by a Purdue Opinion Poll in 1956 and a recent study by Margaret Mead.

The ability to express oneself in language that is clear, precise, and accurate is as important as reading competency for a student who aims at becoming an outstanding scientist or engineer. Both science students and scientists need to report their observations and experiments objectively and concisely. Such reporting requires a large vocabulary, a grounding in semantics, an understanding of the principles of modification and other syntactical relationships, and skills in organizing ideas in a logical, coherent pattern. The accuracy required in scientific writing often results in long sentences filled with restrictive phrases and clauses that pose problems in modification and subordination. Such writing also requires use of words with multiple meanings in a context that clearly denotes their referent or signification.

Productive scientists are constantly communicating with one another—discussing theories, hypotheses, experiments, and findings—for they appreciate the fact that exchange of ideas produces new ideas and motivates new experiments. Even more important, scientists today must be able to explain their research and to interpret the significance of their discoveries to the people in general and to Government officials, military leaders, sociologists, educators, laborers, and businessmen in particular. Unless scientists can talk and write about their discoveries and make clear to laymen the influences their findings may have on the free world's security and culture, the value of their work will be negligible or ephemeral.

Language is the medium of communication. We may even consider it the basis of creative thought, for it is doubtful that anyone can reason clearly about scientific and mathematical concepts unless he has an adequate vocabulary of verbal and nonverbal symbols. Certainly the act of oral or written reporting helps us to refine our concepts and clarify our abstractions.

Because the development of language and reading skills in our American high school is largely the responsibility of English teachers, any nationwide effort to improve learning in science and mathematics depends first of all on how well the English teacher does his job. Today, among all the high school teachers of academic subjects, the English teacher usually has the largest classes to teach, the widest range of individual differences to provide for, the most

extracurricular activities to sponsor, and the most compositions to read after school.

For the past 5 years the English teacher has been the target of parents, businessmen, professors, and writers who claim that youth are deficient in language skills. But few of these critics have taken time to visit high school English classes to learn why every English teacher is not physically able to develop in his pupils the language skills they need in today's world. In State after State, English teachers have passed resolutions asking that their daily load be limited to four classes of no more than 25 students each so that they could do a more effective job. But no one has listened to their protestations—not even those sensitive leaders who have been alarmed by the symbolic beep-beeps of Russia's earth satellites.

Everyone recognizes that America needs more scientists and mathematicians and that the onus for producing them rests in part on the high school. But the counselor, the mathematics teacher, and the science teacher cannot do the job by themselves. Unless the high school English teacher has the time, ability, and materials to teach pupils to read, write, listen, and speak well, the efforts of science and mathematics teachers will seldom succeed. "Crash" programs that focus on only one part of the total school program and ignore basic needs in others are likely to wind up as "crash" programs in the most literal sense of the word. And the time, money, and energy invested in those programs will be lost.

Though made for wartime use,

USOE TRAINING FILMS

are busy in peacetime, too

VICTORY in World War II ended the production of U. S. Office of Education training films without halting their sale or their use. Since 1945 many of these 457 motion pictures and filmstrips have seen the world and been seen by it—and their wartime and peacetime use has paid the U. S. Treasury almost half a million dollars toward the cost of production.

The end of their original function—to train war production workers—might have seen these films laid aside in dusty archives for all their proud record of 31,432 prints sold between 1941 and 1945. But in the dozen years since V–J Day, over 47,000 more prints have found purchasers. It would be reasonable to expect that films made to train industrial workers in the years of World War II would sell less and less as each year passed, but in 1956 and 1957 sales of USOE training films went up!

To follow these films to the places they have gone and the purposes they have served is to write a footnote to the history of American foreign policy since the last war.

Translated into most of the major languages of the Continent—Danish, Dutch, French, German, Italian, Norwegian, Swedish, Turkish, and Serbo-Croat—USOE training films were used first by the European Recovery Program. Now they are part of the productivity projects of the Organization for European Economic Cooperation. Ten years after production, one-half of these films were still in active use in Europe's recovery program: not less than 6,500 prints of them, in all 9 languages, are still used for this purpose.

To a lesser extent, Point 4 technical assistance programs have used USOE training films in Asia, Africa, and South America. Up to now, magnetically produced sound tracks have accompanied films sent to countries of those continents, but the International Cooperation Administration presently plans to make optical tracks of certain of the films in Spanish and some of the Asiatic tongues.

When the 78th Congress of the United States in 1944–45 appropriated funds for the making of these films, it stipulated that the films must be offered at prices sufficient to pay for the cost of production. Every print sold since then—through Castle Films from 1944 to 1946 and United World Films since 1947—has paid the U. S. Treasury a royalty. By the fall of 1957 the Treasury had received $460,000 toward the cost of the films; and the revenue was still coming in.

Many of the USOE training films were made in series on such occupational areas as automotive operation and maintenance, machine shop work, precision wood machining, foundry practices, farm work, shipbuilding and aircraft skills, welding procedures, nursing, and engineering.

Titles of all training films and filmstrips made by the Office for war workers and still available to the public are listed in the publication *U. S. Government Films for Public Educational Use*, prepared by Seerley Reid, as Bulletin 1955, No. 1, available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. The price is $1.75.

Ole! Pan American Day

Pan American Day at Granby High School, Norfolk, Va.

ORGANIZATION OF AMERICAN STATES
ARGENTINA
BOLIVIA
BRAZIL
CHILE
COLOMBIA
COSTA RICA
CUBA
DOMINICAN REPUBLIC
ECUADOR
EL SALVADOR
GUATEMALA
HAITI
HONDURAS
MEXICO
NICARAGUA
PANAMA
PARAGUAY
PERU
UNITED STATES
URUGUAY
VENEZUELA

NO MATTER how you say *Pan American Day*, it is well worth celebrating in your school's own way.

Abril, Avril, or April 14–20 is Pan American Week (*Semana Panamericana* or *Semaine Panamericaine*) throughout all the Americas.

The Organization of American States had its beginning in 1890 at the First International Conference of American States. The definitive charter, however, was not signed until the Ninth Conference in 1948.

OAS aims to achieve peace, justice, and solidarity among the Member States, and to defend their sovereignty, independence and territorial integrity.

American schools find many ways to observe Pan American Day. Here's a parrot's-eye view of last year's observances in the United States.

IN LAKEWOOD, OHIO, the Roosevelt School sixth grade had exactly 21 students, one for each of the members of the Organization of American States. So it seemed a perfect plan to have a 3-day "conference of the OAS."

Each child, bearing a flag of his own making, was "his country's" ambassador to the OAS Council. In true diplomatic style he reported on his country's geography, customs, and economy.

The actual Council, the children learned, is the permanent representative body of OAS, meeting semimonthly at the Pan American Union Building in Washington, D. C. The ambassadors have equal voice, equal vote and equal lack of a veto. The chairman and vice chairman are elected each year. The Council deals with inter-American relations and matters referred to it by the Inte American Conference and the Meetin of Consultation of Ministers Foreign Affairs.

IN YORK, PA., the spring mus festival became a pan-American ever with student choruses and orchestra spiced with pageantry. Fiftee hundred elementary school childre took part.

IN NEW YORK CITY'S Commerc High School, the customary quee election was superseded by the mor democratic election of Miss Pan Amer ica. Her court included "OAS Am bassadors."

IN RAPID CITY, S. DAK., a gastro nomical observance was somewha enlivened by the breaking of a *piñat* and a battle with confetti-filled cas carones (egg shells).

(Though the traditional *piñata* is of course, earthenware (*olla*), an eas ily duplicated one is suggested b Agnes Marie Brady in *Syllabus for th Teaching of Spanish in the Grad Schools.*

Her version is a huge bag, covere with layers of bright tissue paper witl crepe paper streamers. The bag i filled with sweets, balloons, noise makers or small favors.

One child is blindfolded, handed a long stick, and told to break the *piñata.* If he can't break it withir three tries, he is a *tonto*, and someone else has a chance. When the *piñata* is finally broken, the circle of children dissolves into a scramble for goodies.)

IN GAINESVILLE, FLA., the University of Florida celebrated the whole week long. On most campuses, the lead is taken by Spanish-Portuguese Clubs. But at Florida, the observa-

)E LAS AMERICAS
DES AMERIQUES
AS AMERICAS

on was a cooperative effort of stu-
ents from other American countries
tending Florida, the University
and, Los Picaros, the International
ıpper Committee, the Military De-
ırtment, and the Newman Club.

These energetic organizations put
ı everything from a street dance to
symposium on inter-American prob-
ms. Among the festive events were
military review, a soccer game, and
Latin-American concert.

In Washington, D. C., the Pan
nerican buildings themselves—two
autiful marble edifices complete
th tropical patios and parrots—are
ways filled with youngsters on
nool-sponsored tours, stopping to
ok around. Since Pan American
ek roughly coincides with cherry
ossom festival time in Washington,
is a popular date for bus loads of
ungsters to visit the Capital.

But if your classroom can't come
the Pan American Building, the
n American Union can come to
ur classroom.

A free packet of materials, includ-
; a poster, a folder of pictures and
ogram ideas, a pictorial panorama
programs, and an explanation of
AS, is available from the Pan Ameri-
ı Union, Office of Public Relations,
ashington, D. C. All year round
Publications Division of the Pan
nerican Union offers a multitude of
terials and films.

As they say over the Americas:

*Conozca a sus Vecinos del Conti-
ıte.*

*Conheça os seus Vizinhos Ameri-
os.*

*Connaissez vos Voisins due Conti-
t.*

Know your American Neighbors.

Music and dancing and fancy costumes make a festival time out of Pan American Day. Shown here are members of the Spanish Club of the St. Joseph High School, Camden, N. J.

Photos, Pan American Union

THE PRESIDENT OF THE USA PROCLAIMS
PAN AMERICAN DAY

WHEREAS on April 14, 1958, the 21 American Republics will celebrate the 68th anniversary of the founding of a bureau for inter-American cooperation which, as the Pan American Union, now serves as the permanent Organ and General Secretariat of the Organization of American States; and

Whereas the evolution of the Organization of American States into its present form has been accompanied by an ever-increasing solidarity of the peoples of the Republics of the Western Hemisphere: and

Whereas the Organization, as one of the important associations of free nations, contributes to hemispheric defense and to the advancement of international peace and the ideals of freedom:

Now, therefore, I, Dwight D. Eisenhower, President of the United States of America, do hereby proclaim Monday, April 14, 1958, as Pan American Day, and the period from April 14 to April 20, 1958, as Pan American Week: and I invite the Governors of the States, Territories, and possessions of the United States of America and the Governor of the Commonwealth of Puerto Rico to issue similar proclamations.

I also urge our citizens and all interested organizations to join in the appropriate observation of Pan American Day and Pan American Week in testimony of the steadfast friendship which unites the people of the United States with the people of the other American Republics.

State directors see in these stirring times a challenge to

The ARTS in the PUBLIC SCHOOLS

IT was mid-January, and up on Capitol Hill, where the second session of the 85th Congress was already in full swing, legislative bills to encourage education in science and mathematics were beginning to pile into the hopper. A superficial observer might have thought that now the climate had turned inclement for the teaching of the arts: but the State directors of public school music and art, sitting in a 3-day conference at the foot of Capitol Hill, in the Office of Education, did not think so at all.

What they did think was that the new sharp concern over the teaching and studying of science and mathematics was proper—was in fact overdue: and because they saw it in terms of a reappraisal and challenge for every subject in the curriculum, they welcomed it as a challenge to the arts, too.

Part of the challenge to the arts, they said, lies in the fact that the arts can be made to contribute much to the shaping of a first-class scientist—not only because they help to make him a well-balanced, happy person, but because they exercise and intensify in him the very attributes he needs for his work: Sensitivity, imagination, creativity, and the capacity for sustained concentration. As some participants reminded the conference, most of the Nation's leading institutions for training scientists and engineers are keenly aware of the contribution the arts can make: cited was the recent report of the Committee for the Study of the Visual Arts at the Massachusetts Institute of Technology—*Art Education for Scientist and Engineer.*

Not for a moment, however, did the conferees lose sight of the bigger challenge that lies in their responsibility to *every* child, no matter what his vocational destiny—to give him the opportunity and satisfaction of exploring and developing all his capacity in music and art, to stimulate his imagination and stir his creative activities, to make him responsive to beauty of every kind and sympathetic toward the feelings and aspirations of others. It was to this point that the art directors spoke in one of their separate sessions when they said—

Sound art education is noteworthy in the way it respects and provides for individual differences: all boys and girls have a capacity to be creative . . . and art is one of the few phases of the curriculum in which they can all perform successfully with a great variety of results.

"The challenges we face are not new," the music directors said, "and most of our problems are the same ones we've struggled with for years. But the times are changing, and the times put our problems into new focus. To solve them we need new outlook, new insight, new approaches. We need to ask ourselves some disturbing questions—about the content of our courses, the shape of our programs. As teachers, are we imposing ourselves on our pupils, or are we giving the children a chance to react to music verbally, to express themselves? Are we as idealistic in our methods as in our objectives?"

To ask such questions of themselves as pointedly as possible, the conferees divided into two groups meeting simultaneously—art directors in one, music directors in the other. Taken together, their discussions managed to probe education in the arts from nearly every point of view: the child's, the classroom teacher's, the specialist's, the school administrator's, the community's—all as they affect the work of the State directors themselves. What they concluded, what they suggested—all this will be told in two reports now being prepared by a representative of each group for distribution to all State departments of education; but for the present a few of the points of view on which there was consensus will reflect the vigor and positive approach of the conference.

ON TEACHING: *When you get right down to it, good teaching is the best solution to all our problems. The good teacher doesn't have much trouble getting time for his programs, space for his classes, money for the materials and equipment he needs. That's why we must get good art and music teaching wherever we can—from the classroom teacher, from the specialist, from the consultant and classroom teacher working together.*

ON THE LONG PULL: *Let's not spend our energies in resisting the tide for more science and mathematics. Instead, let's roll with the tide, let's take an interest in what others are interested in, and all the while let's concentrate on the long pull for music and art: a sound and consistent campaign for more good offerings at the elementary level and more general classes at the secondary level.*

ON MENTAL HEALTH: *There's spiritual renewal in the arts, and the teachers*

Twenty-three representatives from 18 States attended this conference of art and music directors in State departments of education, Jan. 15–17, 1958. The conference was sponsored by the Elementary Schools Section of the Office of Education, under the general chairmanship of Ralph G. Beelke, specialist for education in the arts. Chairman of the music directors was Joseph C. Saitveit, supervisor of music education for the State of New York: chairman of the art directors was William Bealmer, director of art education for Illinois.

of music and art work hand in hand with the mental health people. Music specifically for therapy might well be introduced in many schools; already a few schools are pioneering in the field.

ON PERFORMING GROUPS: *The directors of performing groups are educators first; impresarios, second. In choosing their performers, they should take a child's interest as well as his ability into consideration, and should form groups on different levels of ability so that all who want the satisfaction and benefits of performance can have them.*

ON ADMINISTRATORS: *The school superintendent is hard pressed on every side—by the public, by the head of every school department. Let's try to plan from his point of view. Instead of increasing the pressures by asking for the program we consider ideal, let's show more consideration; for instance, we might present a well-planned minimum, something we could build on as it proved its worth.*

ON MUSIC AS REENFORCEMENT: *Let's encourage more use of music to reenforce other subjects in the curriculum. Using it as a resource material won't detract from it as an art—will even strengthen it. Once they use it, English teachers, social studies teachers, physics teachers ask for more, say they can't teach well without it.*

ON ART IN THE JUNIOR HIGH SCHOOL: *Here programs and practices have not yet taken shape as they have in the elementary school. Too many of us are still asking, how much art, and should it be elective? Certainly the art program for the junior high school should be diversified, should give each student a choice of materials and processes, and should encourage him to find new uses for materials and tools. For this kind of program we need at least 90 minutes in 2 periods each week, with no more than 25 pupils to the class. And there's every reason why we should provide such a program for every child.*

ON FACILITIES: *Good facilities don't of themselves make a program good, but they can help to make a good program possible. We can't do much in three-dimensional design, for instance, unless we have storage space for projects in progress. Because poor facilities can keep a good program from getting better, communities should give their schools the best facilities they can afford.*

ON RESEARCH: *Although many of our problems are dissolved by conferences and other exchange of information, just as many problems, perhaps more, will yield to nothing but hard research. We have yet to identify and clarify the contributions that only art and music can make to education; to explore the relationships between art and industrial art, to find the most effective ways of reporting pupil progress, the best programs for training teachers. To get the true answers, the right solutions, we must encourage research in many forms—specific projects at universities and research centers, action research in the classroom, and always an objective and inquiring approach by every teacher.*

ONE FORMAL RESOLUTION came out of the conference. Adopted, as it was, toward the close of the conference, it reflects a group conviction that had been strengthened with every session—that music and art have won through to a recognized place in the public school curriculum, are more needed now than ever before, and deserve support and encouragement at every level of supervision:

WHEREAS education is primarily a State responsibility, and

WHEREAS music and art are integral parts of the educational program, and WHEREAS professional leadership at the State level is essential,

BE IT RESOLVED that the Conference of Directors of Art and Music in State Departments of Education recommend the appointment of a director of art education and a director of music education in each State department of education.

26 Research Projects Approved

TWENTY-SIX new educational research projects, to cost $319,000 this fiscal year, were approved by the Advisory Committee for the Office of Education's Cooperative Research Program at its first 1953 meeting, January 30–31.

The total cost of these 26 projects, many of which will not be completed for 2 or 3 years, will amount to $757,000.

Colleges, universities, and State education departments working on the research provide facilities and some services. The Office provides Federal funds to cover other costs.

Work is already under way on 102 such research projects over the country. Thus far, Congress has appropriated $3.3 million for the program—$1 million for the fiscal year ending June 1957, and $2.3 million for this fiscal year. For next year the President's budget recommends $2.7 million—$2.2 million to continue projects already under way, $500,000 for new projects.

From its 26 new projects the Cooperative Research Program hopes to get answers to such questions as these (for more specific objectives see the next issue of *School Life*):

How can we identify gifted children and what can we do to help them become the scientists, engineers, and writers of tomorrow?

How can we help handicapped children learn and eventually become self-supporting?

How can we get and keep enough good teachers?

How can schools prevent juvenile delinquency?

All research proposals received by the Cooperative Research Program between now and April 1 will be considered by the Advisory Committee early in May, when it meets again to make recommendations to the Commissioner.

Teaching of Russian in the United States

Only 16 high schools offer courses now; but what of tomorrow? Signs of growing interest appear in many places across the Nation

SPUTNIK has launched a world of inquiries about teaching the Russian language.

The "beep beep" of the artificial satellite has sent teachers, school administrators, newspaper editorial and news writers, television and radio news commentators to query the Office of Education.

"Who is teaching Russian in the U. S. A.?"

"How are they teaching it?"

And most often comes this question from editorial writers: "Why aren't they teaching Russian in our schools?"

These questions and others come to Marjorie Johnston, the Office specialist for foreign languages. The deluge is in contrast with the one or two queries a year about the Russian language received before sputnik.

To answer these questions on the current status of the Russian language in the United States, Dr. Johnston has been compiling information from various sources.

Helen B. Yakobson, head of George Washington University's Slavic languages department and a regional representative of the Committee for Promoting the Study of Russian in High Schools (formed in September 1957 at the annual convention of the American Association of Teachers of Slavic and East European Languages), has prepared a report on the teaching of the Russian language in United States schools.

According to the report, only 8 public and 8 private high schools are known to be teaching Russian now. Several schools in South Dakota, Connecticut, California, Indiana, West Virginia, New Jersey, Wisconsin, and the District of Columbia are considering adding Russian courses. Two New York City high schools plan to begin courses in Russian this month.

Brooklyn College submitted a questionnaire to State education departments asking about their interest in Russian. Of the 34 departments replying, 10 said they would like to introduce Russian if they could find teachers.

Teachers for Russian are being trained in some institutions. Actually, all except seven States have at least one college or university offering Russian.

Brooklyn College, University of Minnesota, and Teachers College, Columbia University, have begun courses in Russian for teachers. Teachers College, Columbia University, has a summer language training program for Americans of Russian descent who have studied abroad. Yale University plans a summer seminar for native speakers to prepare them to teach in American secondary schools. The New York City Board of Education has arranged a training course for 40 public school teachers who will teach Russian.

Russian is now being taught in 173 U. S. universities and colleges. Thirty-eight have language laboratories. Twelve offer graduate work. Fifteen offer summer language programs.

An interesting example of the way a Russian course originated at what might be termed the bobby-socks-and-saddle-shoe level is offered by the University of Minnesota's University High School, a 6-year high school with only 350 students. A paper describing this school's program has been written by Emma Birkmaier, professor of education, and chairman of modern languages at the University of Minnesota Laboratory Schools. It will soon appear in an Office of Education bulletin on Modern Foreign Languages in the High School.

In 1944, some of the students in the Minnesota high school felt they wanted to learn more about foreign languages than their school was teaching.

The first step the school took to meet the demand was to set up a social science unit on the Soviet Union which included 2 weeks on the language.

Lectures on Russian literature were added to the world literature course, Russian music to the music appreciation course. Eventually, according to Miss Birkmaier, a group of students came into the foreign language department to ask for a class in the Russian language.

"Since new projects of this kind are more or less on an experimental basis," Miss Birkmaier explained, "it was decided to have the students inaugurate a Russian club to meet during the activity hour.

"The club was organized with officers, committees, and constitution. There was no textbook. The students kept notes on the structure of the language and were given mimeographed materials.

"At first the students discussed the importance and extent of the Russian language. We showed films with Russian soundtracks, portraying Russian peoples."

The club also made recordings of the students' spontaneous conversation, dialogs, and short expositional compositions in Russian.

The next year, Russian became a regular part of the curriculum with 16 beginning students. Today, the offering has been expanded to four years with 54 students enrolled. The Russian club continues to function.

The current courses include a very rich program. Native speakers come in and talk on Russian culture and tape dialogs, plays, and readings. The classes attend Russian Orthodox

Church services and suppers. They correspond with Russian students. Now they are even planning two weeks in the Soviet Union in 1958, during the school's European field trip.

There are no high school texts for the study of Russian. Miss Birkmaier observes:

"In examining Russian programs which have failed . . . we usually find the students have had to follow a difficult text and accept a grammatical terminology meaningless to them—a group of nonsense syllables . . ."

The syllabus for the 4-year program of the University High School is available free from the Department of Modern Languages, University High School, University of Minnesota, Minneapolis.

There are stars other than sputnik to follow toward a more complete language program. Today, besides the extensive literature of the Russian people, there are 1,200 Soviet scientific journals being published yearly. Five or six million Soviet students are said to be studying English. Some 70 French secondary schools teach Russian 3 to 4 hours a day, for 5 years. The need for linguists in the American armed, civil, foreign, and private services has never been greater.

ARE THEY GOOD ENOUGH FOR NOW?

By Howard H. Cummings, *specialist for social sciences and geography*

A VETERAN educator on the eve of retirement was discussing the abilities of high-school graduates in civic matters. His younger colleagues pointed out that youth today are aware of economic issues, that they support the idea of international cooperation, and in general compare favorably in civic fitness with the youth of 1920.

The veteran ended the discussion abruptly with a single question: "I'll admit that the kids graduating today are good enough for the year 1920. What keeps me awake nights worrying is this question: Are they good enough for *now?*"

If the high school graduate of 1958 is "good enough for now" in his citizenship, it is a great compliment to the social studies teachers of America. A half century of scientific growth, technological development, global wars, revolution, the advent of totalitarianism, the increase in world population, the increasing urbanization, the growth of literacy—all this has been clear to the teachers who have worked to prepare boys and girls to live in the changing society into which they were born. The nature of the education these boys and girls should receive has been less clear for a major reason: Our analysis of our world is torn between recognition of the need for change and a wish for stability.

Scientific and technical progress clearly involves change; but political, social, and economic progress is a mixture of change and stability. In the new world of the future we want such historic institutions as the monogamous family, a code of laws to protect life and property, a system of courts based on equal justice—to mention only a few of the stable strands of social continuity. We expect our future citizens to subscribe to the idea of the dignity and worth of the individual and to recognize the principles of human freedom that flow from this commitment. The aspirations of all people everywhere for a higher standard of living and a greater measure of security indicate the need for political, social, and economic change. There is need for change in the direction of a world free from threat of war, where science would be used to prolong life and improve human well-being. In this task public administrators, political scientists, economists, social workers, sociologists, geographers, and historians all have a part to play. To play that part these scholars will have to labor with their colleagues in science to discover new knowledge for solving old human problems.

Where do the schools come in? All problems, including many in science, are public problems and must be solved by the public. Each citizen has one vote, and the quality of public decisions depends on the quality of the electorate. In the social sciences and the humanities the knowledge and wisdom of the scholars must be understood by the citizens.

It was against this historic background of the role of education in a democratic society that the National Council for the Social Studies in its annual meeting in 1957 adopted a single resolution, which said in part: "The present crisis demands that we strengthen every aspect of American education—the natural sciences and mathematics, the social sciences, and the humanities. The ideals and aspirations of a free society and its democratic institutions depend upon an educational program that is concerned with the entire breadth and depth of human experience. To this all-important objective the social sciences can make a good and distinctive contribution."

To be "good enough for now" the citizen must have all the components of his education not only strengthened but related. Science must be integrated into the culture and become a part of the basis on which public decisions are made. Only faith in man's reason preserves the life of man in today's thermonuclear world. That faith must be reinforced by new knowledge that man can use to build institutions effective enough to use knowledge for human welfare. A part of the faith in reason is the belief that if man is intelligent enough to discover knowledge, he is also intelligent enough to use the knowledge wisely.

President's Messages

Continued from page 5

2. Improvement of course content

Second, the administration is recommending an increase in funds to enable the Foundation to stimulate the improvement of the content of science courses at all levels of our educational system. The efforts of even the most dedicated and competent teachers will not be effective if the curricula and materials with which they work are out of date or poorly conceived.

3. Encouragement of science as a career

Third, the administration is proposing an expansion of the Foundation's programs for encouraging able students to consider science as a career. Good teaching and properly designed courses are important factors in this regard, but there are other ways in which interest in these fields may be awakened and nurtured. The Foundation has already developed a series of programs directly focused on the problem of interesting individual students in science careers, and these programs should be expanded.

4. Graduate fellowships

Fourth, the administration is recommending an increase in the Foundation's graduate fellowship program. The enlarged program will make it possible for additional competent students to obtain better training for productive and creative scientific effort.

5. Expansion of other programs

The administration is recommending that funds be provided to enable the Foundation to initiate several new programs which will provide fellowship support for secondary school science teachers (during the summer months), for graduate students who serve during the school year as teaching assistants, and for individuals who wish to obtain additional education so that they may become high school science and mathematics teachers.

PROGRAMS OF THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The education programs of the National Science Foundation deal exclusively with science education and operate mainly through scientific societies and science departments of colleges and universities. There is, however, an emergency and temporary need for certain additional Federal programs to strengthen general education, and also for certain Federal programs to strengthen science education in our State and local school systems. The administration is recommending legislation authorizing these additional programs in the Department of Health, Education, and Welfare for a 4-year period only.

1. Reducing the waste of talent

High-quality professional personnel in science, engineering, teaching, languages, and other critical fields are necessary to our national security effort. Each year, nevertheless, many young people drop out of high school before graduation. Many able high school graduates do not go on to college. This represents a waste of needed talent. Much of this waste could be avoided if the aptitudes of these young people were identified and they were encouraged toward the fullest development of their abilities.

The administration proposes, therefore, that the Congress authorize:

(a) Matching grants to the States to encourage improved State and local testing programs to identify the potential abilities of students at an early stage in their education.

(b) Matching grants to the States to encourage the strengthening of local counseling and guidance services, so that more able students will be encouraged to stay in high school, to put more effort into their academic work, and to prepare for higher education. The program also would provide for grants of funds to colleges and universities to permit them to establish training institutes to improve the qualifications of counseling and guidance personnel.

(c) A program of Federal scholarships for able high school graduates who lack adequate financial means to go to college. The administration recommends approximately 10,000 new scholarships annually, reaching a total of 40,000 in the fourth year, to be closely coordinated with the testing and counseling programs. Scholarships should be allotted among the States on an equitable basis and awarded by State agencies on the basis of ability and need. Although it should not be compulsory for students to pursue a specific course of study in order to qualify, reasonable preference should be given to students with good preparation or high aptitude in science or mathematics.

2. Strengthening the teaching of science and mathematics

National security requires that prompt action be taken to improve and expand the teaching of science and mathematics. Federal matching funds can help to stimulate the organization of programs to advance the teaching of these subjects in the public schools.

The administration therefore recommends that the Congress authorize Federal grants to the States, on a matching basis, for this purpose. These funds would be used, in the discretion of the States and the local school systems, either to help employ additional qualified science and mathematics teachers, to help purchase laboratory equipment and other materials, to supplement salaries of qualified science and mathematics teachers, or for other related programs.

3. Increasing the supply of college teachers

To help assure a more adequate supply of trained college teachers, so crucial in the development of tomorrow's leaders, the administration recommends that the Congress authorize the Department of Health, Education, and Welfare to provide:

(a) Graduate fellowships to encourage more students to prepare for college teaching careers. Fellows would be nominated by higher educational institutions.

(b) Federal grants, on a matching basis, to institutions of higher education to assist in expanding their graduate school capacity. Funds would be used, in the discretion of the institution itself, either for salaries or teaching materials.

4. Improving foreign-language teaching

Knowledge of foreign languages is particularly important today in the light of America's responsibilities of leadership in the free world. And yet the American people generally are deficient in foreign languages, particularly those of the emerging nations in Asia, Africa, and the Near East. It is important to our national security that such deficiencies be promptly overcome. The administration therefore recommends that the Department of Health, Education, and Welfare be authorized to provide a 4-year program for—

(a) Support of special centers in colleges and universities to provide instruction in foreign languages which are important today but which are not now commonly taught in the United States.

(b) Support of institutes for those who are already teaching foreign languages in our schools and colleges. These institutes would give training to improve the quality and effectiveness of foreign language teaching.

5. Strengthening the Office of Education

More information about our educational system on a national basis is essential to the progress of American education. The United States Office of Education is the principal source of such data.

Much of the information compiled by the Office of Education must originate with State educational agencies. The administration therefore recommends that the Office of Education be authorized to make grants to State educational agencies for improving the collection of statistical data about the status and progress of education.

This emergency program stems from national need, and its fruits will bear directly on national security. The method of accomplishment is sound: the keystone is State, local, and private effort; the Federal role is to assist—not to control or supplant—those efforts.

The administration urges prompt enactment of these recommendations in the essential interest of national security.

Census Survey Estimates Certain Types of Group Adult Education

SOME NEVER STOP STUDYING

By JOHN B. HOLDEN, *specialist in general adult education*

ABOUT 8 million adults in the United States attended at least one adult education class or group meeting last year.

Another 161,000 (over 20 years old) attended elementary and high school classes. An additional 710,000 were part-time college students.

All three figures are estimates based on the Current Population Survey of October 1957 by the Bureau of the Census, collaborating with the Office of Education.

Following the survey, the Department of Health, Education, and Welfare has requested the Census Bureau to include questions about adult education in the 1960 Census. Information acquired in the initial survey has pointed up the need for full statistics on the local, State, and national levels, showing personal, social, and economic factors. These can be obtained only through the decennial census.

The October 1957 study was financed by a grant from the Fund for Adult Education to the Adult Education Association, which, in turn, contracted with the Census Bureau. It is the first time a national estimate of adult education has been made through a scientific sample by the Census Bureau.

The estimate is based on a sample of 35,000 households in 330 sample areas including 638 counties and independent cities throughout the United States.

The study was limited to questions about organized classes and group meetings requiring attendance three or more times, and excluded correspondence courses, individual instruction, private lessons, one and two session meetings, radio and television courses, self-directed study, or on-the-job training. Multiple enrollments for the same person were not recorded.

People with more education seek more, the study found. During the preceding year, only 1.1 percent of the adults with less than 5 years of schooling were enrolled in a group educational activity. But 25.5 percent of those with more than 4 years of college were continuing in adult study.

The survey asked age, sex, marital status, employment, urban or rural residence, regular school enrollment, and school grades completed. *School Life* expects to report more fully on the survey in a later issue.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

FOR SALE

(Order from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

Administration of Public Laws 874 and 815, 7th Annual Report of the U. S. Commissioner of Education, June 30, 1957. 1958. 145 pp. 75 cents.

Conservation Experiences for Children, by *Effie G. Bathurst* and *Wilhelmina Hill*. 1957. 192 pp. 75 cents. (Bul. 1957, No. 16)

Local Planning for Better School Districts, by *C. O. Fitzwater* and *Winston L. Roesch*. 1957. 20 pp. 15 cents. (Pamphlet No. 121)

Offerings and Enrollments in Science and Mathematics in Public High Schools, 1956, by *Kenneth E. Brown* and *Ellsworth S. Obourn*, assisted by *Marguerite Kluttz*. 1957. 44 pp. 25 cents. (Pamphlet No. 120)

Television in Education, by *Franklin Dunham, Ronald R. Lowdermilk*, and *Gertrude G. Broderick*. 1957. 124 pp. 55 cents. (Bul. 1957, No. 21)

The State and Nonpublic Schools, with Particular Reference to Responsibility of State Departments of Education, by *Fred F. Beach* and *Robert F. Will*. 1958. 152 pp. $1.25. (Misc. No. 28)

FREE

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

The Cooperative Research Program Reports . . . Reprint from *School Life*, December 1957. 4 pp.

Fall 1957 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Schools, by *Samuel Schloss* and *Carol Joy Hobson*. January 1958. 9 pp. (Cir. No. 513)

A Policy-Developing Agency, by *Fred F. Beach*. Reprint from *School Life*, December 1957. 5 pp.

Guide Lines, Guidance and Student-Personnel Section:

Differential Prediction of High School Achievement Using Single Score and Multiple Factor Tests of Mental Maturity, by *Frank E. Wellman*. Reprint from *Personnel and Guidance Journal*, April 1957. 6 pp.

Foreign Service, by *Royce E. Brewster*. December 1957. 6 pp.

Geologist, Paleontologist, by *Royce E. Brewster*. December 1957. 5 pp.

Occupational Therapy, by *Royce E. Brewster*. December 1957. 4 pp.

Measurement Index, by *David Segel*. January 1958. 24 pp. (Cir. No. 383, Revised)

Physical Therapy, by *Royce E. Brewster*. December 1957. 7 pp.

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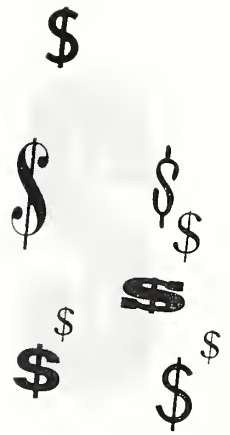
OFFICE OF EDUCATION

AMONG THE CONTENTS

April 1958



The Bargain

QUALITY education these days cannot be bought in the bargain basement. Yet we keep trying to buy it there.

For example, throughout the United States we are paying teachers starting salaries approximately $1,000 a year less than the average salary for starting workers in major industrial and business concerns.

This is the kind of pay for which a new teacher is expected to be on duty each morning well before school begins and, in addition to teaching classes all day, to supervise lunch rooms, recess activities, or study halls, and go home late in the evening facing other hours of correcting papers and planning. Then there are night and Saturday duties at football games, band concerts, class plays, and a whole series of official meetings to round out the work week.

One thousand dollars a year less at the start than business and industry jobs is what citizens of our country are paying teachers who are expected to—

- **★ Take charge of 25 to 40 children every school day**
- **★ Get a college education and continue training on a lifetime basis**
- **★ Be master of both subject matter and teaching technique**
- **★ Dress well**
- **★ Be firm, but patient and reasonable**
- **★ Preserve our cultural heritage**
- **★ Advance the frontiers of knowledge**
- **★ Nurture the young genius; improve the average student; discover and assist the pupil with special problems**
- **★ Participate in community affairs**
- **★ Encourage thrift, hard work, and clear thinking**
- **★ Exemplify the ideals of democracy**

Maybe this kind of bargain is part of the reason why half of all the new teachers entering the profession today plan to leave teaching within 5 years.

Let citizens everywhere come out of the bargain basement in their search to hold and find qualified teachers to instruct and to inspire.

Lawrence G. Derthick

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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Educational news

EVENTS AND DEVELOPMENTS

of national significance

Curriculum materials workshop

SCHOOL CHILDREN in 14 countries will be the first to benefit from a workshop now in session in the Educational Materials Laboratory of the Office of Education. For the participants are 21 teachers and school administrators from those countries and for 6 months they are bending every effort to one purpose—learning how to prepare better and brighter books and other educational materials for young people.

The workshop, first of its kind ever to be held in the Office of Education, is a joint project of the Office, the International Cooperation Administration, and The George Washington University in Washington, D. C.; its directors are Barbara Nolen, lecturer in writing for children, George Washington University, and Delia Goetz, specialist in the preparation of educational materials, ICA. Its sessions bring East and West together: Ethiopian and Liberian work side by side with Indian and Lao: Israeli and Turk with Formosan and Honduran; Bolivian with Iranian; Haitian and Costa Rican with Vietnamese and Thai. All are in this country on training grants provided by ICA.

The first 6 weeks of the workshop, which began on February 17, were spent on writing techniques, curriculum needs, and printing resources. Discussions were supplemented with films, interviews with specialists in related fields, trips to publishing houses, and observation of special programs in schools and libraries.

On March 31 workshop participants divided into 2 groups. For 5 weeks one group will remain in the Laboratory devoting full time to individual projects: the other will visit schools, State boards of education, publishing houses, and university presses, as well as special organizations or establishments meeting particular needs of individual participants. At the end of the 5 weeks, the groups will reverse programs.

Advanced workshop sessions will bring all participants together between June 9 and August 1. Individual sessions will supplement group sessions.

School Life will report later this year on highlights of the workshop.

Report Card USA

NOW we know the theme for American Education Week 1958: *Report Card USA*. It was announced in late March by the planning committee that represents the Week's four sponsors: American Legion, National Congress of Parents and Teachers, National Education Association, and Office of Education.

The Committee also has named a topic for each day of the Week, beginning Sunday, November 9:

9 *Building Character*
10 *Responsible Citizenship*
11 *Education and Survival*
12 *The Curriculum*
13 *The Teacher*
14 *Developing Talents*
15 *Community Teamwork*

but emphasizes that these are suggestions only, which can be shifted about or replaced ot fit local interests. To encourage flexibility, the committee offers some alternate subtopics, too:

Buildings and Facilities
Guidance and Counseling
Lifelong Learning
International Understanding

Like the 37 observances that preceded it, this year's observance will have two sides—school visitations and interpretation of education—and so will involve both educator and layman.

Same terms, same meanings

AT eight regional conferences, this month and last, school administrators and business officials from every State in the Union are scrutinizing the third preliminary draft of a manuscript that one day will establish standards for the Nation's schools to follow in accounting for their property: Standard definitions of terms, accounts, and units of measure: standard ways of determining values and costs.

Six national organizations with much to gain from nationwide standards have joined in this venture to prepare a guide, or handbook, for school accountants: American Association of School Administrators, American Association of School Business Officials of the United States and Canada, Council of Chief State School Officers, National Council of School House Construction, National School Boards Association, and Office of Education.

All have been in on it since the beginning—at the planning sessions

a year ago last December and January and at revision conferences in June and November 1957. Later this year they will send representatives to a national conference in Washington, to study the draft incorporating all suggestions from the regional sessions. From that conference the manual will emerge in final form, to be submitted to each organization separately for approval; and the Nation will stand at the threshold of a time when basic items of property information will have the same meaning everywhere and data collected about them will have real meaning.

As of the first of this month, half of the regional meetings had already taken place—at Washington, Boston, Atlanta, and Little Rock. The rest will be in April: In Lincoln, 2–4; Salt Lake City, 7–9; Spokane, 14–16; and Chicago, 21–23. Each State is sending 5 delegates to its regional conference, ostensibly one for each of the 5 organizations cooperating with the Office, which is represented by Paul L. Reason and George G. Tankard, specialist and assistant specialist, respectively, for educational records and reports.

Featherston appointed

COMMISSIONER Derthick announced on February 15 that E. Glenn Featherston, an Office of Education staff member for 15 years, has been appointed Assistant Commissioner for State and Local School Systems. Dr. Featherston succeeds Wayne O. Reed, now Deputy Commissioner of Education.

Before he came to the Office of Education, Dr. Featherston had held several posts as high school principal and school superintendent in his native Missouri. From 1938 to 1943 he was director of research and assistant State superintendent of schools in the Missouri State Department of Education.

In the Office of Education he has served as specialist for pupil transportation, Assistant Director of Administration of State and Local School Systems, Director of the School Administration Branch, and as Acting Commissioner for State and Local School Systems.

Dr. Featherston will be in charge of the Office of Education's largest division as it strengthens and expands its services to State and local school systems.

Golden Key Awards

TEACHER and cabinet member stood together on February 22 to receive tribute for their contributions to a better America.

The Golden Key Council, representatives of seven national educational organizations, presented to Marion B. Folsom, Secretary of Health, Education, and Welfare, and Lila Windsor, his fourth-grade teacher, the Golden Key Awards for 1958, at an annual dinner, held this year during the regional convention of the American Association of School Administrators in St. Louis.

Mr. Folsom, a Cabinet member since 1955, was cited by the council for his service to the national welfare. Miss Windsor, who taught elementary school for 38 years in McRae, Ga., the Secretary's hometown, was chosen by Mr. Folsom to receive a key in response to the request of the council that he name a person who had influenced his life at a formative period.

Recognition of the teacher's influence on the shaping of the lives of American leaders is the objective of the Golden Key Awards, sponsored by the American Association of School Administrators, Council of Chief State School Officers, National Association of Secretaries of State Teachers Associations, National Citizens Council for Better Schools, National Congress of Parents and Teachers, National Education Association, and the National School Boards Association.

Secretary Folsom calls Miss Windsor one of the best teachers he ever had. Miss Windsor, now 82 and retired, remembers the Secretary as an exceptional student, industrious and well-mannered. She is proud of her former pupil.

The Nation is proud of him, too, and of Miss Windsor.

Library Services Committee

THROUGH the Commissioner of Education's advisory committee on library services, the Office of Education keeps close to the needs of the American people for books and other information materials from libraries. This committee, whose 11 members come from public, college, and school libraries, library trustee organizations, State library agencies, and United States Government agency libraries, holds two meetings each year with the Commissioner of Education and the staff of the Library Services Branch.

The first meeting for 1958 took place January 16 and 17, chiefly to consider these matters:

- The Office of Education's proposed program for obtaining basic facts on resources and services of libraries.
- Need for fully trained school librarians.
- Some of the results of the Library Services Act, by which the Federal Government provides funds to the States to help strengthen their public library services to rural areas.

The second 1958 meeting of the Library Services Advisory Committee will be held this summer.

Present members of the Committee are Channing L. Bete, trustee, Greenfield Public Library, Greenfield, Mass.; David H. Clift, executive secretary, American Library Association; Loleta D. Fyan, State librarian, Michigan State Library; Mae Graham, supervisor of school and children's libraries, Maryland State Department of Education; Paul Howard, librarian, Department of Interior Library; Edmon Low, librarian, Oklahoma Agricultural and Mechanical College; Lowell A. Martin, dean, Graduate School of Library Services, Rutgers University; Mrs. Merlin M. Moore, president, American Association of Library Trustees; L. Quincy Mumford, Librarian of Congress; Arthur H. Parson, Jr., president, Public Libraries Division, ALA; and Gretchen Knief Schenk, free-lance consultant on library development.

Toward a common goal through professional teamwork

GUIDANCE and the CURRICULUM

FRANK E. WELLMAN

THE CURRENT emphases on developing specialized programs of education to meet the demand for scientists, engineers, and other specialists in short supply, have prompted much criticism of our present educational system and elicited a flood of suggestions for remedying the situation. Some of these suggestions frankly look to the Russian system of education as a model. Others, whose authors hesitate to associate their recommendations with the Russian system, plead for a rigorous academic curriculum with a single standard of attainment that all students would have to meet to stay in school. But none of these allow for the wide range of potentialities of our children and youth, the broad needs of society, and the democratic principles underlying our educational system.

Most, if not all, thoughtful educational leaders will agree that the fundamental objective of education must be the optimal development of our people; that, if we are to retain a system of free public education, we must give *all* children opportunities to develop—children at the lowest levels of intellectual capacity as well as those at the highest; and that we must educate in the arts, humanities, and social sciences as well as in the natural, physical, and mathematical sciences.

In our population of students we have enough academic potential to satisfy all the demands of the future for educated citizens in every field, but we must appropriately develop that potential. To do so, we must (1) identify and interpret the general and special capacities of every child, and do it early, (2) provide, through the school curriculum, those experiences that will produce the maximum practical development of those capacities, (3) provide professional assistance to the child and his parents as they make the adjustments and plans that will enable the child to get the maximum benefit from his educational experiences, and (4) continually assess the educational needs of society and evaluate the methods used to meet those needs. Our better school systems have been doing these things for many years and the opportunities they provide for all students are excellent.

Dr. Wellman is specialist in organization of guidance and student personnel services, Office of Education.

A basic curriculum . . .

At the elementary level most schools have an adequate curriculum to develop the basic learning skills (reading, numbers, oral and written expression, and study habits); to give experiences in art, music, physical education, and science; and to develop functional knowledge about our cultural heritage that is necessary for living in a democracy. Although the program of study provides children with a rich variety of experiences, both in nature and in scope, it is relatively uniform in subject-matter areas and offers the pupil few if any electives. The secondary school curriculum, however, deviates from this pattern, and many schools provide programs of study that enable the student and his parents to choose from many possibilities. Opportunities to choose vary widely, of course, from one school to another.

. . . and the child's needs

Now let us examine some of the various facets of the task of adapting curricular experiences to meet the developmental needs of the students.

The variance in the abilities of students to profit from any given program of studies is well known. In the elementary school any unselected group of children will vary in their rates of learning, their ultimate levels of educational attainment, and their standards of behavior. Good teachers and good schools have long realized that teaching methods and curricular content also must vary if each child is to grow according to his capacity.

The guidance personnel of the school system, working closely with the teacher, can provide essential information to make appropriate adaptations. These adaptations may take the form of special classes for the gifted or the retarded, special group procedures within the classroom, special equipment and instructional materials, and so forth. It is obvious that the identification and interpretation of children's abilities cannot lead to the desired educational outcomes unless the instructional program of the school is modeled to meet the needs of the children. It is also obvious that it is virtually impossible for a teacher to provide, in one classroom, those educational experiences needed to challenge the most able, to compensate for the deficiencies of the retarded, and to enable the average student to develop according to his abilities. In other words, when we insist that teachers consider individual differences, we must provide all possible assistance in identifying those differences and in building an adjustable curriculum.

. . . and the child's future

Students with high probability of success in college can be identified even in the elementary school. If they are identified thus early and given appropriate instruction, their educational progress will be limited only by their own capacity and effort.

In the secondary school one of the primary functions of the guidance program is to help the student and his parents plan for an educational program—high school, vocational, or college—that will adequately prepare the student for occupational fields at a level commensurate with his poten-

tialities. Unfortunately, the programs in some of our secondary schools are limited to a college preparatory curriculum or a general curriculum that does not satisfactorily prepare for admission to most colleges. In these schools students have no choice and no opportunities for varying their educational plans; and the guidance services consequently can be of only limited value to the students and the school. There is little necessity for providing a service to help students make choices if there are no choices to be made. There is little value in a student's choosing an occupation unless he has opportunity to prepare for it. Thus the value and success of guidance services depend heavily on the curricular offerings of the school.

On the other hand, we have many fine secondary schools offering their students a choice of 4, 5, or more different curriculums, with 100 or more separate courses. Many of these schools provide opportunities for the most able students to progress at a substantially faster pace than the average and to tackle challenging problems, to do original research and to think creatively at a level usually associated with college programs. They also provide for the students who, upon graduation, will go to work instead of college. In such schools, good guidance services are essential if the students are to profit fully from their curricular opportunities.

What guidance can do . . .

Specifically, guidance services contribute to the total educational program by—

(1) Assisting students to understand their abilities and potentialities. Equipped with this understanding, they can establish occupational goals appropriate to their academic capacity and select the programs of study that will give them opportunity for optimal educational development.

(2) Stimulating students to select courses and direct their efforts to the task of full and efficient development of their capacities. In many students, lack of educational motivation is reflected in poor work habits, indifferent attitudes, and a preference for the easiest courses regardless of their appropriateness. The school counselor working with the classroom teacher can effectively salvage many students who, despite great capabilities, have accepted mediocrity as their standard.

(3) Counseling with students who have adjustment problems—problems like physical deficiencies, family troubles, and cultural differences, any one of which can become an obstacle to a student's development. Again, the school counselor and the student's teachers, working together, can do much to improve, avoid, or eliminate those conditions that interfere with appropriate educational progress.

(4) Providing an analysis of the needs of groups and individual students that can be met by adapting the curriculum and instructional methods. For the school administrator such information is a basis for evaluating curricular offerings and making the modifications appropriate to the student body. For the teacher it provides clues to the hidden abilities of individual students and the sources of their problems, and encourages instructional modifications to produce the most effective educational outcome.

. . . through teamwork

It is obvious that guidance services are as much a part of a unified educational program as are instructional services or other administrative provisions. But it is just as obvious that the basic purposes of education cannot be served adequately by guidance services alone, by the teacher alone, or by a vast array of isolated curricular offerings. Effective guidance services are dependent upon and related to adequate curricular offerings; and, if the most effective results are to be attained, guidance personnel should have a part in determining what the curricular offerings should be. This means that the school's counselors, classroom teachers, and administrators must work as a team if our goal of optimal development for every person is to be achieved.

The coordinated teamwork approach also provides the basis for efficient utilization of the professional personnel in the school. By helping each other through their own specialized efforts, classroom teachers can more effectively carry out the essential instructional functions in the school. Moreover, the counselor's efforts may very well be lost if the classroom teacher does not cooperate in providing those educational experiences for the student that will contribute best to the fulfillment of plans for his development. With each staff member performing those functions for which he is best qualified, and with the work of all staff members coordinated to serve the students and the Nation, duplications and contradictions can be eliminated. This is the kind of teamwork that will enable us to meet with vision and success the formidable challenges that face education in America today.

. . . in the model school

Before we accept a "Model T" version of a school, let us examine the 1958 model.

When we are willing to spend the money needed to build the schools, to develop and implement adequate curricular offerings, and to prepare and employ a topflight professional staff of school administrators, teachers, counselors, psychologists, and other specialists, we can produce the 1958 model—a school with a balanced program to challenge the most able, to transmit the cultural heritage, to prepare all students for a productive and satisfying life, and, above all else, to perpetuate the democratic principles through practice and precept. The future of our Nation, even of democracy itself, is dependent on the education of this and coming generations of children. To provide appropriate educational opportunities for every child is not only the answer to the great challenge of our times: it is the fulfillment of a solemn obligation upon which rests the survival of the free world.

In their laws and regulations the States recognize a growing responsibility

ADULTS IN THE PUBLIC SCHOOLS

CHARLES H. RADCLIFFE and JOHN B. HOLDEN

AS OUR SOCIETY grows more complex, more education becomes necessary for more people. One response to the increasing need has been the growth of adult education programs in the public schools. By statute and regulation many States specifically authorize the establishment of such programs; and even in States where no specific statutory authority exists, public school districts are providing in one way or another for the educational needs of adults. In fact, in every State some districts are conducting classes for adults as part of their public school programs.

The table on the next page summarizes the provisions States have made for adult education programs in public elementary and secondary schools. Although it was compiled from provisions set forth in State statutes, it includes also provisions not explicity set forth but derived from State department of education regulations. It has been sent to State departments of education to be checked for accuracy and interpretation; at this writing all but five departments have responded.

TYPES OF PROGRAMS

The first two columns pertain to provisions for part-time school for school-age youth employed under work permits. In States where no special provision is made for these youth, they may attend classes established for adults.

The rest of the table concerns itself entirely with programs for adults and for youth over school age—programs of five main types (not included are programs under the Federal vocational education acts, correspondence courses, university extension courses not conducted in the local public schools, and recreational activities conducted by agencies other than the public schools):

1. *Americanization for aliens:* Instruction in citizenship, United States and State history, and Constitution.

2. *Elementary grade classes:* All instruction at the elementary grade level, including instruction of illiterates and English language classes for aliens.

3. *High school grade classes:* All instruction at the high school grade level, and courses that can be credited toward a high school diploma.

4. *General education:* All programs of instruction academic in nature and not included in first three types. Includes ungraded seminars, discussion groups, and classes in such subjects as community and international problems, fine arts, literature, philosophy, and home and family living.

5. *Education and training in arts, crafts, and recreational skills:* Activities primarily social, recreational, or for the purpose of producing goods.

One or more of these 5 types of programs are now provided for in the statutes and regulations of 47 States.

METHODS OF FINANCING

The classes for employed school-age youth are usually financed in the same way as the regular school program.

Classes for adults and above-school-age youth, however, are financed in a variety of ways, generally by a combination of ways: In 22 States, State aid (authorized, if not appropriated); in 17,* local school funds but no State funds; in 8, other public funds and or private funds, but no school funds, either State or local. Although 22 States authorize some form of State aid for at least 1 type of program, only 5 aid all 5 types; 7 aid 1, 1 aids 2, 3 aid 3, and 6 aid 4. It should be noted, too, that wherever State funds are authorized, they are authorized as a supplement to local funds, public or private; in other words, adult education programs in the elementary and secondary schools are not generally supported by State funds alone.

Where local tax funds are used, they are often supplemented by fees and contributions; readers of the table should bear this fact in mind so that they do not rule out the possibility of such supplements in those States where only local tax funds are indicated.

OTHER PROVISIONS

A majority of the States require that teachers of adults be certified by the State. Most States require a regular teacher certificate if the course is given for credit toward a diploma. Some require a special adult education certificate *in addition to* the regular certificate, but in some a special or temporary certificate is sufficient.

Typically, the programs under consideration here are established by local school districts under rules and regulations promulgated by the State department of education. In some States the laws authorizing programs in the public schools are mandatory; that is, they *require* the local district to conduct certain adult classes whenever a certain number of persons eligible to attend such classes have petitioned the school board.

In some States the State department of education establishes certain classes, which may be conducted by teachers provided by the State. Wisconsin has a separate department of vocational and adult education, which administers a program in conjunction with, but separate from, the public school system; but local school districts have authority to conduct certain adult-education programs in their public schools. *Continued p. 10*

Mr. Radcliffe is in the Laws and Legislation Branch of the Office of Education; Dr. Holden, in the Adult Education Branch, as specialist for adult education.

*Arkansas and Missouri have constitutional prohibitions against the use of school funds for this purpose.

LEGAL PROVISIONS IN THE 48 STATES FOR ADULT EDUCATI(

TYPE OF PROGRAM AUTHORIZED AND METHOD OF FINANCING

STATE	For employed school-age youth—Part-time school		For adults and above-school-age youth									
			Americanization for aliens: naturalization and citizenship		Elementary grade classes (includes English classes for illiterates)		High school grade classes		General education: public affairs, literature, fine arts, home and family living		Education and training in arts crafts, and recreational skills	
	Mandatory or permissive [1]	Method of financing [2]	Mandatory or permissive [1]	Method of financing [2]	Mandatory or permissive [1]	Method of financing [2]	Mandatory or permissive [1]	Method of financing [2]	Mandatory or permissive [1]	Method of financing [2]	Mandatory or permissive [1]	Method of financing [2]
Alabama					P	SA–6						
Arizona	M	[4] SA–5	P	PF	P	PF						
Arkansas [5]					P	LF–3						
California	M	SA–2	M	SA–2	M	SA–2	P	SA–2	P	SA–2	P	LF–3
Colorado	P	LF–1	[6] P	LF–1	[6] P	LF–1	P	LF–1	P	LF–1	P	LF–1
Connecticut			M	SA–2,6	M	SA–2,6	[7] M	SA–2,6	[7] M	SA–2,6	[7] M	SA–2,6
Delaware	M	[4] SA–5	P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1
Florida	M	SA–3	P	SA–3	P	SA–3	P	SA–3	P	SA–3	P	SA–3
Georgia	P	SA–3			[9] P	LF–2,3						
Idaho	[6] P	LF–1	[6] P	LF–1	[6] P	LF–1						
Illinois	P	[4] SA–3	P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1
Indiana					[10] P	LF–1	[10] P	LF–1				
Iowa	[11] M	[4] SA–6	P	LF–1	P	LF–1	M	[12] LF–1	P	PF	P	PF
Kansas	M	LF–1										
Kentucky	P	LF–1							P	LF–1		
Louisiana	P	SA–1	P	SA–1	P	SA–6	P	SA–6	P	SA–6	P	SA–6
Maine			P	SA–5	P	SA–5	P	SA–5	P	SA–5	P	LF–3
Maryland					P	LF–1	P	LF–1	P	LF–1	P	LF–1
Massachusetts	M	SA–5	M	SA–3,5	M	SA–3,5	[14] M	SA–5	P	LF–1	P	LF–1
Michigan	P	SA–1	P	SA–1	P	SA–1	P	SA–1	P	SA–1	P	LF–3
Minnesota	P	SA–1	P	LF–1	P	LF–1	P	SA–3	P	LF–1	P	LF–1
Mississippi					P	LF–1			P	LF–1	P	LF–1
Missouri [5]	P	SA–1							P	LF–3		
Montana	P	LF–2	P	LF–2	P	LF–2						
Nebraska	P	LF–1	P	SA–6	P	LF–1	P	LF–1	P	LF–1	P	LF–1
Nevada	M	SA–5	P	LF–1	P	LF–1	P	LF–1	P	SA–6		
New Hampshire					M	SA–6						
New Jersey	P	SA–1	P	SA–5	P	SA–5			P	PF		
New Mexico	M	[4] SA–1			P	LF–3						
New York	M	SA–3	P	SA–4	P	SA–4	P	SA–4	P	SA–4	P	SA–4
North Carolina	P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1
North Dakota	M	SA–3	P	LF–2	P	SA–2	P	LF–1,2	P	LF–2	P	LF–2
Ohio	P	SA–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1
Oklahoma									P	LF–1		
Oregon	M	[4] SA–6	P	LF–1	P	LF–1	P	LF–1	P	LF–1		
Pennsylvania			M	SA–3	M	SA–3	M	SA–1	M	SA–3		
Rhode Island			M	[8] SA–3	M	[8] SA–3			P	SA–3	P	SA–3
South Carolina [16]					P	SA–6	P	SA–6	P	SA–6		
South Dakota						[12] LF–1	P	[12] LF–1	P	[12] LF–1	P	[12] LF–1
Tennessee	P	[4] SA–6			P	SA–1	P	SA–1	P	SA–1		
Texas [16]			P	LF–1	P	LF–1	P	LF–1	P	LF–1	P	LF–1
Utah	M	[4] SA–3	M	LF–1	M	LF–1	P	LF–1	P	LF–1	P	LF–1
Vermont					P	PF	P	PF				
Virginia			P	SA–2	P	SA–5	P	SA–5	P	SA–5	P	SA–5
Washington	P	SA–1	P	SA–1	P	SA–1	P	SA–1	P	SA–1	P	LF–1
West Virginia	P	LF–1	P	PF	P	PF	P	PF				
Wisconsin			P	LF–1	P	LF–1	P	LF–1	P	[17] LF–1	P	LF–1
Wyoming			P	SA–6	P	PF	P	LF–2	P	PF	P	PF

PROGRAMS IN THE PUBLIC SCHOOLS, AS OF DECEMBER 1957

TEACHERS [3]		ADMINISTRATION [3]					GENERAL PROVISIONS [3]					
			Courses established by—				Credit given toward diploma					
Special credentials required	Temporary credentials issued by State department of education	Program administered by State board or department of education	District with approval of State agency	State agency	Special division created in State agency	Position of State director created	Elementary	Secondary	2 or more districts may establish a program together	Junior colleges have adult education classes	Adults may attend regular elementary or high school classes	Both day and evening classes
		X		X								
		X	X									
		X	X								X	X
X		X	X		X	X	X	X		X		X
					X	X			X			X
X	X	X	X		X	X		X				
		X	X	[5] X	X	X		X				X
X	X	X	X		X	X	X	X	X	X	X	X
X												
X					X	X	X	X	X	X	X	X
		(13)	X				X	X	X	X		X
		X	X									
X	X	X	X		X	X	X	X	X			X
		X	X				X	X	X			X
		X	X					X				X
X		X	X	X	X			X	X		X	
	X	X	X				X	X	X	X		X
	X	X	X		X	X		X	X	X	X	X
		X	X									
		X	X		X	X						
		X	X			X	X	X			X	X
		X	X									
X		X	X									
X	X	X	X		X	X	X	X				X
								X	X	X	X	X
	X	X	X				X	X	X	X	X	X
							X	X	X			X
	X	X	X	[15] X		[15] X	X	X	X			X
X		X	X				X	X				X
	X	X	X	X		X	X	X	X			X
		X	X				X	X			X	X
		X	X				X	X	X		X	X
		X					X	X		X		X
X		X	X			X						
X			X			X		X			X	
	X	X	X							X	X	X
		X	X									X
							X	X			X	X
		(18)	X	[15] X						X		

[1] Permissive legislation states that local districts may establish programs; mandatory legislation requires them to establish under certain conditions.

[2] Methods of financing are indicated by symbols as follows:

SA, State aid authorized (to supplement local funds, public or private):

1, Per pupil in ADA.
2, Per pupil, clock hours.
3, Per teacher or teaching unit.
4, Per class.
5, In percent of total costs.
6, In administrative allotments.

LF, Locally financed with tax funds (no State aid):

1, Local school funds.
2, Special tax.
3, Other public funds.

PF, Privately financed: Tuition, fees, and contributions (no State or local tax funds).

[3] Except where noted, does not apply to classes for school-age youth.

[4] From vocational education funds.

[5] Constitution prohibits expenditure of school funds for adult education.

[6] 1st-class cities or districts.

[7] Town of 10,000 or over.

[8] Some classes established by State department of education.

[9] Established by county commissioners.

[10] For persons aged 14 to 30 unable to attend day school.

[11] Cities of 12,000 or over.

[12] Persons over 21 pay tuition.

[13] Programs for part-time school for employed youth are administered by State board of vocational education.

[14] Cities of 50,000 or over.

[15] Americanization classes.

[16] Has no specific legislation for adult education but gives general authority for programs.

[17] State aid for general adult education programs in public schools made available through the State board of vocational and adult education.

[18] Administered by State board of vocational education.

NOTES

STATE AID

During the 1956–57 school year 16 States provided $15½ million in State funds to help local community programs in adult education. Most of these programs consisted of elementary and high school credit classes and general noncredit programs of public affairs, literature, fine arts, home and family living, safety and health, and a few business and technical classes not reimbursable under the Federal vocational acts.

The largest amounts were allocated in California, New York, and Florida. Delaware, Maryland, Nevada, Oregon, Pennsylvania, and Utah, which once provided State aid, are not currently doing so. Washington and Wisconsin provided the same amount in 1956–57 as they did 10 years before; Alabama and Virginia, less. For 1957–58 Michigan has less State money for general adult education than it had previously.

State aid for general adult education is facing a critical dilemma. More and more communities are starting programs, our adult population is increasing, and an increasing percent of adults are enrolling. Yet the adult education programs have been handicapped by a dwindling share in the total State aid for public school education. Even California, which has more than tripled its State aid to adult education in the last 10 years, has not kept the same pace for adult education as it has for public school education in general. In 1951–52 it gave 2.5 percent of its total State aid for public schools to adult education; last year, 1.59 percent.

The National Commission on Adult Education Finance has recommended that State finance programs for public education "should authorize and make available enough aid to result in an expenditure for adult education in each school district of an amount equal to a minimum of 2 or 3 percent of the total expenditures for elementary and secondary education." (*Financing Adult Education in America's Public Schools and Community Councils*, by Edward B. Olds, research coordinator, Adult Education Association of the U. S. A., p. 104).

Several States are currently studying methods of financing adult education programs. A group of State directors, meeting last November in San Diego at the annual conference of public school adult educators, suggested the following essential principles for State legislation on adult education:

1. *The limits of adult education should be broadly defined.*

2. *The revenue should be an inherent part of the State aid foundation program, the same as it is for other areas of public school education.*

3. *The formula used for distribution should—*

Provide for adequate administration and supervision.

Encourage local effort and support.

Provide an equalization factor.

Provide a foundation program.

Be closely related to or an integral part of the regular pattern of other educational aid to public schools in distribution.

Provide risk capital for new communities starting a program and for experimentation and research in difficult subject matter areas.

State departments of education have the responsibility to help schools initiate and strengthen local programs in adult education, to act as clearinghouses for adult education resources, to recommend plans for State financial aid to local districts, to help determine the needs of adults, and to suggest methods for evaluation. To discharge these responsibilities the departments need the support of sound legal provisions; and they should therefore recommend to their State legislatures the kind of legislation that will best encourage and support programs sufficiently flexible to meet the dynamic challenges of this important area of education.

State aid for general adult education and for all types of public school education, 1956–57

STATE	GENERAL ADULT EDUCATION	ALL TYPES OF PUBLIC SCHOOL EDUCATION [1]	AID TO ADULT EDUCATION AS PERCENT OF TOTAL STATE AID
California	$8,250,841	$518,000,000	1.59
New York	3,555,178	460,000,000	.77
Florida	1,324,743	106,950,000	1.24
Pennsylvania	500,000	271,800,000	.18
Massachusetts	[2] 329,000	38,000,000	.87
Michigan	300,000	260,000,000	.12
Louisiana	250,000	145,771,000	17
South Carolina	[3] 203,517	57,500,000	.35
Wisconsin	190,000	34,000,000	.56
Oregon	152,630	36,632,000	.42
Washington	[4] 150,000	121,900,000	.12
Connecticut	116,000	27,350,000	.42
Rhode Island	78,119	6,050,000	1.29
Virginia	40,000	65,000,000	.06
Maine	24,181	7,900,000	.31
Alabama	10,000	95,000,000	.01
Total, 16 States	15,474,209	2,251,853,000	.69

[1] Advanced Estimates of Public Elementary and Secondary Schools for School Year 1957–58, Research Division, National Education Association, p. 27.
[2] Includes $234,000 for university extension.
[3] Includes $142,000 for "Opportunity School."
[4] Estimated by State officials.

For graduates and undergraduates, a guidebook apiece

Financial Aid for College Students

RICHARD C. MATTINGLY

PLEASE send me information about the colleges and universities in my State: What do they charge for tuition and fees, for board and room? Do they offer any scholarships? Which ones have jobs for students, money to lend?"

In letter after letter, questions like these come to the Division of Higher Education in the Office of Education, mostly from students, parents, and teachers seeking information that will help a student decide what college to attend. And with them come many questions about specific institutions: Location? Public or private? Degrees? Size of student body? Number of students entering each year?

By way of answer, the Office of Education last fall published *Financial Aid for College Students: Undergraduate*, by Theresa Birch Wilkins (Bulletin 1957, No. 8, price $1, obtainable from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Single copies have been mailed to the approximately 25,000 public secondary schools.) The directory covers each of the 1,562 institutions of higher education cooperating with the Office to make the answers available.

In the academic year 1955–56 these colleges and universities awarded over 237,000 scholarships with a total value of approximately $65.7 million, averaging $277 per scholarship. In addition, they made 77,107 long-term loans totaling almost $12.5 million, and employed about 288,500 undergraduate students for an aggregate wage of almost $66 million.

These gross figures are interesting because they describe the total institutional student aid picture, but most prospective students want to know what is available at a particular college. The kind of information they can get from *Financial Aid For College Students: Undergraduate*, is best shown by a slightly fictitious excerpt.

Sample College

Collegetown, U. S. A. (private; women; grants bachelor's degrees; enrollment: Full-time—323, first-time—121; tuition and required fees, $975; board and room, $625).

Scholarships: 26 to entering freshmen at an average of $451; total, 97 (10 without specific reference to need) at an average of $525. Range: 79 between $375 and $874; 18 below $375.

Loans: 4 to entering freshmen at an average of $131; total, 25 at an average of $221; 4-year maximum, $1,000. 4 percent interest after leaving institution.

Employment: 89 students at an average of $193.

Brief thought it is, this description is highly informative. For example, it tells the prospective student that even if she can get one of the college scholarships, she will still need a considerable sum of money: the basic expenses are $1,600, and the college has no scholarship worth more than $874. However, the school does offer loans and employment. It does not here give details on terms of loan repayment, but many institutions do.

COMPANION volume to the undergraduate directory is *Financial Aid for College Students: Graduate*, by the author (Bulletin 1957, No. 17, sold by the Superintendent of Documents for 50 cents). It contains similar information about 406 institutions that gave financial aid to graduate students for the 1955–56 academic year, including some that granted fellowships to students to go to institutions offering graduate or professional programs.

For each institution the graduate directory, like the undergraduate, provides data on tuition and fees, room and board costs, enrollment, and number of degrees granted during the 1955–56 academic year. It gives loan information in the same manner as the undergraduate directory except that it tells the maximum amounts that students may borrow. It includes also the number and value of fellowships granted in each field. (The reader should bear in mind that the data are for a single academic year and may not apply to subsequent years.)

Fellowships and assistantships are usually awarded to the student on the basis of the subject he wishes to study. In his search for institutions giving fellowships in a particular field of study, the prospective graduate student will find the index to Bulletin 17 particularly useful, for it lists institutions by the 100 fields of study in which fellowships are granted.

Institutional employment, including assistantships, helped more undergraduate and graduate students in 1955–56 than did outright grants of scholarships and fellowships. Over 288,000 undergraduate students were employed, although on an average they received only $229 annually, slightly less than the average of $277 received by the 237,370 scholarship holders. For graduate students the comparable figures were 24,885 fellowships averaging $733, and 29,406 assistantships averaging $1,190. Thus, for every 6 graduate fellowships there were approximately 7 assistantships; and for every dollar given to a fellowship holder, a graduate assistant *earned* almost two.

BOTH of these directories come out of a student-assistance project in the Programs Branch of the Office's Division of Higher Education. Directed by Ralph C. M. Flynt and supervised by J. Harold Goldthorpe, the project for the past 2 years has assembled data on student financial aid available in more than 1,700 institutions. The Office hopes to publish a complete report and statistical analysis of these data within the next year.

Mr. Mattingly is research assistant, Division of Higher Education, Office of Education.

Between publicly and privately controlled institutions—a difference and a similarity

Enrollment Trends in Higher Education

By M. Clemens Johnson *and* Herbert S. Conrad

CONSIDERABLE interest has been expressed in the comparative rates at which enrollments have grown in publicly controlled and privately controlled institutions of higher education. In this report, we present graphic data on the subject for the prewar year of 1939 and for each of the postwar years from 1947 to 1957. The data are restricted to 4-year institutions only (they do not include junior colleges) and to students of college grade, or "degree-credit students."

A "degree-credit student" may be defined as a student whose program in an institution of higher education consists wholly or principally of work that is normally creditable toward a bachelor's or higher degree—either in the institution attended by the student, or by transfer (as from a junior college to a 4-year institution). Students taking such work by correspondence, however, are *not* included in the enrollment figures given here.

Dr. Johnson is educational statistician and Dr. Conrad is director, Research and Statistical Services Branch, Office of Education.

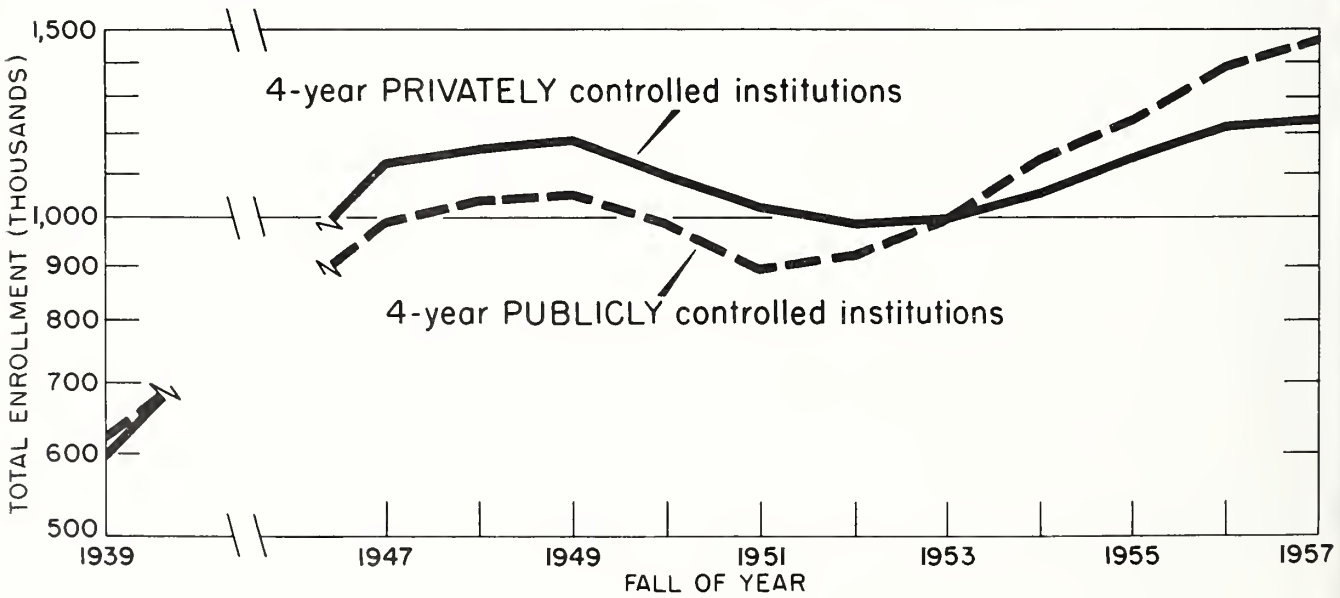
Two categories of enrollment are separately presented: *Total enrollment*, which includes students at all levels, from freshman through graduate, and *first-time enrollment*, which includes only the "new freshmen," or students entering higher education as degree-credit students for the first time. Each category includes both full-time and part-time students. All enrollment figures refer to *fall* enrollment, i. e., enrollment within 2 or 3 weeks after the opening of college in the fall.

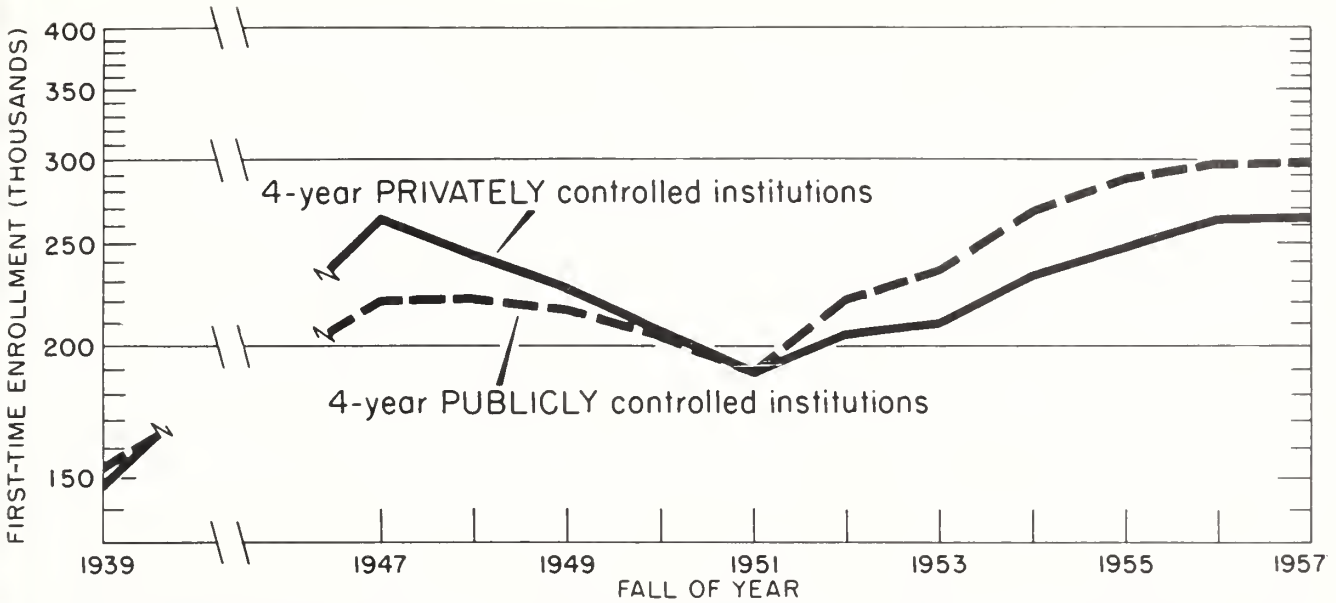
Total fall enrollment

The proportion of *total* fall enrollment in publicly controlled 4-year institutions rose from 50.9 percent in the fall of 1939 to 54.2 percent in the fall of 1957—a rise of 3.3 percentage points. During the same time, the proportion in privately controlled institutions decreased by 3.3 percentage points.

The total-enrollment data, shown in the first graph, are plotted on a ratio-scale, in which *equal distances on the vertical axis represent equal proportional changes*. Thus, a change from 200,000 to 240,000 (an increase of 20 percent) in a given period of time would be represented by the same rise as a change from 300,000 to 360,000 in the same period; in other words, *equal proportionate changes in a given period* of time would appear as *parallel* trends on the chart. The gradual divergence of the lines from 1953 to 1957 reflects the greater proportional gains of total enrollment in the 4-year publicly controlled institutions.

In *total* fall enrollment, publicly controlled 4-year institutions of higher education in the United States showed a greater rate of growth between 1953 and 1957 than the privately controlled. (Data are plotted on ratio scale: Equal distances on the vertical axis represent equal proportional changes.)





In *first-time* fall enrollment, publicly and privately controlled 4-year institutions of higher learning in the United States showed identical rates of growth between 1953 and 1957. (Data are plotted on a ratio scale: Equal distances on the vertical axis represent equal proportional changes.)

First-time fall enrollment

The proportion of *first-time* fall enrollment in publicly controlled 4-year institutions rose from 50.9 percent in the fall of 1939 to 53.0 percent in the fall of 1957—a rise of 2.1 percentage points. During the same period, the proportion of first-time enrollment in privately controlled institutions decreased by 2.1 percentage points.

In the 4-year period from 1954 to 1957, however, both types of institutions gained in the number of first-time students enrolled. The *proportionate* gains in the two types in this period were virtually identical, as is indicated in the second chart by the parallelism between the two curves from 1954 to 1957.

An Inconsistency?

A question may arise as to the consistency of the facts shown in these two charts. How is the diverging trend for recent years in the first chart to be reconciled with the parallel trend in the second? The answer, presumably, lies in a higher rate of transfer into the 4-year publicly controlled institutions than into the 4-year privately controlled. Such a rate of transfer into the publicly controlled institutions might be expected from the recent increase in the growth of public junior colleges. Other possible factors include a higher rate of reentry into publicly controlled institutions by students whose education was interrupted by military service or other circumstances, or a higher rate of retention from baccalaureate to graduate programs. *The study from which these charts are taken,* however, offers no specific evidence on any of these possibilities.*

Space is lacking here to include data for junior colleges, or to report separately on full-time *vs* part-time enrollment and undergraduate *vs* graduate. It is hoped that a brief report on these additional aspects of the enrollment question may be published soon.

*U. S. Dept. of Health, Education, and Welfare, Office of Education, *Opening Enrollment in Institutions of Higher Education, Fall 1957*, Circ. No. 518, Washington, 1958, pp. 6–7. (Copies are available from the Government Printing Office for 40 cents each.)

WHO? A Year for Answers

CIRCUMSTANCES join to make this year the best one yet for learning about the World Health Organization.

This year brings WHO to its 10th anniversary; and its 88 member countries invite all people to observe the occasion by taking a grateful look at what WHO has accomplished.

This year sees one of WHO's biggest campaigns—to obliterate malaria—off to a good start.

This year, for the first time, the United States will be host to the World Health Assembly, beginning May 26, in Minneapolis.

In a year that stirs our interest in international health and cooperation teachers and others are looking for information about WHO. Materials are available, some of them free—fact sheets, booklets, pictures, an anniversary film. The Office of Information, Division of International Health, Public Health Service, Washington 25, D. C., has a good basic kit, plus information about other sources.

Nine new contracts signed, 26 more contracts recommended

Cooperative Research Program

SINCE *School Life* last reported on projects newly added to the Office of Education's cooperative research program, the Office has signed nine more contracts with colleges, universities, and State departments of education, and has thus brought the total number of research projects to 102. In addition, the Research Advisory Committee, meeting in January to consider 69 new project proposals, recommended 26 to the Commissioner of Education; already most of these are being negotiated into contract. Taken together, the 128 projects, many of which run for more than 1 year, call for $6.3 million in Federal funds to bring them to completion. For the first 2 years of work, the Congress has made $3.3 million available; for next year's projects, both continued and new, the President's budget asks for an appropriation of $2.7 million.

The newest contracts

The 9 new contracts, all signed since last October, call for $116,759 in Federal support this fiscal year. They provide for these projects:

- The American University, 8-month project under Samuel Engle Burr, Jr., *Development of fiscal relationships of State departments of education.* Federal funds, $10,120.
- Brooklyn College, 2-year project under Louis M. Heil, *Characteristics of teacher behavior and competency related to the achievement of different kinds of children in elementary grades.* Federal funds, $32,200.
- California State Department of Education, 4-year project under Walter Thomas Plant, *Personality changes associated with a college education.* Federal funds, $16,964.
- Colorado State Department of Education, 3-year project under William G. McDonough, *Improvement of school organization and administration to meet the needs of children of migrant farm workers.* Federal funds, $35,850.
- Massachusetts Institute of Technology, 1½-year project under Robert E. Hewes, *Use of statistics in counseling students.* Federal funds, $4,571.
- The Ohio State University, 1½-year project under Paul R. Klohr, *Identification and development of talent in heterogeneously grouped students in a general education program at the secondary level.* Federal funds, $22,500.
- University of California (Berkeley), 3-year project under Walter Loban, *Language ability in the middle grades of the elementary school.* Federal funds, $45,839.
- University of Michigan, 1½-year project under Robert C. Angell, Amos Hawley, and Morris Janowitz, *Career conflicts in school systems: A comparative study.* Federal funds, $7,810.
- University of Texas, 1½-year study under James W. Reynolds, *Development of community centered programs in junior colleges.* Federal funds, $49,163.

The latest recommendations

Except for some concentration on gifted and handicapped children, the 26 projects recently recommended to the Commissioner would explore almost as many problems as there are projects:

BOSTON UNIVERSITY: (1) *Adapting instruction to the learning needs of children in the intermediate grades;* (2) *Teaching topographical orientation and spatial organization to congenitally blind children.*

HUNTER COLLEGE, *Identification and training of gifted elementary school children with exceptional scientific talent.*

INDIANA UNIVERSITY, *Problem solving performance of elementary school teachers on professional criteria.*

IOWA STATE DEPARTMENT OF PUBLIC INSTRUCTION, *Effects of special training on the achievement and adjustment of gifted children.*

MAINE STATE DEPARTMENT OF EDUCATION, *Effect of supplementary instruction on academic achievement of educable mentally retarded children in rural communities.*

MICHIGAN STATE UNIVERSITY: (1) *Relation of the high school student's occupational aspiration to his socioeconomic status and his mental ability;* (2) *Critical thinking, attitudes, and values in higher education.*

MISSOURI STATE DEPARTMENT OF PUBLIC INSTRCTION, *Factors associated with the school's holding power for educable mentully retarded adolescents.*

NORTHWESTERN UNIVERSITY, *Using the interests of elementary and secondary school pupils as a basis for improving instruction.*

PURDUE UNIVERSITY, *Vocational education in public schools as related to social, economic, and technical trends.*

SAN FRANCISCO STATE COLLEGE, *Effect of special day training classes for the severely mentally retarded.*

SOUTHERN ILLINOIS UNIVERSITY, *Education of the children of migrant agricultural workers in southern Illinois.*

SYRACUSE UNIVERSITY, *Studies of college environments.*

UNIVERSITY OF CALIFORNIA (Berkeley), *Special attitudes of boys and girls as related to academic success at various levels.*

UNIVERSITY OF CHICAGO, *Development of educational methods for different types of students.*

UNIVERSITY OF HOUSTON, *Sensory thresholds in mentally retarded children: Some problems of differential diagnosis and education, with special reference to hearing.*

UNIVERSITY OF KANSAS CITY, MO., *Factors influencing choice of a teaching career.*

UNIVERSITY OF MINNESOTA: (1) *Cognitive development and performance in children with normal and defective hearing;* (2) *Effects of direct and indirect teacher influence on the learning of gifted, average, and below-average students;* (3) *Modification of parental attitudes toward mentally retarded children.*

UNIVERSITY OF PENNSYLVANIA, *Differences between good and poor problem solvers of above average, average, and below-average intelligence.*

UNIVERSITY OF WISCONSIN, *Newly formed centralized school districts.*

WASHINGTON UNIVERSITY, MO.: (1) *Achievement motivation in normal and mentally retarded high school children;* (2) *Teaching and development of an integrated physics-algebra course at the ninth-grade level.*

WAYNE STATE UNIVERSITY, *Relationship of self-concept to beginning achievement in reading.*

HERE *School Life* continues its reporting-in-brief on projects that have been completed under the Office of Education's cooperative research program, now in its second year. The project reported below is sixth in the series; the first five were summarized in the issues for December 1957 and January and February 1958.

MENTAL AGE AND LEARNING

FURTHER evidence that a child's ability to learn should not be judged by mental age alone comes out of a study made by William M. Cruickshank, director of education of exceptional children at Syracuse University, and Kathryn A. Blake.

In the literature of previous research bearing on this issues, Drs. Cruickshank and Blake had found justification for certain hypotheses: Mentally retarded and normal persons of the same mental age show both similarities and differences in their performance of intellectual tasks; and the similarities and differences seem related to the nature of the tasks. On tasks involving routine behavior developed over a long period of time they differ little. But on tasks requiring motor manipulation of test materials, mentally retarded persons do better; and on tasks depending heavily on immediate rote learning and reasoning ability, normally intelligent persons do better. There appear to be no differences, however, in the rates at which normal and retarded persons improve and in the extent to which their performance varies.

To test these hypotheses on tasks involving direct learning and transfer of learning, the 2 researchers put 3 different kinds of tasks to 30 mentally retarded and 30 intellectually normal boys, all with a mental age of about 10 years. The retarded boys had an average chronological age of 15 years and an average I. Q. of 70; the normal boys had averages of 10 years and 99. They were asked to sort cards (learning sensorimotor responses), to pair nonsense syllables (learning arbitrary rote associations), and to find the relation between the content and position of pictures and the presence or absence of a light (discovering and applying the principle that underlies a phenomena). Each task had two forms—one for direct learning and one for transfer of learning; but both forms required identical responses.

In performing the *direct-learning* tasks, the retarded boys showed themselves significantly superior in sensorimotor learning. The normal boys showed themselves superior in rote learning but not superior enough to permit a positive generalization about it. In the principle-discovering task, findings were not conclusive. In none of the tasks did the two groups show any significant differences in variability of performance or rate of improvement.

In none of the *transfer-of-learning* tasks did the groups show differences enough to justify conclusions.

The generalizations made by the researchers at the close of their study are, as they say, "limited to the populations from which the samples were selected and the types of learning performance assessed . . . A wider application will have to await . . . investigations in which are employed larger samples, different tasks . . . different experimental conditions. There is also need for further comparative research on other psychological processes . . .

"When such studies are completed, special educators will have a more experimentally adequate psychological foundation to weigh with philosophical and sociological considerations in . . . planning for mentally handicapped children . . . However, should the findings of this study be sustained by further comparative research, the relationships demonstrated here do suggest that no *a priori* expectations about intellectual performance should be made on the basis of mental age alone. Instead, it is necessary to weigh both intelligence level and chronological age in relationships to mental age, the task, and the aspect of performance under consideration. Mentally handicapped individuals can be expected to perform more adequately, less adequately, or in a similar fashion to their intellectually normal mental age counterparts depending upon the type of response required by the situation in question."

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

FOR SALE

(Order from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

HIGHER EDUCATION PLANNING AND MANAGEMENT DATA, 1957–58: SALARIES, FRINGE BENEFITS, TUITION AND FEES, ROOM AND BOARD. by *W. Robert Bokelman.* 1958. 102 pp. 60 cents. (Cir. No. 517.)

PUBLIC VOCATIONAL EDUCATION PROGRAMS. 1957. 17 pp. 15 cents. (Pamph. No. 117, revised.)

RETENTION AND WITHDRAWAL OF COLLEGE STUDENTS, by *Robert E. Iffert.* 1958. 177 pp. 65 cents. (Bul. 1958, No. 1.)

TEACHERS OF CHILDREN WHO ARE SOCIALLY AND EMOTIONALLY MALADJUSTED, by *Romaine P. Mackie, William C. Kvaraceus,* and *Harold M. Williams,* in collaboration with *Hazel F. Gabbard* and *Ernest H. Suerken.* 1957. 92 pp. 45 cents. (Bul. 1957, No. 11.)

THE STATE AND NONPUBLIC SCHOOLS, by *Fred F. Beach* and *Robert F. Will.* 1958. 152 pp. $1.25. (Misc. No. 28.)

FREE

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

EXCEPTIONAL YEARS FOR EXCEPTIONAL CHILDREN. Reprint from *School Life,* January 1958. 8 pp.

FACULTY, STUDENTS, AND DEGREES IN INSTITUTIONS OF HIGHER EDUCATION, STATISTICAL SUMMARY, 1955–56, by *Dorothy Gray.* February 1958. 11 pp. (Cir. No. 514.)

HIGH SCHOOL GRADUATION REQUIREMENTS ESTABLISHED BY STATE DEPARTMENTS OF EDUCATION, by *Grace S. Wright.* January 1958. 20 pp. (Cir. No. 455 Revised.)

HOW TO USE THE CRITERIA FOR EVALUATING GUIDANCE PROGRAMS IN SECONDARY SCHOOLS, Form B, by *Arthur L. Benson.* Reprint January 1958. 14 pp. (Misc. 3317–A.)

PROFESSIONAL LITERATURE FOR TEACHERS OF ELEMENTARY SCIENCE, by *Glenn O. Blough* and *Paul E. Blackwood.* Revised February 1958. 10 pp. (Selected References No. 3.)

SELECTED PUBLICATIONS OF THE OFFICE OF EDUCATION FOR SCHOOL ADMINISTRATORS. February 1958. 4 pp.

U. S. GOVERNMENT PRINTING OFFICE: 1958

SCHOOL LIFE

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OFFICE OF EDUCATION

AMONG THE CONTENTS

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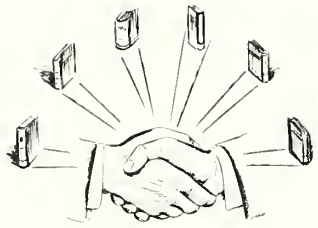

COOPERATION: Essential to Research

EDUCATION in a free society, by its very nature, makes cooperation essential to the research that guides its progress.

COOPERATION IS ESSENTIAL because education is not a single science. Rather it is the application of many sciences to the task of modifying human behavior. Naturally, then, to improve educational policy and procedure we must have research in many disciplines—anthropology, sociology, psychology, physiology, and the like—and we must have it at two levels: Basic research, which identifies the primary behavioral phenomena; and methodological research, which applies the findings of basic research to educational problems.

COOPERATION IS ESSENTIAL because universal education as an ideal and a national need has thrust upon our society the most monumental task it has ever faced. More people are learning; there is more to learn. Thus the task of providing education becomes both immense and complex. Giving right direction to the educational undertaking of this great Nation requires the research efforts of all individuals and organized groups in the country, the use of all research resources. Unless educational planning for the future is undergirded with the most exacting type of research into all kinds of educational endeavor, education will not meet the challenge of the future.

FINALLY, COOPERATION IS ESSENTIAL if research findings are to have meaning for the policies and procedures of education. In other words, the distance between the researcher and the user of research must be lessened and the understanding between them must be increased.

In launching its Cooperative Research Program, the Office of Education is attempting to keep in focus these three fundamental needs for cooperation. It is the intent of this program to broaden and strengthen relationships among the contributing disciplines; to stimulate and assist research effort everywhere; and to speed up the process of bringing the findings to policymakers and planners—in classroom, community, State, and Nation.

Roy M Hall

Assistant Commissioner for Research

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

CARROLL B. HANSON
Director
Publications Services

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Educational news

EVENTS AND DEVELOPMENTS

of national significance

Space Primer

BACK of the President's plan for a space program is a 4,000-word statement by the President's Science Advisory Committee, of which James R. Killian is chairman. In language so simple that it has been called a primer, *Introduction to Outer Space*, published by the White House tells why this Nation should explore space. Copies can be had from the Superintendent of Documents, Washington 25, D. C., for 15 cents each.

Sign of Summer

YOU are summer's first swallow; we hope you presage a full, warm season.

With this graceful greeting, teachers and school officials in the Soviet Union welcomed Oliver Caldwell last month. Mr. Caldwell, who is the Office of Education's assistant commissioner for international education, was the first educator to enter that country under the recent (January 27) cultural-exchange agreement between the USSR and the United States. To him the welcome expressed a hope he finds strong on both sides of the agreement—that now begins freer communication and closer understanding between the two peoples.

Mr. Caldwell was in the USSR as a planner of interchanges. As a result of his visit, a team of 10 US educators is already in the USSR, studying the country's educational system; and a similar Soviet team soon will be coming here. Mr. Caldwell has also arranged for an interchange of curriculum materials; on this subject we will report details next month.

The US team, which left on May 6 and returns June 10, is headed by Commissioner Derthick and includes four others from the Office of Education: Lane C. Ash, assistant director, division of vocational education; and John R. Ludington, Helen K. Mackintosh, and John B. Whitelaw, respective chiefs of sections for secondary schools, elementary schools, and teacher education.

Other members are George Z. F. Bereday, associate professor of education, Columbia University; Henry Chauncey, president, Educational Testing Service; A. John Holden, commissioner of education for Vermont; Herold C. Hunt, Eliot professor of education, Harvard University; and Harry C. Kelly, assistant director for scientific personnel and education, National Science Foundation.

Television Conference

ALL research thus far on educational television will be spread out this month before the Conference on Educational Television when it meets to take the measure of a still-new and exciting educational tool and to judge the promises of the future by the experiences of the past.

This survey of research, however, is only part of the program planned for May 26–28, when 65 educators will attend meetings sponsored by the Office of Education with the cooperation of the National Association of Educational Broadcasters. Franklin Dunham, chief of the Office's radio-TV services and in charge of arrangements, says that sessions will explore the needs of both higher education and elementary and secondary schools; the separate problems of producers and users of educational TV; the contributions that can be made by standard commercial broadcasting, radio, and movies, as well by educational stations; and the place of TV in national educational policy.

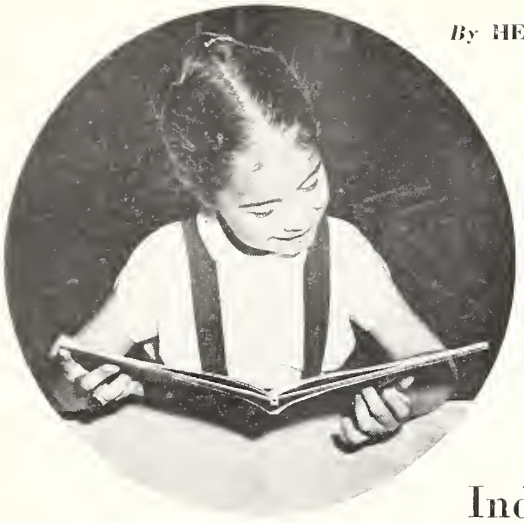
Among the speakers will be William G. Carr, executive secretary, National Educational Association; Kenneth Christiansen of the Educational Television and Radio Center; Novice G. Fawcett, president of The Ohio State University; Frederick H. Garrigus, manager of organizational services, NAEB; John E. Ivey, Jr., executive vice president, New York University; Marshall McLuhan, editor, *Explorations Magazine;* John L. Scanlon, deputy director of research, Fund for the Advancement of Education; Maurice F. Seay, director of education, W. K. Kellogg Foundation; and Ralph Steetle, executive director, Joint Council on Educational Television.

Wanted: Portraits

IF the gaps can be filled, the Office of Education soon will have on display for visitors and staff a collection of photographs or portraits of all the Commissioners of Education who have served the United States since the position first was established, 91 years ago.

For assistance in filling the gaps the Office herewith appeals to readers of *School Life*. Yet to be acquired are copies of the first three commissioners—Henry Barnard, John Eaton, and N. H. R. Dawson—and of the fifth and the eighth—Elmer E. Brown and William John Cooper. Either the likenesses or clues leading to them will be happily received.

By HELEN K. MACKINTOSH and MARY HELEN MAHAR



Teaching Reading *the* Individualized Way

ONLY the person who knows from experience the pleasures and uses of reading can even imagine the problems facing a child who cannot read well. The understanding teacher of any group of children recognizes their wide differences in reading ability and works to help each child succeed in terms of his capacity. Her methods are useful tools; to be certain they are right for her purpose, she turns upon them the hard light of one question after another:

Do I have valid reasons for selecting one method of organizing teaching-learning experiences and for rejecting another? Do I put the stamp of "good" on certain ways of working just because they have been used for a long time, and "poor" on ways relatively new although there is some evidence that they give good results? Do I supplement what I have learned from my training and experience with knowledge that has come out of recent research?

For this teacher in today's school, are there any principles to guide her in her choice of practices?

An individual matter

Some of the statements about reading that are appearing in professional magazines provide one basis for evaluating practices. For example, these:

We still fail to teach about 15 percent of our pupils to read successfully.—*Spache*

By the time a class has entered the sixth grade, the range in reading abilities may be from zero to about the 12th grade.—*Betts*

There is a widespread acceptance of the importance of individualizing reading instruction.—*Shane*

Reading is a highly individual matter, and each child differs from every other child in ability to read. Educators should pay more attention to this fact in evaluating methods of teaching and learning. The skill of recognizing words and getting thought from the printed page is basic in the reading process, but the more complex skills of using the thought for some purpose is of even greater importance. People read, for example, to get help in solving a problem, to give themselves pleasure, or to have something to share with others. Such purposes must be accepted by the child as his own. As the writer of a recent magazine article said, "If children like books, they'll read."

Although children's reading interests can be identified for any age level—preschool, primary, or intermediate—and reading materials selected to suit them, there are many reading materials with qualities that appeal to readers of all ages—qualities such as good story, action, adventure, and humor. For children who are just beginning to read and for children who have difficulty with reading, it is highly important to use materials rich in these qualities. The teacher will be wise to remember also that most children have personal interests that can be used to attract them to books. Not all children are gifted academically, but every child has gifts the teacher can find and use as "handles" to bring him and his book together. Three things about the child—his interest, ability, and background—should be part of any consideration of teaching and learning as it relates to reading.

As Dr. Betts points out, children in any grade are at widely different stages of reading ability. But in their attitudes toward reading, favorable or unfavorable, nursery and kindergarten children, as well as older girls and boys, reflect their parents. Parents are helpful when they show interest in books and use every means to extend and enrich children's experiences and vocabularies; but when they put pressure on children to make them learn to read, they probably defeat their own purposes.

Teaching methods

The preceding discussion is preamble to a look at currently accepted methods of teaching reading. There are no figures to cite, but many teachers in the United States are probably still attempting to teach reading from a single text, requiring every child in the class to read the same page in the same book at the same time. Busy teachers, new teachers, teachers with large classes—all these and others have often accepted the practice, for a variety of reasons.

Probably the most widely used method of teaching reading in 1958 is based on some form of grouping. Grouping means many things to many people. but a generally ac-

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cepted meaning is the dividing of a class into three groups, usually on the basis of ability. A teacher using this plan should realize what such grouping does to children. A child in the "best" group may be self-satisfied, may brag a bit, may refer condescendingly to those who do not read well. A child in the middle group may be satisfied to be average, since most people in the world *are* that. But the child in the "poor" group has little incentive, for no matter how much he improves, he still will probably remain in that group.

Dr. Dolch suggests that a teacher who wants to understand the effects of grouping on children should try to imagine herself in similar circumstances. Suppose the superintendent of schools divided his faculty into three groups on the basis of ability. How would the teacher in the lowest group feel? Would she do better work? Or poorer?

There are classes where children are divided into two groups rather than three. Others are divided into five or more: this is the kind of grouping Dr. Dolch says teachers would need if they "honestly" followed the reading levels of children. There are a number of written reports describing how a teacher has worked with five or more groups in her classroom. In these situations, however, groups are organized on a basis that keeps them flexible rather than fixed—not on the basis of ability but on the basis of a sociometric study, a purpose, a problem, or a specific need.

Individualized reading

Among the teachers who think of reading as a highly individual process, an ever-increasing number with creative imagination are developing plans for children's reading experiences that are variously called individualized, self-selected, self-pacing, personalized, or reading by invitation. Some teachers move into an individualized program from a situation in which they have 3, 5, 6, or 7 groups. Others individualize instruction from the start. How each one proceeds depends upon (1) her own ability to organize, (2) her ability to work with children, (3) the size of her group, (4) the previous experience of her pupils, (5) her knowledge about books of different degrees of difficulty and different interest appeals, and (6) the availability of such books.

In the new publication edited by Alice Miel, several teachers tell how they got under way in individualized programs of reading. Some teachers were fortunate enough to have small classes; others began with a group within the class; and one, beginning with seven groups, used them as springboards to seven individualized programs in which children helped each other get started. Success seems to depend not so much on how the teacher gets started or whether she uses many different books either alone or in combination with textbooks, as on her own interest and the interest of the children.

One of the problems of the teacher who uses several individual books, or "trade" books, is that they do not provide her with the controlled vocabulary that is one of the most important features of a textbook series. It is on this issue—whether a controlled vocabulary is essential—that educators disagree. But if repetition is desired, the teacher can use a book like Wanda Gag's *Millions of Cats*, which has a great deal of repetition but provides it in the framework of a story that has action, good story, adventure, and humor.

Although trade books are primarily the starting point for the teacher in an individualized reading program, this fact does not preclude the use of textbooks once the child understands that he is reading and progressing as an individual, not as a member of a group, and is following his own progress through his own record, kept in either graphic or anecdotal form.

It is certain that more research is needed to evaluate individualized and group procedures in the teaching of reading. Surely researchers need to scrutinize present methods of teaching beginning reading, rather than to concentrate solely on the remedial programs for those who have not succeeded in learning to read. After reviewing findings of studies published over a 50-year period, Dr. Gray concludes that there is a place for both the group and the individualized methods of teaching reading.

Value of the school library

Teaching reading by the individualized method requires plentiful resources of children's books. An elementary school library with an organized collection of children's books and other material, administered by a professional librarian and open at all times of the schoolday to teachers and children, is essential to a fully developed reading program in the elementary school. From it, with the assistance of the librarian, teachers can select classroom collections which they can continually refresh by making new selections.

A centralized elementary school library makes the whole collection of children's books available to every grade and classroom: the same books can be used at different times by every grade in the school and thus meet the need of every child. For example, in a third-grade room some children read at the first-grade level; others at the second; still others at the third-, fourth-, fifth-, and sixth-grade levels; and many children read at different levels at different times. In the reading program planned to serve these highly individual needs, the elementary school library not only provides a valuable service, but provides it economically.

In elementary schools not yet equipped with school libraries, principals and teachers interested in teaching reading by the individualized method should develop classroom collections, following as closely as possible the basic principles of the centralized school library. These collections should be selected from recognized lists of children's books, and should be interchanged at intervals among classrooms. Among the materials that teachers will find helpful in organizing these collections and

developing activities related to reading are Jacobs' leaflet, and others, in a bulletin entitled *Adventuring in Literature With Children.*

Books should be displayed on shelves and tables in every classroom so as to stimulate children's reading interests in an atmosphere conducive to the enjoyment of books. If these displays are changed from time to time, they will make an intriguing kaleidoscope of different types of reading material: sometimes they can be used to present stories, folktales, or poetry; other times, realistic books about airplanes and trucks or home and community life; other times, factual books related to units of study in the curriculum—social studies, science, and mathematics. There are children's trade books on all these subjects, and they can be used to teach not only reading but every other subject in the curriculum. In this manner, learning through reading becomes a rich experience, and reading itself becomes a natural and joyful activity for boys and girls.

Lists and criteria

Teachers accustomed to using graded textbooks for teaching reading may sometimes have difficulty in selecting trade books for the individualized method. Children's trade books, however, are graded in a broad sense—for instance, as appealing to the youngest readers, from 3 to 5 years old, or to children from 10 to 12. In addition, most standard and recognized lists of children's trade books indicate the age level or grade range for each book listed. *Children's Catalog* lists and notes the grade range for 3,204 books; *A Basic Book Collection for Elementary Grades* does the same for more than 1,000 books. Both *Adventuring With Books*, a list for the elementary grades, and *Bibliography of Books for Children* indicate age range.

These lists, all compiled by experienced teachers and librarians from the whole field of children's literature, are highly useful guides. Not only are they frequently revised and brought up to date but they are annotated and arranged by subject or interest category. In *Bibliography of Books for Children,* for example, such subject headings as "Picture Storybooks," "Animals of All Kinds," "Holidays To Celebrate," and "Fanciful Stories and Folklore Collections," lead the teacher to many attractive and interesting books for children aged 4 to 12; others, like "Earth Studies" and "Experiments To Try" and "Music" point out books varied in approach and level of difficulty to suit the needs of elementary children of all grades. A companion list, *Children's Books for $1.25 or Less,* useful in choosing inexpensive books for a new elementary school collection, also is subdivided by subject. Teachers unfamiliar with childrens' books can depend on such lists in beginning a collection and can acquire knowledge of the books as they use them.

Several authoritative periodicals also annotate and grade new books for children. Among them are the *Horn Book*, the *Booklist and Subscription Books Bulletin*, the *Bulletin of the Children's Book Center*, and the magazine, *Elementary English.*

The American Library Association publishes a comprehensive catalog of tools for book selection, giving the source and price of each. It can be purchased in quantity, but single copies are available free on request. The aids it lists should be available in every school library.

Some teachers may want to augment their knowledge of children's books and to improve their understanding of criteria for selecting them. They may wish to become less dependent on lists, and to develop their own ability to evaluate critically in terms of the special interests of all the children in their classrooms. There are many fine books about children's literature that discuss criteria for selecting different types of children's books. Two should be especially helpful, one by Arbuthnot and one by Smith.

The child's choice

Children who are being taught to read by the individualized method should be encouraged to select freely, both in the library and in the classroom, books they like. Usually a child will naturally select a book he can read, or a book so close to his interest that he will increase his skill as he reads it. Children generally reject books that are too hard, too easy, or lacking in appeal.

Sometimes a child needs to be told something about the books that will encourage his selection or give him confidence to take a book to read, but he should not be discouraged from browsing and experimenting. There are many intangibles working in a child's selection of a book—color, size, illustrations, relation of the story to his experience, his own personality—and if, in giving guidance, the teacher permits these intangibles to have free play, the child will probably select the book that is right for him. In contrast, if his teacher selects a book for him and assigns it as a class exercise, he is not so likely to gain anything from it. He may master the words through repetition and drill, but the experience may—and often does—destroy his interest in further reading.

Pleasure is basic

The individualized method of teaching reading does not preclude all the shared group and class experiences that children can have with books and reading. They love storytelling; and storytelling by the teacher, the librarian, and sometimes by the children should be part of the reading program. Sometimes this storytelling can take place in the library or outdoors under a tree. It may be a good procedure at times to divide children into groups so that they can tell each other the stories they have read. The school librarian may bring new books to the classroom and talk about them, or the teacher may want to tell the class about some of the new books. Children enjoy choral speaking of poetry, which gives them an opportunity for creative self-expression. All experiences of the

individualized reading program—children selecting their own books, reading quietly as individuals, reading to each other, listening to a story, or speaking poetry—should be considered basic to the teaching of reading, and not treated as "free period" activities, or as rewards for reading an assigned book or "finishing" sooner than the time assigned.

Children's out-of-school and home experiences with reading should be considered as part of the whole reading program. Teachers and school librarians will find that cooperation with public librarians in introducing children to the public library will encourage children to use the children's room of the public library after school and on Saturdays. Children's specialists on public library staffs can often come to the school and talk about books or plan book fairs and exhibits with the teachers and school librarians. Useful guides can be made available to parents interested in buying books for the child's home library—lists like one prepared by Arbuthnot, for example.

Every child needs a place at home for his own books. A child's ownership of books with a special corner or shelf for them helps to develop in him an affection for books and a sense of security that is an essential part of growing up.

Children's attitudes toward reading will profoundly affect their reading ability. If children, in learning to read, also learn to *like* to read, their approach to all schoolwork involving reading will be more favorable to learning and understanding. The individualized method of teaching reading has implications for pupil achievement that are immeasurable. The growth of individuals in our democracy is in large measure dependent upon their ability to read with intelligence, discrimination, and enjoyment.

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VARIETY: *The Essence of Rural Education*

RURAL counties vary widely in their educational practices and standards: this is the outstanding characteristic coming to light in the Office of Education's comprehensive survey of rural education, now nearing completion. From the 1,200 counties included, the Office has selected, for summary purposes, the 101 "most rural" (criteria: At least 60 percent of the population on farms, and no urban center of more than 2,500); but even this narrowed group shows such striking variations as the following:

- ★ *Number of school districts:* One county has 89; several others (county units) consist of a single district. Average, 10.9.
- ★ *Number of pupils:* One county has as few as 91; another, as many as 7,671. Average, 2,326.
- ★ *Size of schools:* One county averages as few as 9.5 pupils per school; another as many as 612. Average, 85.1.
- ★ *Pupils per staff member:* One county averages 7.5 pupils; another, 12.2. Average, 21.7.
- ★ *Percent of school revenue from State and Federal sources:* One school receives only 6.1 percent; another, 95.9. Average, 61.2.
- ★ *Salary of instructional staff:* One county pays an average of $1,676; another, as much as $4,039. Average, $2,933.
- ★ *Cost per pupil in ADA:* For 1 county it is only $110; for another, $825. Average, $211.
- ★ *Transportation cost per pupil in ADA:* For 1 county it averages $9; for another, $104. Average, $26.

And these are but a few of the wide variations that exist among rural counties. Still others, including extreme differences in geographic conditions, economic circumstances, and school policies, will be presented in the forthcoming report of the survey; such information contributes to our understanding of the problems peculiar to rural education.

—Walter Gaumnitz,
Head, Rural Research and Statistics Unit

ILLUSTRATIONS
BUREAU OF
INDIAN AFFAIRS

No village too remot

FEDERAL SCHOOLS FOR NATIVE CHILDE

By WARREN I. TIFFANY

BECAUSE it stands between two cultures, the Federal school for native children in Alaska has a dual and delicate task: To prepare the native for a new way of life in case he chooses it and, at the same time, to help him see the worth and charm of his own culture, the rewards and opportunities of a life among his own people.

Of course the Federal school is not the only one so challenged in Alaska. To some extent this responsibility falls on every school in the Territory with any native pupils at all; but because the Federal school serves only native villages far from the large centers of population, its nearness to the indigenous cultures—Eskimo, Indian, or Aleut—is pronounced and its dual purpose sharply posed.

Today there are 86 schools in Alaska supported and administered by the Federal Government. Two of these, on the Pribilof Islands of St. George and St. Paul, are under the Fish and Wildlife Service, U. S. Department of the Interior, which operates the fur-seal rookery there under an agreement with Canada, the Soviet Union, and Japan. But all the other Federal schools are under the Bureau of Indian Affairs, also in the Interior Department.

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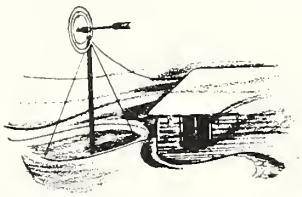
Up until 1900, when the Congress passed a civil code for Alaska and made the Territory responsible for establishing its own schools in incorporated towns, Federal schools were the only public schools in the Territory. Since then, as towns have developed all over Alaska and as the Territory has reached out into rural



areas to help establish schools there, the Territorial public school system has steadily grown. Today it enrolls six times as many pupils as the Federal schools, one and one-half times as many native children. It has 125 schools; in administration and support, they fall into 4 categories (data, from records in the Bureau of Indian Affairs, are for October 1957):

- ★ 28 incorporated school districts, complete with school boards and local funds. Elementary enrollment, 19,264, about 20 percent native; secondary, 4,667, about 18 percent native.
- ★ 68 outside the bounds of city and district, maintained by the Territorial department of education as if all were in one big district. Elementary enrollment, 3,147, about 48 percent native; secondary, 253, about 35 percent native.
- ★ 21 Johnson-O'Malley schools, one-time Federal schools now operated by the Territory; similar to the 68 rural schools except that Federal Government still pays the bills and holds the titles. Enrollment, 644, entirely elementary, virtually all native.
- ★ 8 on military bases, administered by the Territory but supported by Federal funds under Public Law 874. Elementary 6,701, secondary 170.

How fast the Territorial system has grown in the past 10 years is shown in the latest published report by Alaska's Commissioner of Education. Between 1946–47 and 1955–56 the average daily attendance rose from 7,100 to 26,400; the pupil-transportation load, from 1,100 a day to 5,600; operating expenses, from $233 to $439 per pupil and from a total of $1.7 million to $11.6 million.

In addition to the 125 Territorial public schools, there are between 20 and 25 private and denominational schools in Alaska, most of them elementary. As of October 1957 their total enrollment was nearly 1,600, divided fairly evenly between white and native children.

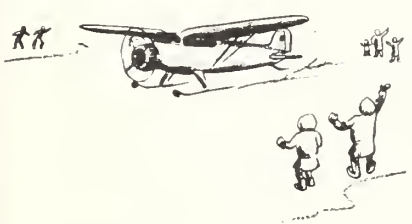
NOW, having roughly supplied the outlines of the whole elementary-secondary school scene in Alaska, we return, for a closer look, to the 84 Federal schools operated by the Bureau of Indian Affairs, which together last year enrolled 4,302 pupils. Most are 1- or 2-room schools with 1 or 2 teachers. According to records for the 1956–57 school year, three-fourths have enrollments somewhere between 15 and 55, but the smallest has 13 and the largest has 308. A school's presence in any community means that the Federal Government, before establishing it, had evidence that the community was going to stay put for some years to come and would be needing schooling for at least 12 children a year.

service, no population too sparse

N ALASKA

For children who live in communities too small or too migratory to justify a permanent school, the Bureau provides two boarding schools, both in southeast Alaska: Wrangell Institute, an elementary school, which had 255 pupils last year; and Mount Edgecumbe, a high school, which had 739. Only natives—that is, children who are at least one-quarter Indian, Eskimo, or Aleut—may attend. Attending means being separated from one's family for a whole school year at a time, unless parents pay the airplane fare for a visit home. Except for clothing and pocket money, the Federal Government pays all expenses; but parents are encouraged to provide transportation.

The day schools are concentrated—if one may use the word for schools as widely scattered as these—in the northern and western part of Alaska. Many are strung like beads on a chain along the Yukon River and the shores of the Bering and Arctic Seas. Several are north of the Arctic Circle, and one is on the topmost tip of Alaska, at Barrow. Two are on St. Lawrence Island, in sight of Soviet shores. All are administered from the Bureau's headquarters, at Juneau, through three district offices—at Nome, Bethel, and Anchorage.



Because BIA aims at going out of business eventually, it is working toward the day when Alaska will be able to support and run these schools. Together, the Territory and the Federal Government have been moving in that direction for many years. In 1934, to facilitate the changeover, the Congress passed the Johnson-O'Malley Act, which authorizes the Secretary of the Interior to contract with each of the States and Alaska for turning over to local school authorities, as they show willingness and ability, the Federal school buildings and equipment as well as full responsibility for operating the schools.

As a result of this act, some of the 48 States with large Indian populations no longer have Federal schools within their boundaries. In Alaska, 24 Federal schools have been transferred: the first Johnson-O'Malley contract was negotiated for the school year 1951–52, when 5 schools were transferred; 8 followed in 1952–53, 10 more in 1954–55, and 1 in 1955–56. Although the Territory and the local communities now have all the administrative responsibility for these schools, the Federal Government still pays all the operating costs.

As long as it stays in the local school business in Alaska, BIA will be working to provide the best schools possible within its means. To raise the quality of its service and keep the morale of its teachers high, it has recently made more supervision available: within the past 3 years it has stationed at both Nome and Bethel a supervisor and an assistant supervisor, who make the rounds of their schools at least twice a year.

Most of the teachers in BIA schools come from the States, for Alaska is extremely short of native teachers, partly because the university was established as a school of mines and not until recent years has provided teacher education. Most of the teachers are young, with a pioneering spirit, a fondness for outdoor life and adventure, and a strong desire to be of service. They are graduates of an accredited 4-year college, have at least 24 hours in education. All other qualifications being equal, native teachers are preferred; but they are in the minority.

Starting salary for beginning teachers is usually $3,670, plus a cost-of-living allowance; for experienced teachers, $4,525. All are given regular Civil Service appointments, but the Federal Government pays transportation home every 2 years with the understanding that the teacher will return for 2 more years of service.

Except for teachers in the boarding schools or in the 5- or 7-teacher schools, all teachers in the Alaska service are required to be married and to bring their spouses with them: BIA frequently employs both husband and wife. If both are teachers, both teach at the same school, one

probably as the principal teacher, at a starting salary of $4,970. In 1-teacher schools, 1 member of the family serves as the principal teacher and the spouse becomes a general assistant, lending a hand with school duties, classes for adults, and whatever other programs the Bureau has in the village. A nonteaching husband is janitor, handyman, community worker, and general school helper; a nonteaching wife must perform many of the same duties, with less emphasis on the janitorial side.

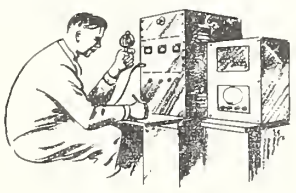
A few of the schools—12 last year—are taught by Eskimo instructional aides. These are not aides in the sense that they are teachers' assistants; for they are really in charge of classrooms, being qualified by virtue of inservice training and at least a high school education. Most of them serve in schools with only a limited program, perhaps only the first 2 or 3 grades, while the Bureau seeks to determine whether it would be justified to build a permanent school and employ a fully qualified teacher.

WITH each stopover on his way to his post in Alaska, the new teacher from the States gets closer to a realization of what his life will be like for the next two winters.

At Seattle he meets the official connected with the operation of the *North Star*, the Government's vessel for carrying supplies to Bureau schools. With counsel and assistance from this official he does a whole year's grocery shopping at one time and, if short of funds, can negotiate a loan to pay the bill. Because the making of these arrangements forces him to visualize his future needs in detail, it gives him, as nothing else has, a glimpse of the isolation he will know and the self-sufficiency he must exhibit.

His goods go north by boat, but he himself flies first to Juneau for an orientation at the area office and then to his district headquarters to spend a few days being readied still further for his new responsibilities.

Part of this readying is an introduction to the Alaska Communication System, which is somewhat comparable to Western Union in the States. What the newcomer learns from this introduction is more than just incidental intelligence. Like most BIA teachers in Alaska, he will be sending and receiving all radiotelephone messages for his community, including



ing telegrams; in the Nome district, for example, teachers at 25 of the 27 schools have this responsibility. The radio equipment used for this purpose is owned by BIA and located in the schoolhouse, and the teacher will have standing appointments with it every day, morning and evening.

One of these appointments is scheduled to coincide with the time when the doctor at the nearest Public Health Service hospital also stands by, usually at 6 o'clock in the evening, waiting to hear emergency calls from the villages and to prescribe treatment or give advice, or to order a patient prepared for a trip to the hospital via plane. Another listening time is worked out with BIA district headquarters, which has its own frequency and uses radio for many of its staff communications. Teachers may also communicate with one another over the radiotelephone although their conversation will hardly be private, for it's available to any one in Alaska with a radio set. In any event, this avenue of quick communication is very important in the lives of many teachers, especially in villages where the mail plane comes in only once a week.

Although serving as a communications link is one of the teacher's vital extracurricular duties, he has others, too. These may include serving as welfare representative or as supervisor for the local cooperative store, which has been established with the aid of a Government loan so that the natives can buy and sell and learn about modern trade.

Through these out-of-school responsibilities the BIA teacher becomes more closely identified with his community than any teacher in the States is ever likely to be. But even within the classroom he is thus identified, for BIA schools have always been community schools. They have furnished the impetus and shown the way to sanitary sewage disposal, pure water supply, balanced diets, and better housing. They have taught villagers new skills and helped them toward economic independence. By this combination of contacts the teacher's influence among the natives can grow to dimensions that will make it either his greatest problem or his greatest advantage, depending on how he uses it. As the area office at Juneau says (*Highlights in Education*, October 1957), he usually reacts to the experience in 1 of 3 ways:

> The retiring teacher may find it an overwhelming experience and feel impelled to erect a shell of privacy about himself, thus missing his destiny as a force for change in the community almost altogether.
>
> The unwary teacher may find himself enticed toward the pitfalls of a well-intentioned dictatorship and a leader-centered program, which may flourish for a time but, upon his departure, may collapse into [a] vacuum . . .
>
> The thoughtful teacher, alert to possibilities for both child and adult education, will find it a humbling and invigorating experience, leading . . . to analytical observations, that he may build a realistic program around problems of everyday living; [and] to the development of self-help so that, after he departs, the forces for change which he has set in motion will continue to operate under enlightened local leadership.

It is in the classroom, however, with the children, that the teacher finds his greatest satisfaction—much of it because there he is most at home, there he is confronted with situations he is professionally trained to meet. He has few of the usual discipline problems, for most Alaska native children are obedient and polite. Many are reluctant to express their thoughts and feelings in a group, but the teacher who finds ways to draw them out is well rewarded. There is little truancy; for, even though attendance in BIA schools is not compulsory, nearly every school-age child within reach of school attends nearly every day.

Some of the problems common in the States exist in Alaska schools, too—overcrowding, for instance, and half-day sessions. In addition, the teacher has to cope with the fact that many children enter school knowing little or no English, and with the need for adapting teaching materials and curriculum content to the child's environment and experience.

But most of these problems yield at last to patience and ingenuity and good will, as do the many housekeeping chores connected with teaching in an Alaska village. Ordering supplies means anticipating every possible school need 2 years in advance, including not only paper and paste but light bulbs, rope for the flagpole, and chemicals for the toilets. Between the far-spaced visits of the maintenance man, the teacher's ingenuity must be proof against any breakdown in the school plant.

This is the kind of life that makes teaching in Alaska a mixture of excitement and serenity, of emergency and routine, of the complex and the simple, of teaching and being taught. For many a teacher the blend becomes irresistible, and he returns to enjoy it year after year.

CONGRESSIONAL PROPOSALS FOR EDUCATION

An emphasis on finding and developing talent

BETWEEN its opening day, January 7, and the last day before the Easter recess, April 4, the 85th Congress, 2d session, voiced its interest in education through many bills. Emphasis in these bills is on the conserving and developing of our human resources. To develop our best students, to develop the best in all our students, proposals before the Congress establish programs of testing, guidance and counseling, scholarships, fellowships, loans, teaching expansion and improvement, and the relief of classroom shortages. The impact of the outstanding scientific development in the past year is reflected in the emphasis given to science students in the awarding of scholarships, fellowships, and loans, and in teaching expansion programs.

But this is not to say that other educational problems are being forgotten: far from it. School milk programs, Federal assistance in areas where government activity has created school district hardships, tax relief for teacher and student—all these and others are also of primary concern to the legislator. But the major bills focus on developing our youth to its fullest through better programs of education, financial assistanee, and needed facilities and teachers.

The Administration bill

Quiek on the heels of President Eisenhower's special message on education in January, the Department of Health, Education, and Welfare made recommendations to the Congress incorporating the President's suggestions. Soon afterwards, on January 31, three bills, each entitled the *Educational Development Act of 1958*, were introduced to "encourage and assist in the expansion and improvement of educational programs to meet critical national needs"—S. 3163 (Smith, New Jersey, for himself and 10 others), H. R. 10278 (Kearns), and H. R. 10279 (Frelinghuysen). They would help the States set up testing and guidance and counseling services; increase the number and salaries of science teachers; provide 10,000 undergraduate scholarships for each of 4 years to high-caliber students, particularly those with aptitude for science and mathmematics; and encourage the teaching of modern foreign languages. They would provide graduate fellowships through colleges and universities to those qualifying, particularly to those preparing to teach in institutions of higher learning.

Scholarships and loans

To help able students receive higher education, a number of bills would provide scholarships, fellowships, or loans through State agencies. Some of these bills include provisions aimed at improving teaching. Emphasis for both student and teacher is on science, mathematics, and modern foreign language learning.

In the same vein as S. 3163, H. R. 10278, and H. R. 10279 are S. 3187 (Hill, for himself and 26 others) and H. R. 10381 (Elliot). Their coverage is wider, however. They would offer 10,000 scholarships and 1,500 fellowships each year for 6 years and set up a student loan fund, giving preference in all cases to science students. They would provide funds to States and institutions of higher education to assist and encourage science teachers; to conduct testing of students, counseling and guidance programs, and work-study programs. They would promote the learning of modern foreign languages and the development of television, radio, motion pictures, and other media for educational use, and would develop vocational education in occupations essential to national defense.

Four other scholarship bills in the Senate are S. 2917 (Thye), S. 3119 (Mansfield), S. 3157 (Flanders and Bricker), and S. 3268 (Hill, and Smith, New Jersey). With the exception of S. 2917, these bills would amend the National Science Foundation Act to enable the National Science Foundation to offer scholarships and fellowships to gifted students for scientific study. S. 2917 would grant funds to States to award scholarships and fellowships to students of proven scholastic aptitude. Fellowships would be granted only to science and mathematics majors.

S. 3156 (Flanders) would double programs now conducted by the National Science Foundation for the advanced education of teachers and would establish a National Humanities Board in the Department of Health, Education, and Welfare to promote education of teachers of the humanities through summer programs.

The House has before it 16 bills that would provide scholarships or student loans. Four would amend the National Science Foundation Act to expand scholarship programs—H. R. 10180 (Sikes), H. R. 10156 (Price), H. R. 10464 (Van Zandt), and H. R. 11257 (Harris). Eight would grant scholarships and fellowships independent of any existing acts or provisions—H. R. 9635 (Brooks), H. R. 9692 (Martin), H. R. 9725 (Sieminski), H. R. 9905 (Dingell), H. R. 9918 (Long), H. R. 11223 (McGovern), H. R. 10154 (O'Konski), and H. R. 11776 (Byrd). H. R. 11223 and H. R. 11776 would grant loans as well as scholarships. Six bills would grant loans only—H. R. 10068 (Rodino), H. R. 10908 (Gathings), H. R. 11061 (Keating), H. R. 11117 (Cramer),

H. R. 11501 (Jackson), and H. R. 11830 (Lane). All bills, loan and scholarship, stress science.

New classrooms

A number of bills are primarily aimed at alleviating the classroom shortage at the elementary and secondary level.

S. 3311 (Murray, for himself and 12 others) and H. R. 10763 (Metcalf), entitled the *School Assistance Act of 1958*, would grant States $25 per school-age child for school construction in fiscal year 1958, $50 in 1960, $75 in 1961, and $100 in each fiscal year thereafter. Funds would not be granted on a matching basis, but on an effort index, based on the number of schoolchildren and the State's per capita income. According to estimates, the bill would cost $1.1 billion in its first year of operation, $4.5 billion at the $100-per-child level.

S. 3179 (Kennedy) and S. 3216 (Javits) would allow $300 million for each of 5 years and $600 million for each of 4 years, respectively, to State educational agencies for classroom construction.

Other bills that would allow Federal funds for school construction are these: H. R. 9731 (Teller), $600 million for each of 5 years; H. R. 11530 (Frelinghuysen), $600 million for each of 3 years; H. R. 11625 (Kearns), "such sums as would be necessary," and H. R. 11854 (Engle), $500 million for each of 4 years.

Public Laws 815 and 874

Several proposed bills would extend and amend Public Law 815 and Public Law 874, which are in their eighth year of giving Federal financial assistance to individual school districts for educating the children of people connected with Federal activity.

H. R. 11378 (Thompson) reported without amendment to the Committee of the Whole House, March 19 (H. Rept. 1530) would make permanent such assistance insofar as it applies to children of persons who both reside and work on Federal property; and would extend until June 30, 1961, such assistance insofar as it applies to other children. It would also make a significant change for school districts educating Indian children by enabling them to accept payment under Public Law 874 without giving up the right to payments under the Johnson-O'Malley Act for special services.

Other bills to extend or improve Public Law 815 and 874 include S. 3069 (Smith, New Jersey), H. R. 9620 (Auchincloss), H. R. 9623 (Baldwin), H. R. 10490 (Gwinn), H. R. 10697 (Montoya), H. R. 10952 (Holt), and H. R. 11020 (Scudder).

Toward general improvement

S. 2916 (Thye) would provide financial assistance to the States on a 50–50 basis in paying the salaries of science teachers in secondary schools and in providing appropriate scientific equipment for schools.

S. 3352 (Flanders and Cooper) would assist local educational agencies of the States in initiating, expanding, and improving science and mathematics instruction in public secondary schools by authorizing grants of $50 million for fiscal year ending June 30, 1959, and for each of the 3 succeeding fiscal years thereafter for use in acquiring laboratory and related facilities.

S. 3606 (Proxmire) would provide financial assistance to the States for educational purposes by returning a portion of the Federal income taxes collected therein: 1½ percent for fiscal year 1958; 3 percent for fiscal year 1959; and 5 percent for payment due on or before December 1, 1960, for preceding fiscal year.

H. R. 9839 (Perkins) would authorize the appropriation of funds to assist States and Territories in financing a minimum foundation education program of public elementary and secondary schools and reducing inequalities of educational opportunities in schools.

H. R. 9689 (MacDonald) and H. R. 10299 (Udall) would amend the Outer Continental Shelf Act to provide that certain revenues under the act could be used as grants-in-aid to primary, secondary, and higher education.

H. R. 9939 (Wright) would provide for the accelerated development of secondary school education in the natural sciences in the States and Territories through an appropriation of $75 million to States on a matching basis.

College housing loans

Several bills would help colleges provide housing, equipment, and facilities.

S. 3213 (Fulbright) would increase by $250 million the borrowing authority of the Housing and Home Finance Agency for college housing loans. S. 3399 (Capehart) would raise the amount colleges may borrow for science equipment and facilities—from $295 million to $1⅛ billion. A similar lifting would be given to the ceilings on college housing loans by S. 3281 (Thye), S. 3351 (Beall and Javits), H. R. 10598 (Carrigg), and H. R. 11329 (O'Brien).

New department?

S. 3126, the *Science and Technology Act of 1958* (Humphrey, McClellan, and Yarborough), would create a Department of Science and Technology and National Institutes of Scientific Research, would provide a fund for loans to science students, and would authorize scientific programs outside the United States. At the request of the Senate Committee on Government Operations, the Committee staff has prepared an analysis and summary of the act.

Two other science department bills are pending: S. 3180 (Kefauver), limited to the establishment of a department, and H. R. 11392 (Christopher), which would include a science academy under a department of science.

And science corps?

There are many bills in this session of Congress that advocate a United States science academy; but previous sessions have known only one, proposed by Mrs. St. George in the 1st session of the 85th Congress.

S. 2957 (Thurmond) would establish an academy under the Secretary of Defense. Students selected for the academy would receive room and board, instruction, and $500 a year. Graduates would be required to serve the Federal Government 1⅓ days for each day they received training at the academy.

Other Senate bills for a science academy include S. 2967 (Gore), which would place such an institution under the Department of Health, Education, and Welfare; and S. 3111 (Jenner) which, like S. 2957, would put it under the Department of Defense.

House bills to establish a science academy are H. R. 9610 (Anfuso), H. R. 9672 (Kee), H. R. 9685 (Long), H. R. 9712 (Rogers, Massachusetts), H. R. 9902 (Boggs), H. R. 10067 (Rodino), H. R. 10224 (Adair), H. R. 10635 (Radwin), H. R. 10931 (St. George), H. R. 10933 (Utt), H. R. 11392 (Christopher), and H. J. Res. 503 (Kean).

Bills calling for the establishment of a commission to study the need for a science academy and the shape such an institution should take have been introduced in S. 3110 (Potter), H. R. 10159 (Griffin), and H. R. 10229 (Broomfield).

National Science Council

H. R. 9611 (McCormack) and H. R. 10208 (Riehlman) would amend the National Security Act of 1947 to provide for the coordination and integration of policies and procedures with respect to Federal programs in the field of science and technology by creating a five-man National Science Council.

Tax relief

Several bills would give tax relief to teachers, students, and parents to help them meet educational expenses.

Under some proposals, a teacher could count costs of additional education as "business expense" on income tax returns. In the Senate, 6 bills would give such relief—S. 3096 (Smathers), S. 3158 (Stennis), S. 3329 (Kerr and Monroney), S. 3353 (Flanders, Bricker, Allott, and Cooper), S. 3359 (Langer), and S. 3526 (Hill). Three would allow deductions for expenses without limit; three would set limits of $600 or $800. In the House 26 bills would allow the teacher to deduct not over $600 from gross income for certain amounts paid by him for his further education, and 7 bills would allow deductions for all expenses.

Certain bills would allow the college student or his parent deductions for education. In the Senate, 4 bills—S. 2938 (Frear), S. 3162 (Smathers), S. 3403 (Thurmond), and S. 3527 (Hill)—propose tax deductions for the student paying his own expenses or for the supporting parent; 2 allow $600; 1 allows $100; and 1 allows all expenses. In the House 11 bills would bring tax relief to student or parent, either allowing deductions for expenses or granting exemptions to the extent of $400, $600, or $800. One bill would allow a 30-percent deduction if the deduction did not exceed a total of $1,500 for any 1 dependent.

One bill in the Senate and four in the House would make certain educational contributions deductible. S. 3251 (Murray) would increase the amount of a corporation's charitable contributions that might be allowed as a deduction where all or part are made to educational institutions. H. R. 9630 (Bennett) would allow deductions for contributions to the United States for use with programs of scholarships and other educational assistance for students of science, engineering, and other technical subjects. H. R. 9845 (Thompson, New Jersey) would allow a corporation to extend up to 5 percent of taxable income the deductions it could make for contributions to educational institutions. H. R. 10834 (Simpson, Pennsylvania) and H. R. 10835 (Curtis, Missouri) would permit tax credit for contributions and other expenditures for basic research in science.

Other tax-relief proposals include a credit for increases in State and local taxes imposed for school purposes (H. R. 10351, Poff); exempting from tax the interest on obligations of educational institutions (H. R. 11052, Price); exempting from excise tax the automobiles furnished without charge to schools for driver training programs (H. R. 11780, Ikard); and a refund of Federal tax collected in States and Territories for improvement of public educational systems, school construction, and increasing teachers' salaries—the *National Education Act* (H. R. 11828, Hillings).

For the exceptional child

Several bills would improve and increase the special teaching of exceptional children. S. 3410 (Neuberger) proposes a double program: (1) A special $18½ million, 7-year program of Federal scholarships and fellowships to individuals to train as teachers of exceptional children, and (2) a $2½ million grant for 7 years to public and nonprofit institutions to encourage and expand the training of teachers of exceptional children. On the House side, 3 bills have been presented: By grants to institutions of higher learning, H. R. 10842 (McGovern) would provide a 10-year program to encourage teaching and research in the education of exceptional children; by grants to State agencies and nonprofit public institutions of higher education, H. R. 11135 (Gray) and H. R. 11833 (May) also would promote teaching and research in the education of mentally retarded children.

For the veteran

The veteran or the veteran's child would receive benefits by a number of bills.

S. 2978 (Yarborough) would extend the GI bill of rights to all vet-

erans discharged after Jan. 31, 1955. S. 3184 (Thye) would permit eligible veterans to commence institutional on-farm training under the Veterans' Readjustment Act of 1952 more than 3 years after discharge from military service if facilities for such training were not available earlier.

A veteran would be permitted—by H. R. 10888 (Bass) and H. R. 11397 (Fogarty)—to give his child the educational benefits he has not used and to which he is entitled.

H. R. 9823 (Hale) would amend the War Orphans' Educational Assistance Act of 1956 to provide educational benefits to the children of members of the United States Navy who were killed while on convoy duty in 1941.

H. R. 10501 would provide education and training for certain veterans under the Veterans' Readjustment Act of 1952 who did not initiate their program of education or training within 3 years after discharge from active service.

School integration

Several bills would affect integration in the public schools.

H. R. 11219 (Hays, Arkansas) would establish a joint congressional committee on civil rights to study the programs of desegregation in the public schools, such a committee to report to Congress within a year.

To implement the Supreme Court decision on the integration of public schools, both Houses have before them the Civil Rights Act of 1958 in four identical bills—S. 3257 (Douglas and 15 others), H. R. 10601 (Diggs), H. R. 10630 (O'Hara), and H. R. 10645 (Roosevelt).

On the other hand, S. 3467 (Johnston) and H. R. 10775 (Colmer) would restrict certain powers of the United States Supreme Court that affect integration of schools.

H. R. 11047 (Matthews) would prohibit the President from calling out the National Guard and from using Federal troops to assist in enforcing any Federal court order that would result in racial integration in a public school in the United States.

Milk and food programs

S. 3342, an original bill, which would continue the special school milk program for 3 years, passed the Senate by voice vote February 24 (S. Rept. 1319).

Four other bills also were introduced to the Senate to extend the special milk program: S. 3002 (Humphrey), S. 3070 (Aiken), and S. 3145 (Thye) for 3 years; S. 3182 (Proxmire), permanently. Three bills in the House would continue the program for 2 years—H. R. 10324 (Johnson), H. R. 10390 (Knutson), and H. R. 10859 (Jennings).

S. 3501 (Proxmire and Clark) and H. R. 11791 (Metcalf) would authorize the Secretary of Agriculture to expand funds appropriated for the diversion of surplus farm commodities to provide balanced diets in schools and institutions and for the needy.

S. 3501 (Proxmire and Clark), S. 3577 (Hill and Scott), and H. R. 11791 (Metcalf) would authorize the Secretary of Agriculture to make surplus farm commodities available to schools, institutions, and the needy out of funds appropriated for diversion of such surpluses.

Miscellaneous

Certain bills affecting education fall in none of the foregoing categories.

S. 2956 (Monroney, Kerr, and McNamara) would amend the Vocational Education Act of 1946 to grant $10 million for education in fields of science essential to vocational education.

S. 3460 (Johnston) would modify regulations for salaries and personnel practices for teachers, certain school officers, and other employees of dependents schools of the Department of Defense in foreign countries.

S. 3243 (Clark) would grant permission to 25 foreign students to attend the District of Columbia Teachers College each year on the same basis as residents. It passed the Senate by voice vote March 11 (S. Rept. 1374).

S. 3582 (Humphrey, Murray, Neuberger, Proxmire, and Jackson) and H. R. 11773 (Blatnik) would establish a Youth Conservation Corps to train young men and conserve resources.

S. 3155 (Flanders) would permit certain educational organizations to import, duty free, scientific and laboratory apparatus for educational or scientific purposes.

H. R. 9634 (Boggs) would promote education through TV.

H. R. 9843 (Taylor) would defer certain college science students from military duty; H. R. 9643 (Collier), H. R. 9843 (Taylor), and H. Con. Res. 238 (Bentley) would do the same for teachers or student teachers.

H. R. 10293 (Dawson, Illinois) would establish a national scientific research reserve fund.

H. R. 10851 (Anfuso) would amend the Social Security Act to authorize Federal assistance to certain dependent children over 18 as long as they are in school.

H. R. 11310 (Celler) would provide for the establishment of a United States Foreign Service Academy.

H. R. 11315 (Fino) would amend the Social Security Act to provide that an individual's entitlement to child's insurance benefits shall continue after he attains age 18 as long as he is regularly attending school.

NOTE.—With every day that passes, the legislative scene changes. Since this summary was written, President Eisenhower has signed S. 3243 into law (P. L. 85-384), thus affecting the status of foreign students at the District of Columbia Teachers College; and the House, by voice vote and with amendments, has passed H. R. 11378, to extend and amend Public Laws 815 and 874. In its next issue *School Life* will report further action on the bills summarized above, and will list bills introduced between April 14 and June 1.

McCALL'S MAGAZINE

BACK HOME AGAIN . . .

For the Teacher of the Year, welcome and retrospect

"IS it made of gold? All the way through—is it gold?"

Carefully, lovingly, each one of Jean Listebarger's second-graders handled her golden apple. They copied the recipe for bean soup printed on the menu from the U. S. Senate's diningroom. Over and over they studied the photographs of Miss Listebarger alighting from the plane in Washington, looking just as pretty as she does every day at school.

Home again after her flying trip to Washington and New York to receive the award of Teacher of the Year from *McCall's Magazine*, Jean found her first day back at school in Ames, Iowa, one of the happiest parts of the whole experience. For the children, *the* happiest part was teacher's return and the sparkle that followed her: Their own letter from President Eisenhower, which the school photostated so everyone could have a copy; the picture they took of themselves to send in return; all the good letters they wrote to *McCall's*, praising the apple.

As for Jean herself, her thoughts are sober. "You ask me how I feel, now that the excitement's over. First, I feel humble . . . humble when I think of the thousands of outstanding teachers I have represented . . . humble when I realize how far I have to go before I can truly be an exemplary teacher.

"And I feel grateful . . . to *McCall's* for accentuating the positive in education . . . to the many, many people who have helped me to develop . . . to my home, my college, my church."

TRAVELING SCIENCE BOOKS

NINETY books on science for children and youth make up the newest exhibit of the Smithsonian Institution Traveling Exhibition Service. BOOKS FOR YOUNG SCIENTISTS. All were chosen from the Washington, D. C., spring Children's Book Fair for content, artistry, appeal to children, and acceptability by schools and libraries. Two staff members of the Department of Health, Education, and Welfare served as judges—Irvin Kerlan, of the Food and Drug Administration, and Paul E. Blackwood, specialist for science education, Office of Education.

A complete list of titles in BOOKS FOR YOUNG SCIENTISTS is not yet ready, but here is a sampling:

ALBUM OF HORSES, Henry; ALL ABOUT EGGS, Selsam; ANIMALS IN ARMOR, Hylander; EXPLORING BY SATELLITES, Branley; EXPLORING MARS, EXPLORING THE MOON, Gallant; FIRST BOOK OF BUGS, Williamson; GROWING AND CHANGING, Exler; HONEY-BEE, Adrian; I KNOW A MAGIC HOUSE, Schwartz; NOW IT'S FALL, Lenski; OUR FRIEND THE ATOM, Haber; PHOTOGRAPHY, Zim and Burnett; PREHISTORIC ANIMALS, Scheele; ROMPING THROUGH MATHEMATICS, Anderson; SNOW, Bell; SEA TREASURE, Johnstone; STORY OF ROCKS, Shuttleworth; THE BOOK OF SONGBIRDS, Hausman; THE CAT FAMILY, Hogner; THE FIRST BOOK OF SPACE TRAVEL, Bendick; THE LITTLE AIRPLANE, Lenski; UNDERSTANDING SCIENCE, Crouse; WHAT'S INSIDE THE EARTH?, Ames and Wyler; WHEN YOU GO TO THE ZOO, Blough and Campbell; WONDERFUL WORLD OF THE SEA, Fisher; WONDERS OF THE HUMAN BODY, Ravielli; YOU AMONG THE STARS, Schneider; YOUR WONDERFUL WORLD OF SCIENCE, Freeman; and ZOO PARADE, Perkins.

Schools, colleges, museums, nonprofit civic groups may rent BOOKS FOR YOUNG SCIENTISTS for a 3-week period for $50 plus certain shipping charges. For more information about it and the other 135 traveling exhibits of the Service, including several of children's art, write to Mrs. John A. Pope, Chief, Traveling Exhibition Service, Washington 25, D. C.

OFFICE OF EDUCATION PUBLICATIONS CHECKLIST

FOR SALE

(Order from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

1957 Annual Report, U. S. Department of Health, Education, and Welfare. 1957. 263 pp. 75 cents.

Organizing Districts for Better Schools, by *C. O. Fitzwater*. 1958. 49 pp. 25 cents. (Bul. 1958, No. 9.)

Statistics of Land-Grant Colleges and Universities Year Ended June 30, 1956, prepared by *Doris C. Holladay*. 1957. 109 pp. 50 cents. (Bul. 1958, No. 2.)

FREE

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

Cooperative Research Program Research Findings. (Reprint from *School Life*, January, February 1958.) 2 pp.

Direct Teaching by Television, by *Ronald R. Lowdermilk*. (Reprint from *School Life*, February 1958.) 4 pp.

Directory of College Courses in Radio and Television, 1957–58, prepared by *Gertrude G. Broderick*. 44 pp.

Education for School Librarianship. Some Recent Developments, by *Mary Helen Mahar* and *Willard O. Mishoff*. (Reprint from *School Life*, February 1958.) 3 pp.

"Les Girls"—A New Chapter in the Manpower Story, by *Mary S. Resh*. (Reprint from *School Life*, February 1958.) Folder.

Library Services Act (Public Law 597, 84th Congress). 1958. 3 pp.

Library Services to the Nation. 1958. Leaflet.

The Local Board of Education (Bibliography), prepared by *Alpheus L. White*. March 1958. 22 pp.

Preliminary Statistics of City School Systems, 1955–56, by *Lester B. Herlihy*. March 1958. 10 pp. (Cir. No. 522.)

Resources for Foreign Language Teaching, by *Marjorie C. Johnston* and *Catherine C. Seerley*. April 1958. 33 pp. (Cir. No. 524.)

Using Pictures in School, prepared by *Charlotte Boyd* and *Effie G. Bathurst*. 16 pp. (Education Brief No. 2, Revised March 1958.)

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SCHOOL LIFE

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OFFICE OF EDUCATION

AMONG THE CONTENTS

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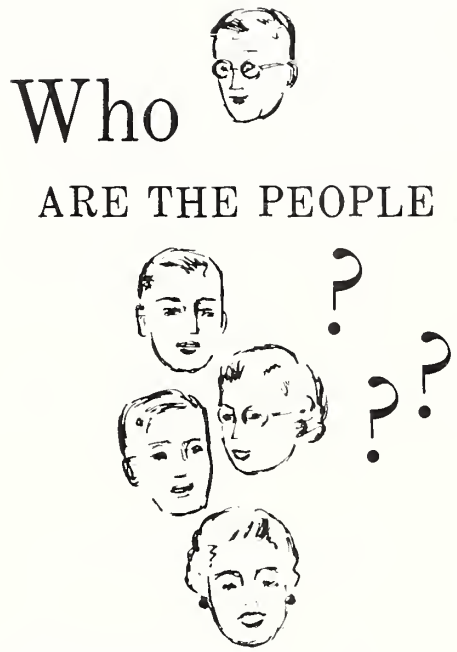

From "Human Welfare and Education," a speech by MARION B. FOLSOM before the biennial convention of the Jewish Welfare Board, Washington, Apr. 18, 1958

Who are the people who control our schools?

They are
the men and women elected to 48 State legislatures, which establish the State school codes, help finance education, and establish certification requirements for teachers.

They are
the people serving on more than 230 State boards that govern or regulate schools and colleges.

They are
the State school officials who perform supervisory and administrative duties.

They are
the tens of thousands of businessmen, farmers, housewives, and other citizens elected to school boards to build schools, employ teachers, select courses and books.

They are
the many men and women serving on the boards of private institutions.

They are
the teachers and administrators in the schools themselves.

They are, ultimately,
the millions of American parents who play a direct role in the activities of their children's schools.

THESE are the people who control our schools.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE . MARION B. FOLSOM, *Secretary*
OFFICE OF EDUCATION . . . . . LAWRENCE G. DERTHICK, *Commissioner*

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The Russian Race for Knowledge

LAWRENCE G. DERTHICK, *U. S. Commissioner of Education*

This statement is a speech given by Commissioner Derthick before the National Press Club, Washington, D. C., June 13.

WE HAVE JUST RETURNED from a month-long study of the schools in the USSR.

What we have seen has amazed us in one outstanding particular: we were simply not prepared for the degree to which the USSR is committed to education as a means of national advancement. Everywhere we went we saw indication after indication of what we could only conclude amounted to a total commitment to education. Our major reaction therefore is one of astonishment—and I choose the word carefully—at the extent to which this seems to have been accomplished. For what it is worth, ten American educators came away sobered by what they saw.

Here are some of the evidences of this total Soviet commitment to education:

Classes are of reasonable size.

Teachers are chosen on a highly selective basis—we saw no indication of any shortage.

The educational process extends after school hours and during the summer under professional direction.

Teachers and principals have an abundance of staff assistance: curriculum experts, doctors, nurses, laboratory assistants, and so forth.

School money is available to do the job. We were told repeatedly, "A child can be born healthy but he cannot be born educated."

Responsibility for the conduct and achievement of children rests with their parents, who participate regularly in school affairs.

These factors insure vigor and quality in any school system, whether in a communistic society or a democracy.

This, of course, is a preliminary report. Our team covered so much ground in so short a time that we have not yet completed the analysis necessary for careful judgments in a number of areas. We plan to publish as soon as possible a comprehensive report—part of the continuing study of Russian education to which many other groups will contribute.

Our hosts were most cooperative. Minister of Education Afanasenko, of the Russian Republic, at our first meeting, smilingly referred to the closed curtains in his office. "This is only for the benefit of the movie cameras. You will find no iron curtain about our schools."

This prediction was confirmed. We were impressed by the apparent interest of the Russians in the cultural exchange with the United States. In theaters and on the streets, as well as in schools and on campuses, we were greeted with great interest, reflecting Russian curiosity about things American. In Leningrad we saw lines that, we were told, had waited all night to buy tickets to the Philadelphia Symphony.

Despite our limited time we were eager to obtain a cross section view and asked for a schedule that turned out to be exceedingly strenuous, even with a chartered airplane and night travel—nearly 7,000 miles around the Soviet Union, in addition to our studies in the Moscow area, which itself involves a school system comparable in size and complexity to that of Chicago.

We were in some areas seldom, if ever, visited by Americans since the war. We visited in the Tatar Republic at Kazan; Sverdlovsk, the Pittsburgh of Russia, in the Urals and Siberia; Alma Ata and Tashkent in Kazakstan and Uzbekistan down close to the borders of China and Afghanistan. Then we traveled to Sochi on the Black Sea, to Minsk in Byelorussia, to Leningrad and back to Moscow for the final work. We saw schools in operation from the kindergartens through the university and their extensive program of complementary educational activities. We visited two collective farms, saw industrial operations, and toured the museums and galleries that are part of the total USSR educational endeavor.

In Leningrad we saw a typical example of the Soviet drive for knowledge. Here 70,000 men and women in full-time jobs are on double shifts—but they spend the second as full-time students in regularly established schools operating day and night to fit their jobs. From this and other observations it seems clear that for hundreds of thousands of workers education has not ended; not only do they have an opportunity to finish secondary school, but a great proportion continue right on through the higher institutions of learning. And other tens of thousands take the popular correspondence courses.

As I mentioned earlier, we saw no evidence of any teacher shortage. Teacher work loads and other working conditions are advantageous. Teacher prestige is high; only the best are chosen to teach—one out of six who apply for training. Salaries are at the levels of those of doctors and engineers; in fact, a fully trained doctor and nurse are regular members of each school staff.

We saw scientific research establishments with trained staff running into the thousands, and with excellent plants and equipment. We saw, of course, the skyscraper university in Moscow with its lavish appointments and its ultra-modern equipment. We noted the expansion of universities everywhere, and at the other end of the scale we were impressed by the quality and number of child care centers and kindergartens.

The importance of science in Soviet education is unquestioned. Biology, chemistry, physics, and astronomy are required of every pupil regardless of his interests or aspirations.

The minister of education for the largest Soviet republic told us that

plans were under way to introduce greater variety into their curriculum. Their emphasis on a uniform academic curriculum weighted with mathematics and science is being modified, somewhat in favor of polytechnic courses and industrial practices. The contemplated program will add an eleventh year, and decrease slightly the number of lessons in mathematics, science, and the humanities. All pupils in grades 9, 10, and 11 would be required to spend 3 days in school and 3 days in agricultural and industrial work outside the school.

Incidentally, we were interested to note the increases planned for home economics; also that driver training is being included in the practical course work in the secondary school—this in a country where one must wait at least a year for his automobile.

The avowed goal of the planned changes is to increase the numbers of skilled workers immediately upon graduation, also to condition every child to production work.

We witnessed an education-centered economy . . . with the emphasis on the collective rather than the individual needs of the people. Although the Soviet system imposes uniformity, Soviet education adjusts itself to changing conditions. Developmental programs are encouraged in limited numbers by the Ministry of Education as part of the process in a planned economy and a planned culture.

Our delegation was critical of the stereotyped concepts of culture and esthetics we encountered and the lack of emphasis on individual expression and creativeness. When we probed for explanations, we were told that "The Soviet people believe in reality, science, and the laws of nature."

At every turn we were struck by the emphasis on the study of languages in the schools. This is one of their areas of experimentation. For example, during the school year just completed, 17 schools began foreign language instruction in the second grade. Eight of these schools are referred to as English schools, seven as German, and two as French. Instruction in literature, history, and geography is also carried on in the second language beginning in the fifth grade.

The stated aim of these experimental schools is "to have pupils graduating from the secondary school who will have a free command of the language, and who will not have to go to special foreign language institutes." Approximately 45 percent of the 10-year-school pupils are studying English, 35 percent German, and 20 percent French. We were also informed by the Minister of Education that efforts are being made to increase the emphasis on conversational competence.

Direct comparisons of the *quality* of education in two countries as different in goals and aspirations as the United States and the Soviet Union are difficult, if not impossible. Soviet teaching methods and content are designed to insure that "every pupil passes." In an attempt to accomplish this, extra teaching services are provided with individual tutoring, incentives and awards, and restriction of student privileges.

Examinations are confined to elements in which the pupils have been drilled. Little if any attention is given questions involving the application of knowledge to new situations. Teachers evaluate pupils on each lesson and daily recitation. Low marks are usually considered a reflection on the teacher rather than the pupil.

Clearly, much more study and research are necessary before the effectiveness of those procedures can be fairly evaluated. The best products of Soviet schools are undoubtedly very good. However, we are inclined to think that the enormous effort made to advance slow learners in highly academic subjects tends to restrict opportunities for many able students.

Everywhere in Russia are evidences not only of passionate love of country but of a burning desire to surpass the United States in education, in production, in standard of living, in world trade—and in athletics. The slogan we saw most—in posters, films, and everywhere—was "Reach and Overreach America." We did not find among children and teachers any evidence that this fierce sense of competition was other than of peaceful intent. In education the spirit is a race for knowledge, for supremacy in a way of life and in world leadership. In the words of one Soviet official, this is the Russian attitude: "We believe in a planned society, you in individual initiative. Let time tell." They are convinced that time is on their side and they can win world supremacy through education and hard work.

This conviction is basic to all their efforts and all their plans. Education is paramount. It is a kind of grand passion—this conviction that children, schools, and hard work will win them their place in the sun, and on the moon.

We are today in competition with a nation of vast resources, a people of seemingly unbounded enthusiasm for self-development and fired with conviction that future supremacy belongs to those with the best-trained minds, those who will work hard and sacrifice.

Let me emphasize in closing, lest we be misunderstood, that in pointing up strengths in the Soviet system attributable to their total commitment to education we are not extolling the virtues and purposes of the Russian schools. Their system simply would not fit our way of life.

The American people look to their system of education for infinitely more than the means of political and economic advancement. Our schools must always preserve the intangible values of our free society.

Speaking for ten American educators who have had a unique opportunity to study Soviet schools, let me say that our confidence in the educational system of the United States, as reflected in our better schools, has been strengthened by this experience. On the other hand, our concern for our weaker and neglected schools has been deepened. We come back convinced that we cannot as a nation afford to disregard the challenge imposed upon us by the Russian race for knowledge.

In the Listener's EAR

WHEN your child speaks, how do you listen? In the space between you and him are only airwaves and light waves—a bridge too uncertain for him to cross on unless you hold it firm with your understanding and love.

An openminded, openhearted listener—when every parent and teacher is that, what hope will shine for all children, especially for children with speech disorders! Of that bright prospect, Office of Education staff had a glimpse one day last month when they heard Wendell Johnson speak of the listener's share in communication. Dr. Johnson had been their colleague since December, when he took leave of absence from the University of Iowa as professor of speech pathology and psychology to spend 6 months in the Office's Section for Exceptional Children and Youth as consultant on speech and hearing problems; but this was the staff's first formal opportunity to hear him put the case for wise listening—a case he strengthens by pointing to some of the harm that a thoughtless listener can do.

"It takes two to stutter," he says as he tells of the findings in many clinical studies. "It isn't that on a certain day little Wilbur starts to stutter: it's that on a certain day little Wilbur's mother *decides* he stutters. On that day she notices in his speech, maybe for the first time, some of the simple repetitions and hesitations that all children normally make and that her little boy undoubtedly had been making, in an easy, unselfconscious way, ever since he started to speak. But on that day, for some reason—perhaps she is more perfectionistic than usual—she thinks she sees in his normal nonfluency a danger sign.

"She may not cry it aloud in his presence—'Why, he's a stutterer!'—but from the moment of her judgment her own anxiety begins to affect the child. From the way she looks at him or away from him when he speaks, from her worrying reminder to 'think before you talk' or to 'take a deep breath before you begin,' he gradually is made to feel that something is wrong with the way he talks. He tries to do what she seems to ask, and in trying grows more tense and hesitant—and more nonfluent. In the bargain he becomes his own most disturbing listener as he learns to doubt that he can speak so that others will approve, and to be afraid of the consequences. The problem arises for the listener before it does for the speaker, and it is basically as his own listener that the speaker comes to be affected."

Lay listeners, usually parents, make their fateful judgments in most cases when the child is 3, or a bit beyond. Why then? Dr. Johnson says one reason is that "by the time a child is 3 he has laid down his basic language pattern: he has a working vocabulary, he makes complete sentences. For these first 3 years he was regarded as 'just learning,' and everything he said won smiles. But now his mother becomes a new kind of listener. She begins to hear him not as a child learning to speak but as one who *has* learned, and so she tends to judge his speech by adult standards. As she becomes concerned accordingly, what had once been fun for both mother and child becomes their common ordeal."

Thus begins what Dr. Johnson calls "the basic fact in a stutterer's life"—that he doesn't feel *understood as a person*. "And this," Dr. Johnson says, "is one fact we must always remember. Many teachers think that what they can do for a stutterer is only a matter of being kind, of helping him change so he won't be handicapped, so he can get a job and be accepted by the customers. In short, they think it's only a matter of helping him conform.

"But it's much more than that. It's a matter of giving him the satisfactions every child has a right to: To think well of himself, to feel important as a person, to discover his own gifts, and, by developing them, to know success among his peers. All these his teachers can help him to achieve—but only as they turn a generously listening ear and make speech rewarding for him again."

Dr. Johnson's plea for listening more to what the child says and means than to his "surface noises" is one that speech correctionists themselves will underline. Not long ago, when the Office of Education asked 120 of them what competencies they need most, they rated "ability to develop a teaching atmosphere free from pressure and conducive to good mental health" at the top of a long list, second only to "knowledge and understanding of the different types of handicaps." This encouraging fact appears on an early page in *Speech Correctionists: The Competencies They Need for the Work They Do.** a bulletin prepared, with the help of a national committee, by Romaine P. Mackie, Chief of the Office's Section for Exceptional Children, and Dr. Johnson. It should be useful to all who are concerned with the teaching of speech-handicapped children.

*Available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 15 cents.

FEDERAL EXPENDITURES *for* EDUCATION

CLAYTON D. HUTCHINS

Dr. Hutchins *is Chief, School Finance Section, Office of Education.*

EVERY other year the Office of Education issues a bulletin on the Federal Government's expenditures for education. Latest in the series, *Federal Funds for Education, 1956–57 and 1957–58*, a report on 137 programs, has just been completed and will be off the press in a few months.

As advance information for those who await the report, two summary tables are presented here. They are self-explanatory, but for the second table two notes may be helpful: The line "National and other" covers certain programs national in scope and therefore not reportable by States; the line "Reconciliation" recognizes adjustments made in view of the fact that, for some funds, State legislatures decide on the proportions to be used for schools, and detailed information on their apportionments is not available to the Federal offices. These amounts and the amounts to the States are broken down by agencies, to specify the three that allot the largest Federal sums for education—the Department of Health, Education, and Welfare; the Department of Agriculture; and the Veterans Administration.

The Congress of the United States has provided these funds to finance programs it considers necessary or desirable for the national welfare. Most school funds, however, in keeping with the American philosophy that education is a State and local responsibility, are derived from State and local revenues.

Federal funds expended for education, by administering agency and kind of education, alternate school years, 1948–49 to 1956–57

[Thousands of dollars]

AGENCY AND KIND OF EDUCATION	1948–49	1950–51	1952–53	1954–55	1956–57
AGENCY					
Department of—					
Health, Education, and Welfare	256,534	132,147	332,509	414,906	490,736
Agriculture	141,812	171,154	195,694	245,070	399,381
Commerce	7,987	5,394	4,372	2,899	3,346
Defense	15,830	26,301	40,694	49,947	69,332
Interior	31,229	45,557	58,455	81,646	90,425
Justice	.....	389	422	461	530
Labor	2,599	3,183	3,324	3,160	5,899
State	.....	.....	37,402	42,286	47,115
Treasury	1,983	1,808	2,585	3,051	3,375
Veterans Administration	3,039,062	2,120,216	725,572	710,084	813,955
Atomic Energy Commission	.....	18,908	25,221	24,479	30,717
Canal Zone	.....	2,299	2,635	2,910	3,647
District of Columbia	3,219	2,678	2,522	5,186	4,310
Federal Civil Defense Administration	.....	.....	.....	.....	707
Federal Deposit Insurance Corporation	.....	.....	.....	.....	7
National Advisory Committee for Aeronautics	498	710	618	675	580
National Science Foundation	.....	.....	3,649	12,003	33,181
Tennessee Valley Authority	653	593	557	485	582
Total	**3,501,406**	**2,531,337**	**1,436,231**	**1,597,248**	[1] **1,997,825**
KIND OF EDUCATION					
Elementary and secondary education	161,403	223,609	454,410	540,006	656,632
Higher education	3,251,788	2,194,528	809,583	854,152	1,032,374
Adult education	20,815	25,365	35,023	40,664	87,220
Inservice training of civilian personnel	.....	1	359	1,549	3,485
Education of Merchant Marine and military personnel for defense	22,525	23,689	25,710	23,985	34,497
Research in educational institutions	44,543	64,045	73,385	94,284	133,478
International education	332	100	37,761	42,608	50,139
Total	**3,501,406**	**2,531,337**	**1,436,231**	**1,597,248**	[1] **1,997,825**

[1] The slight difference between this amount and the total in the second table is the result of rounding.

Federal funds for education allotted to the individual States and Territories, school year 1956–57

STATE OR TERRITORY	GRAND TOTAL	ADMINISTERED BY DHEW	ADMINISTERED BY USDA	ADMINISTERED BY VA	OTHER
Alabama	$48,231,682	$13,037,468	$10,824,129	$24,238,029	$132,056
Arizona	12,355,694	4,446,702	2,461,750	5,250,659	196,583
Arkansas	22,589,728	6,434,113	6,982,002	9,097,288	76,325
California	152,014,008	56,658,053	20,170,175	72,210,407	2,975,373
Colorado	21,690,221	8,215,052	3,236,933	10,068,819	169,417
Connecticut	17,607,933	5,710,931	3,203,977	7,918,259	774,766
Delaware	3,659,367	1,784,532	975,481	868,740	30,614
Florida	41,959,139	12,381,443	7,575,091	21,667,930	334,675
Georgia	50,374,246	16,048,494	11,249,879	22,889,198	186,675
Idaho	6,173,743	1,160,292	1,886,145	3,109,964	17,342
Illinois	71,416,715	16,683,843	15,643,704	37,406,028	1,683,140
Indiana	33,966,151	7,500,406	8,398,977	17,282,841	783,927
Iowa	28,438,556	5,284,557	7,184,414	15,765,117	204,468
Kansas	21,104,124	7,542,209	4,973,293	8,341,932	246,690
Kentucky	28,677,267	7,549,456	9,298,536	11,678,624	150,651
Louisiana	37,383,160	7,314,374	11,205,560	18,678,245	184,981
Maine	8,261,570	3,338,926	2,030,507	2,860,198	31,939
Maryland	27,148,386	16,565,709	4,479,848	5,593,906	508,923
Massachusetts	45,104,812	10,771,574	9,163,023	23,534,803	1,635,412
Michigan	54,553,406	14,573,229	13,062,821	25,940,917	976,439
Minnesota	32,819,174	6,198,621	9,004,727	17,126,231	489,595
Mississippi	25,836,963	6,140,973	8,186,144	11,451,358	58,488
Missouri	42,797,934	9,614,733	9,688,151	23,019,279	475,771
Montana	7,748,871	3,124,131	1,609,237	2,964,672	50,831
Nebraska	17,822,464	4,218,010	3,168,062	10,365,790	70,602
Nevada	2,635,018	1,490,782	590,334	545,494	8,408
New Hampshire	5,370,200	1,666,150	1,268,216	2,384,819	51,015
New Jersey	28,266,506	8,184,268	6,171,493	13,392,899	517,846
New Mexico	13,756,283	6,219,308	2,978,897	4,353,129	204,949
New Yark	105,720,304	25,127,827	22,294,617	55,481,008	2,816,852
North Carolina	51,369,349	14,074,997	14,031,264	22,760,775	502,313
North Dakota	8,900,235	1,244,506	2,270,993	5,354,527	30,209
Ohio	57,529,851	13,955,002	16,748,247	26,152,506	674,096
Oklahoma	36,640,348	13,462,746	7,078,307	15,944,680	154,615
Oregon	16,871,412	5,922,494	3,579,597	7,127,154	242,167
Pennsylvania	78,514,092	18,514,950	16,129,573	42,328,695	1,540,874
Rhode Island	9,340,244	3,594,550	1,260,218	4,380,146	105,330
South Carolina	28,146,500	7,713,363	7,320,149	13,070,811	42,177
South Dakota	11,764,260	3,323,416	2,403,734	6,013,030	24,080
Tennessee	39,424,638	9,914,145	11,610,333	17,487,660	412,500
Texas	98,423,031	27,293,603	17,866,300	52,698,730	564,398
Utah	14,547,887	4,000,463	2,171,922	8,106,950	268,552
Vermont	3,819,280	1,259,912	1,204,730	1,283,725	70,913
Virginia	43,716,895	24,302,603	8,849,722	10,369,457	195,113
Washington	32,022,179	14,621,365	5,375,661	11,766,659	258,494
West Virginia	17,788,734	4,768,197	5,800,993	7,183,439	36,105
Wisconsin	31,853,326	5,943,842	8,644,159	16,182,348	1,082,977
Wyoming	3,780,162	1,334,849	996,881	1,418,451	29,981
District of Columbia	18,697,756	1,277,955	771,592	12,291,021	4,357,188
Alaska	9,727,423	4,142,562	372,580	0	5,212,281
Canal Zone	3,646,896	0	0	0	3,646,896
Guam	311,067	287,160	23,907	0	0
Hawaii	6,355,102	4,477,652	1,812,702	0	64,748
Puerta Rico	11,698,566	3,062,068	8,633,866	0	2,632
Virgin Islands	242,656	68,411	145,878	0	28,367
Unallotted	179,370	0	179,370	0	0
Outlying Parts—United States	36,946,222	0	0	36,946,222	0
National and other	298,727,144	65,667,769	6,052,340	7,100,000	219,907,035
Foreign countries	2,501,985	0	0	2,501,985	0
Reconciliation	8,853,278	—58,477,992	29,079,542	0	38,251,728
Total	[1] **1,997,823,513**	**490,736,754**	**399,380,683**	**813,955,554**	**293,750,522**

[1] The slight difference between this amount and the 1956–57 total in the first table is the result of rounding.

Major enactments in 26 States

STATE SCHOOL LEGISLATION, 1957

ARCH K. STEINER, *Laws and Legislation Branch*

AN unprecedented number of laws affecting education were passed by the States last year. Legislatures met in every State but Virginia and Kentucky—1 in special session only (Mississippi); 12 in both special and regular sessions (Arkansas, Connecticut, Delaware, Florida, Maine, Minnesota, Missouri, New York, Oregon, Rhode Island, Texas, and West Virginia); and the rest in regular session only. In some States the enactments ran into the hundreds.

For 20 of the legislating States, *School Life* already has reported (January 1958); the remaining 26 are accounted for here. Both summaries, limited to enactments with statewide application, are condensed from a detailed report compiled by the Office of Education from official documents and records supplied by State departments of education.*

ALABAMA

Increased minimum foundation program by $2.2 million; appropriated $4.8 million and authorized $3-million bond issue for construction trust fund.

Provided for construction at University Medical School and Polytechnic Institute, $4.5 million each; and at Deaf and Blind Institute, $3 million. Appropriated additional $40,000 for Deaf and Blind Institute.

Gave retired teachers substitute privileges and reinstatement rights; increased monthly benefits to $90.

Approved $350,000 annually for scholarships at Tuskegee Institute and $17,600 for a State scholarship nurse-training program.

Expanded benefits to disabled veterans and their dependents.

Enacted laws for pupil placement and closing of public schools.

Appropriated $50,000 for a commission to study the school system.

Provided for a committee to screen proposals concerning the schools.

CALIFORNIA

Raised school fund appropriation to $193.37 per unit in ADA.

Appropriated $200 million for construction bond act of 1955; $100 million for other construction; $1.2 million for repairing flood damage; $4.3 million for State colleges in Alameda and Orange Counties; $890,000 for Los Angeles State College.

Increased taxes from 1 to 3 mills; authorized short-term borrowing, investment of surplus, transferral of funds, bonding elections; provided for commissions to study tax practices.

Amended construction bond act of 1955; passed building aid law; created construction fund and gave it $1 million from the investment fund.

Permitted use of State school-building funds for administrative buildings, district reorganization, and laboratory and vocational equipment.

Extended retirement coverage and social security benefits to district trustees, employees of cafeterias and child-care centers; gave members accrual rights toward retirement for military and allied services.

Improved teacher tenure, leave, and contract provisions.

Increased salaries: State superintendent's, to $22,500; teacher's minimum, to $4,200. Upped allowances to board members for salaries, dues, etc. Based county superintendent's salaries on ADA. Liberalized leave benefits.

Exempted officials from financial responsibility for injury to pupils.

Extended scholarship program to 1962 and authorized dependents of military personnel to register as residents in colleges.

Permitted attendance outside district; required health examinations for pupils; extended library services; defined minimum school day and month.

Improved transportation laws; encouraged sparetime employment for youth; regulated discipline; changed methods of adopting textbooks; regulated junior high school fees.

Modified programs for handicapped children, for nonresident exceptional children; provided for driver training, nurse's training, and other special kinds of education—adult, TV, etc.

Provided for branches of the University at La Jolla and Santa Clara Valley; extended district authority over junior and State colleges.

Permitted veterans' affairs to pay for courses for professional licenses.

Regulated reorganization in various kinds of school districts; created a committee and appropriated $65,000 to recodify school laws.

Created—and appropriated $25,000 for—a public library commission.

Approved Western Regional Conference for Education Beyond High School, Citizens Advance Committee on Fitness of American Youth, and Interim Committee on Education of the Handicapped.

CONNECTICUT

Increased aid: For general support, by $19.8 million for biennium; for elementary- and secondary-school construction, from one-third of total cost to one-half; for regional schools, by $100 per pupil; for adult education, from 2½ percent per pupil hour to 6.

Authorized additional bond issues for construction: $7.5 million for teachers colleges, $5.4 million for vocational and technical schools, and $700,000 for municipalities.

Postponed for 10 years the end of building aid; authorized hardship grants for construction.

Appropriated funds for increases in teachers' salaries and $25,000 for library fund; increased monthly retirement allowances, to $50 for retirees *before* 1943, to $100 *after*.

Provided for survivors' benefits, for withdrawals and refunds, for retirement on disability based on 5 highest salary years; permitted 10 years' credit for State or university service; said retired teachers could earn

*The full report, more than 100 pages long, cites the enactments specifically, by chapter or bill, under 7 headings: Financial support, construction, personnel, students, special education, higher education, and administration and organization.

$1,200 as substitutes; authorized legislative council to study the system.

Required count of all children under 18; amended transportation law; permitted boards to discipline pupils.

Increased aid for the mentally handicapped; regulated powers of State board for the handicapped.

Required board meetings to be open.

GEORGIA

Limited the funds a local system must pay toward minimum foundation program, thus enabling increases of $200 in teachers' salaries.

Doubled salaries of county board members, to $10 a day; provided for busdrivers a minimum of $100 a month for 10 months.

Extended retirement benefits to librarians, teachers in nonsectarian schools, and transferees from other States; permitted teachers to reenter system and establish prior service.

Authorized Governor to suspend compulsory school attendance law, boards to require vaccination against polio.

Proposed constitutional amendment permitting university regents to use State funds for an unlimited number of scholarships.

INDIANA

Appropriated $188.7 million for biennium, increasing foundation program by $32.6 million.

Increased taxes: 50 percent gain on income, 2 percent on gasoline, $1.25 on each $100 assessment on property, 35 cents (to $3.65) for special fund, 1 percent (to 5 percent) on private capital for construction; enacted withholding law.

Repealed 7 cents property tax and 50 cents poll tax for tuition fund and a property tax for retirement fund; replaced both from the general fund.

Amended building authority law; provided for acquiring sites and financing and leasing school buildings with 30-year purchase option.

Authorized high school diplomas to veterans on basis of standards tests.

Set aside $24,500 from alcoholic beverage commission fund to help meet cost of creating in State department a division for the handicapped.

Extended vocational education; established driver education division to be financed by State license fees.

Provided for consolidation of schools to form new corporations and metropolitan districts; appropriated $62,500 for the codifying of school laws by the legislative bureau and the university; provided for Commissions to study training and licensing procedures and subversive activities.

Regulated bond sales; broadened use of local building funds to equip, lease, rent buildings, and to collect taxes; empowered town trustees to collect taxes up to 30 cents on each $100 of assessed value.

Appropriated $2 million for veterinary school at Purdue University, $4 million for veterinary construction fund; transferred $5 million from World War I bonus fund to construction fund.

Increased monthly retirement benefits to $95; set $7,200 as top salary base for computing benefits; extended benefits to group employees; authorized districts to contract for group insurance and to collect through payroll deductions.

Required bus transportation; required reports on immunization of children against certain diseases.

KANSAS

Increased maximum mill levy for general fund: In all common districts maintaining high schools, to 10 and 18; rural high schools, to 8; districts with high school extension, to 5; non-high-school territory, for county equalization, to 5; first-class districts, to 30; second-class cities, to 25.

Extended 2-percent sales tax to high school concessions; increased taxes on income, cigarettes, and wholesalers stamp; allocated sales tax revenue to State agencies; adopted ADA as basis for distributing State aid to high schools; authorized no-fund warrants for reorganized districts.

Set maximum county level for junior colleges at 1.5 mills; increased levy for municipal university from 4 to 5.

Authorized $2.3 million for operating State educational institutions; designated State department of education to receive Federal funds.

Appropriated $5.5 million for construction for higher education and $10,000 for the school for the deaf.

Permitted school districts to acquire land and housing; required contractors to comply with building code; provided for cancellation of contracts.

Increased salaries of county officials by 20 percent; limited retired teachers to 60 days of substituting a year.

Repealed law for separate schools for white and colored pupils; defined school day and month; put student employees under board of regents; provided for textbook committee; improved safety standards, rural library services; required school census.

Authorized "campus police" and the sale of temporary buildings at State colleges and university.

Provided for district reorganization; required all official records to be open to public inspection; authorized a board to regulate high school activities associations and prescribed method of financing transportation to special events; created surplus-property section; directed legislative council to study the educational system.

LOUISIANA

Increased aid by $9.6 million annually, which includes $1.5 million for the educable mentally retarded.

Transferred to State board of education for salaries: From welfare fund, 7.5 percent of sales taxes; from property tax relief fund, $5.3 million.

Extended retirement benefits to certain employees; increased allowances for teachers with benefits less than $160 a month, and supplementary benefits on years of service for teachers with less than $200.

Authorized parents to sue local board for damages to students caused by negligence of board employees.

MASSACHUSETTS

Provided for reimbursing regional districts for vocational schools.

Made cities, towns, and regional districts eligible for grants.

Increased teachers' minimum salaries to $3,300 a year; put custodians and supervisors under civil service.

Simplified retirement formula; permitted members within 6 months of 60 to retire under certain conditions; redefined *teacher;* provided for monthly payments to certain teachers in municipal pension systems; permitted retired teachers to earn up to $1,000 a year as substitutes.

Reimbursed employees for expense of defending themselves in removal proceedings; authorized purchase of group insurance.

Continued on page 12

WEALTH OF THE INDIES

DELIA GOETZ AND

HE *that would bring home the wealth of the Indies must also carry the wealth of the Indies with him.* This old proverb comes often to our minds these days as we watch 20 teachers and writers from 13 countries and 3 continents comparing notes in a workshop for developing educational materials. For we know that soon, when the last session is over, each one will go home laden with new riches, mostly because he himself brought a wealth of experiences with him and willingly shared it with his fellows.

These people have come to the United States principally to learn how to apply creative writing techniques for reaching new goals in education, but they are having many other experiences besides. They are traveling alone in a strange country, addressing conferences in English, entertaining luncheon meetings with original songs, and holding their own against barrages of questions from schoolchildren.

From the beginning they have been eager for new experiences, openminded, and enthusiastic. The first day of the workshop was the Monday after Washington's big snow of mid-February, when zero weather and blocked roads kept many Government workers at home. But two-thirds of the workshop arrived on schedule, including those from tropical lands such as Haiti, Laos, Liberia, and Thailand. When Washington trolleys and taxis failed them, they continued cheerfully on foot through the drifts to their rendezvous at the Office of Education. Ever since, this same spirit has carried them through lectures, field trips, struggles with language, and an initiation into textbook-writing techniques.

All of them—7 women and 13 men—are here on training grants from the International Cooperation Administration. The youngest is 22, the oldest 56; most are under 40. In background and experience they vary widely. Among them are staff members from the ministries of education in India, Iran, Israel, and Thailand; the dean of education at Costa Rica's National University; the director of the Neca Teacher Training College in Turkey; four rural educato from Haiti; and a supervisor and community educat from Honduras. Thailand is represented also by a your mother, and by a supervisor of teacher education wi years of experience and a sympathetic ear for the troubl of younger members of the group.

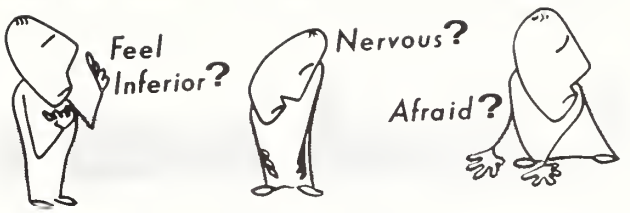
There are also young teachers from Laos, Liberia, a Ethiopia; a young artist from Bolivia; and a Vietname who recently received her master's degree in education this country. A few have written several books; son none. Some are fluent in English; some often interru their own halting remarks with "I don't speak your la guage well" or "I don't know the English words for what want to say."

Only those from the same country had known each oth before they came to Washington; but once the worksh got underway they had ample opportunity to get a quainted with—if not always to understand—each othe For 6 weeks, from February 17 through March 31, the attended lectures by the directors of the workshop, on t different kinds of educational materials, the techniques writing fact and fiction, and the fitting of materials curriculum needs and age levels—as well as on such pu lishing details as illustrations, layout, format, and desig They heard other lectures, too, from guest speakers wl had had experience—many of them, in countries and ci cumstances like those the members will know in their ow work—in writing and evaluating educational materials, the graphic arts, or in language research.

After the lectures, the workshop went on field trip They visited such places as printing presses, and the ed torial offices of a magazine published in three language They took a tour to investigate the possibilities for produ ing good materials with inexpensive equipment. They sa

The authors—a specialist in the preparation of educational materials for the International Cooperation Administration and a lecturer on writing for children, The George Washington University, Washington D. C.—are the directors of the 6-month workshop they describe here—a joint project of ICA, the university, and the Office of Education, and the first of its kind to be held in the Office.

A NOLEN



Amusing, forceful sketches by Adnan Cakmakcioglu for his college freshman's handbook will help many young Turks to a hopeful, constructive attitude just when they need it most.

ow schools develop and use educational materials centers nd, on film, watched libraries extend their services.

Interesting and helpful though they are, however, these eld trips and background experiences have been but secndary to an assignment each participant has had on his ind from the beginning—the actual writing of one or ore textbooks.

Many of the group had their projects for this assignent already planned when they arrived. The young man om Liberia was one of these: his project had been sected while he was still at home. After weeks of discussg with teachers and other leaders the educational needs his people, he had decided on a book of Liberian folk les and then, through intensive research, had collected s raw material from tribal storytellers. Some of his best ories and legends came from an "old, old man of 62." ho had earned the right to lie in a hammock and pass on others the oral traditions of his people.

Equally certain of what his project would be has been e director of a teacher training college in Turkey, who preparing a handbook for college freshmen, designing to counteract homesickness and to develop independence id stability in a new and disturbing educational environent. He has a talent for illustration and has used it to ce his spine-stiffening message with humor.

But some of the members still had the decision to make hen the workshop began, and spent days and nights planng and worrying, weighing and rejecting. Fortunately, ow beginners sometimes make speedy progress. As one marked during a conference in which he outlined five fferent projects, "Something must have been holding me ick at home, for I didn't know what fun it is to write."

The projects in the workshop are as varied as the chilen in a classroom. The artist from Bolivia, who first plored the problems of teaching fractions through pictures, has settled on a basic wordbook, or picture dictionary. A teacher from Haiti, who already had prepared a picture dictionary, has attacked the job of preparing a simple grammar to follow her dictionary. Her plans, like those of many others, include wordbooks and teacher manuals to supplement her textbook. Another language book, in Hebrew, is being designed for pupils whose mother tongue is English, French, or Spanish.

The member from India has been his own stern taskmaster. He has wished to master the techniques of writing biography, to produce workbooks as well, and to lighten his writing with humor, an ingredient too often lacking, he feels, in texts for his country. The need for better geometry textbooks in Iran has prompted one member from that country to prepare a simple introduction to geometry, as a sample of new methods of writing textbooks. His ambitious countryman, overflowing with ideas, has finally selected the hero legend of Firdusi, as important to Iran as King Arthur is to English-speaking children.

Whatever the subject, each manuscript has been prepared in two languages: In English, so that the directors and other members of the workshop can criticize; and in the language of the country where it will be published and used. Each person's manuscript has been read in advance by other members of the workshop and then discussed in weekly sessions of small groups interested in the subject matter or grade level. Discussions have been channeled along productive lines by consideration of such basic questions as these: What is the educational goal of this material? How well does it meet this goal? Is it interesting? Is it factually correct? Is it adapted to a specific age group or level of development? Are some sections better than others? Which are best? Which are weakest? How can it be improved?

Criticism is an essential part of any workshop in writing. Analyzing another's manuscript and offering constructive criticism for its improvement is an important step in learning to write. More than one member of the workshop expressed doubts in advance that other members would accept criticism from their fellow workers. In practice, these doubts have turned to amazement and satisfac-

tion as one participant after another has discovered the advantages of giving and receiving criticism.

Although the participants are novices at textbook writing, their maturity in intellectual development and educational experience has enabled them to profit quickly from new ideas and a new approach. They have discovered that the old bugaboo—the misguided translation of unsuitable material from one culture to another—can be replaced by a creative and original approach. They have been encouraged to reach down into their own teaching experiences, their personal hobbies, and their own national culture, for those colorful details of childhood experience that can enliven the most practical textbook. Again and again, the directors of the workshop have had the satisfaction of seeing a hesitating author suddenly develop a sense of purpose and accomplishment as he recognizes the "wealth of the Indies" lying dormant in his own experience.

We talk of new goals in education—democracy in action. There is a similar philosophy in teaching any creative activity, which is the very antithesis of authoritarianism. Writing is a creative activity: Whether it shapes a textbook in grammar or geography, a biography or a folk tale, it makes demands on the spiritual and emotional equipment of the writer as well as on his educational and intellectual skills.

Before the workshop ends, on August 1, two new group projects will supplement the individual writing projects. The *Workshop Sampler*—a collection of sample pages from each member's work—will be produced by committees of the members, supervised by a graphic arts specialist. It will serve a double purpose: As an official report, and as a souvenir of the first Washington Workshop in the Development of Education Materials. A second publication, the *Workshop Weekly*, will be produced during the summer session; it will be a newsletter with a rotating staff so that those with an interest in publishing school or community newsletters when they get home can have some practical publication experience in advance.

As the workshop has progressed and members and directors have grown better acquainted, it has become obvious that the output will not be limited to manuscripts. Lively discussions have revealed that these people, with their different backgrounds, customs, and cultures have much to offer each other. And so, for the final 8 weeks, panels of the participants will lead seminars on topics related to their work and their different worlds.

Thus, when the Workshop for the Development of Educational Materials closes, each member will carry the "wealth of the Indies" home with him, for each in his own way will have enriched those with whom he has worked.

STATE LAWS

Continued from page 9

Established medical, dental, and nursing scholarship board, and a scholarship program for higher education; authorized scholarships to students at State teachers colleges preparing to work with the mentally retarded, and five 4-year scholarships at the New Bedford Institute of Technology.

Postponed the end of certain veterans' benefits; regulated benefit options of veteran's surviving spouse.

Permitted girl truants to be placed in custody of youth service board.

Regulated day occupational organizations for the mentally retarded; provided for community clinics for retarded children of preschool age; reimbursed local agencies for classes for the deaf; provided grants for certain blind persons; increased aid for educating the deaf, blind, and aphasic.

Authorized cities and towns to spend up to $1 per pupil for educational TV.

Established rural schools for training practical nurses; regulated nursing practice and prescribed for the licensing examination; required examination of graduates of foreign schools applying for a veterinarian's certificate; established camps for children in care of youth service board.

Named Bradford-Durfee College of Technology and New Bedford Institute of Technology; increased authority to grant degrees in science.

Provided for examination of graduates of foreign medical schools.

Authorized State department of education to grant degree of associate in science to persons completing course in community colleges.

Authorized conveyance of lands and holding of property under jurisdiction of university.

Modified reorganization laws for regional districts.

Authorized teachers to inspect records on themselves; regulated the keeping of attendance records; provided for countersigning bonds and notes in regional school districts.

MICHIGAN

Set aside for aid fund two-thirds of sales tax, 4-percent tax on spirits, 2 cents per pack on cigarettes; guaranteed a budget 10 percent larger than in 1955–56; allocated $650,000 to special county districts, $700,000 to vocational education, $200,000 to adult education, $5 million to distressed districts, and $60 per pupil for transportation.

Raised property tax limit for community reorganized school districts; raised monthly license fee on trailer coaches to $3, mostly for schools.

Authorized third-class districts to construct or lease school buildings.

Increased salary of State superintendent to $17,500 a year; permitted teachers to retire at 60.

Prescribed courses in civics, political science; regulated transportation.

Established schools for traffic violators; authorized graduates of driver courses to get operators' licenses before reaching statute age.

Provided for educating the mentally retarded, in or out of own district.

Extensively revised community college act for construction, tax limits, administration, and reorganization; changed *college* to *university* in name of Western Michigan College.

Modified district reorganization procedure for elections, tax limits, bond debts; required private trade schools to have State permits; regulated membership on State equalization board.

MISSISSIPPI

Authorized State colleges and universities to construct airports.

Enabled municipalities to raise money to purchase, construct, or equip auditoriums, and other school buildings.

Empowered board to insure school buses against liability up to $10,000 per person, $20,000 per accident.

MISSOURI

Transferred $65.6 million from general revenue to State school fund; appropriated $1.4 million for building aid to reorganized districts.

Prescribed method of distributing aid for dependents of military personnel; authorized investment of surpluses; regulated tax collections.

Removed $2,500 limit on what a board can spend without contract when using its own employees.

Based retirement benefits on full salary contributions; let teachers purchase credit for out-of-State service; increased benefits; gave transfer rights.

Authorized superintendents to excuse incompetent pupils from attendance; ended excusing of 14-to-16-year-olds who have finished elementary school; required superintendents to assign pupils to most accessible district.

For the handicapped, established a study commission and training centers, required special census enumeration, clarified State board's duties, reorganized districts for financing, cut to 6 the number of children required to petition for special classes.

Changed names of teachers colleges to omit the word *teacher*.

Ended requiring of separate schools for white and colored children.

Designated State board of education to administer surplus property; regulated purchase of school supplies; authorized school funds for dues to State school board association.

NEVADA

Required districts to fix tax rates to budget limits set by tax commission; clarified terminology for funds.

Empowered officials to lease real property or unused school buildings; authorized public agencies to exchange land; provided for transfer of Federal surplus property.

Regulated appointment, qualifications, and salary of State superintendent and his assistant; authorized retired persons to earn $1,200 a year.

Lowered top age limit for compulsory attendance to 17 years.

Modified legislation for transportation and safety; required textbook commission to meet annually.

Set aside for school of industry $2,200 from distribution fund; modified legislation for vocational education and rehabilitation.

Authorized State board to regulate publication of district expenditures; required parents to be held liable, up to $300, for damages by children.

NEW HAMPSHIRE

Substantially increased aid for foundation program, technical institutes, vocational rehabilitation, teachers colleges, State supervision; authorized State board to administer a revolving fund for technical institutes.

Authorized cooperative districts to issue bonds to 9 percent of assessed value; cities, to 4 and 6 percent.

Asked tax commission to study reasons why any town has a tax rate below $2.50; required State board to adjust cost of required programs to comply with foundation aid; made institutional property tax free.

Appropriated $60,000 and provided additional 2½ percent for building aid for high school district and a sum equal to 30 percent of annual payments on principal of loans.

Provided aid for salaries of superintendents, for assistance to teachers on basis of need; enabled OASI to integrate with retirement system; provided for hearings on tenure, etc.

Required districts to pay costs of their children attending school elsewhere; regulated child employment.

Provided for transportation and education of the mentally retarded.

Channeled automobile license fees into the driver education program.

Established nursing-education board.

Created position of State deputy commissioner of education; regulated private nursery schools and kindergartens; required annual approval of certification standards; set up health and safety standards; revised election procedure for school districts.

NEW JERSEY

Authorized local governments to issue bonds redeemable before maturity.

Raised teachers' minimum salaries: Nondegree to $3,600–$5,800, bachelor's $3,800–$5,300, master's $4,600–$6,200; yearly increments, $200.

Set minimum pensions at 25 percent of final average salary at age 65 with 35 years of service; gave employees option of State or local systems; authorized retirees to earn $1,200 a year and waive part of their pensions.

Gave school nurses tenure rights; required local boards to appoint them.

Permitted accumulation of sick leave beyond 10 days; authorized teachers to purchase group life insurance.

Enabled foreigners to get teachers' certificates if they declare intent to become citizens in 5 years.

Added publicly assisted housing to the facilities that may not be barred to users because of race, creed, etc.

Provided for polio immunization.

Regulated the apportioning of board membership, absentee voting, and purchases and bids.

NEW MEXICO

Increased equalizing aid from $500,000 to $800,000; raised interest limit on institutional bonds to 6 percent.

Set up school finance division in State department; authorized director to increase a school's budget up to $500.

Authorized $120,000 for refunds of taxes, penalties, interest.

Provided retirement at age 60 with 15 years service, at any age with 30 years service; computed benefits on last 5 salary years; provided liberal disability benefits; gave teachers tenure rights.

Asked Congress for 10 million acres in trust for higher education revenue; provided for establishing a college in any community that needs one; required undergraduates to study American history and political science.

Enacted constitutional amendment for a State department of education, an elected State board, and a board-appointed State superintendent; appropriated $25,671 to match Federal funds for library services.

Strengthened truancy laws.

Ended the authorizing of independent school districts.

NORTH CAROLINA

Increased general appropriation; authorized districts to call elections to

get operating funds: created study commission on finance.

Raised auto license tax $1 to pay for driver training.

Authorized two $10-million bond issues: For capital improvements at State institutions; for student housing, to be repaid by rents.

Set up revolving fund for college dormitories and facilities; limited to 30 and 40 acres the sites acquired by eminent domain; required plans and specifications for construction over $200,000; regulated bids, contracts.

Authorized State board to permit local voluntary payroll deductions.

Extended retirement to superintendents, resident teachers, State employees; raised teachers' monthly benefits from $50 to $60; raised weekly disability payments from $32.50 to $35.

Established for 1957–58 and 1958–59 300 and 600 loan scholarships, $350 each, for prospective teachers; 200 summer school scholarships a year.

Required State and United States history in the curriculum; required teaching fire prevention: authorized boards to take title to school buses for carrying students to school functions; freed boards from liability in accidents during field or civil defense trips; said attendance officers should report, not prosecute.

Provided $165,000 a year for trainable mentally handicapped; limited each eligible to $300; prescribed the use of vocational training funds.

Provided for State-local planning to reorganize community colleges; regulated private trade schools with five or more students; authorized elections to determine district reorganization.

NORTH DAKOTA

Required districts to increase levies for general fund by 25 percent if they are to qualify; eliminated State aid to Indian districts receiving Federal aid; authorized county tax increases up to 5 mills for junior colleges; preserved sales tax.

Increased county levy for high school equalization fund from 3 mills to 4, weekly payments from $3 to $3.50; permitted districts to issue bonds up to 10 percent of assessed value, to go 2 mills beyond former tax limit without an election, to build and operate schools outside their boundaries.

Authorized high school districts to pay clerks $400 instead of $200.

Required teachers after 1960 to have 2 years' training beyond high school; county superintendents, a first grade certificate, a minor in elementary education, and 5 years of teaching.

Required superintendents to furnish bond for money in their custody; required records to be open to public.

Authorized high school graduates to borrow for college, $500 per year at 3 percent; highway commission to establish 12 engineering scholarships of $600 each per year; provided 2-year scholarships for teachers with first grade elementary certificates which would be repaid by 1 year of teaching in the State.

Authorized localities to levy taxes for library services.

Required 7-to-14-year-olds to attend public school, children who have not finished eighth grade to attend until 17.

Passed resolution to place emphasis on penmanship and spelling.

Directed the legislative research committee to study special education, district reorganization, administration, finance, and higher education.

Regulated reorganization; authorized State superintendent to appoint director of surplus property.

OHIO

Appropriated $367 million for 2-year foundation program and a supplemental $41.8 million, including retirement; removed bus depreciation from foundation program.

Required property reappraisal; limited bonded indebtedness to 9 percent of assessed value; permitted bond issues for school furnishings, equipment, and sites.

Authorized $150-million bond issue for construction in needy districts; provided $10 million building aid for 1957–58 and additional $10 million after 1959; required districts to levy at least 15 mills to be eligible for rehabilitation aid.

Increased State superintendent's salary to $25,000; provided cost-of-living adjustment fund to increase pensions. Permitted leaves of absence with part pay for not more than 1 year; required a flat $2 fee for certificates; permitted State board to set standards and grant teachers certificates for private schools; authorized an "executive head" certificate for supervisors and administrators, and employment of executive heads for 5-year period.

Appropriated $220,000 for scholarships for 2d year college students.

Permitted officials to expel students; made parents responsible up to $500 for damage by children; increased fines for delinquents from $25 to $50.

Defined a school year as 178 days, and a schoolday for grades 1–6 as 5 hours; permitted boards to establish and support separate schools for the mentally retarded.

Authorized county boards to study reorganization, curriculum, and instructional needs: modified reorganization procedure; authorized State Board to regulate county service funds.

OKLAHOMA

Increased aid from $250 to $400 per capita; changed distribution formula. Increased minimum salaries: Bachelor's from $2,100 to $2,700 and, beginning in 1958–59, to $3,000; master's from $2,400 to $2,900 and $3,200; doctor's from $2,600 to $3,100 and $3,400; also, a $300 supplement for 1957–58 and increments of $100 for each of 12 years before 1958–59 and 15 years after.

Provided for transferring children to other districts or States; enlarged definition of *physically handicapped.*

OREGON

Set distribution formula: 80 percent at $230 per weighted pupil, 20 percent in equalization grants, and an increase per child from $80 to $95.

Authorized district tax for salaries of supervisors of home demonstration agents and 4–H Clubs; changed voting procedure for new taxes.

Set bond limit at 7.4 percent of true cash value in elementary and unified districts, 3 percent in high school districts; enabled districts to issue bonds to get, build, or improve buildings; regulated architectural designing.

Established teachers' salary minimums and increased to 9½ months the period in which they apply: Nondegree teachers, $3,400; bachelors, $3,700; masters, $4,000. Raised State officials' salaries.

Provided continuing contracts for teachers after 3 years; required boards to give reasons for not rehir-

ing; changed teacher-transfer procedure; established tenure districts; extended sick leave benefits; provided for revoking certificates of teachers involved in offenses.

Included in census all children between 4 and 20 years; required instruction on alcohol, narcotics, humane treatment for animals; provided maximum of 50 cents per pupil in ADM toward curriculum improvement; regulated textbook standards.

Raised auto license fees $1 to pay for driver training in high schools.

Authorized districts to establish community colleges, and appropriated $90,000 for their administration.

Provided annual increases totaling $700,000 for the handicapped; appropriated $25,000 for the gifted.

Provided for major district reorganization, with a 9-member county committee and a 7-member board; provided for a study commission on post-high-school education.

RHODE ISLAND

Appropriated $2.6 million for aid; increased per pupil amount to $37.

Gave State Commissioner $7,000 for free public band concerts and $7,000 for symphony orchestras.

Regulated administration of bond issues; appropriated $25,000 for a finance study commission.

Approved $16 million bond issue for school building at 13 localities.

Prescribed minimum of $1 per hour for nonskilled employees.

Authorized retired teachers to substitute up to 50 days a year; modified service provision for retirement; extended coverage under OASI.

Appropriated $20,000 a year for postgraduate courses for superintendents, principals, teachers; $5,000 for pharmacy students.

Made public school year 190 days.

Appropriated funds for Audubon Society for natural science instruction, $10,000 for administering New England Higher Education Compact.

SOUTH CAROLINA

Provided 10 percent more aid for salaries for lunch supervisors, visiting teachers, county superintendents.

Required written applications and prescribed forms; modified basis for certifying teachers on examinations; required health certificate from visiting teachers.

Required high schools to report courses students pass or fail; asked schools to display State flag.

Established commission to study public school standards and curriculum.

SOUTH DAKOTA

Appropriated $2.5 million for distribution to schools; $17,000 for surplus commodity, lunch, and milk program; $870,000 to equalize taxes.

Required property to be assessed at full value and taxed at 60 percent; modified procedure for controlling school funds; set up office of county director of equalization; raised limit on taxes in municipalities and districts, but not to more than 110 percent, 115 percent, and 120 percent of 1955 rate; gave taxes from public shooting areas to schools.

Reduced by $5,000 the amount of moneys and credits of individuals and firms subject to tax; cut out taxes on certain checks, bank drafts, etc.

Authorized county commissioners to disregard assessment ratio of State board of equalization for 1956.

Required banks to furnish security to qualify as school fund depositories; authorized preference to State residents in awarding contracts.

Increased county superintendents' salaries, basing them on population; modified regulations on duties and conflict of interests of officials.

Made parents liable up to $300 for property damage by their children.

Required licensing of school vehicles; regulated selection of free textbooks.

Provided for assigning pupils to other districts when home district does not operate a school; set heavy penalties for disturbing schools.

Appropriated for biennium $150,000 for mentally handicapped, $125,000 for physically handicapped, $20,000 for crippled children, $100,000 for rehabilitating the disabled, $1,000 for young citizens league, $2,500 for on-farm training.

Changed laws for district reorganization, and for terms, vacancies, powers, and duties of State board.

TENNESSEE

Appropriated $75.8 million for grades 1–12 in 1957–58 and $80.7 million for 1958–59.

Increased limit on bond issues 10 percent; authorized county court to borrow money for short terms at no more than 6 percent and to issue notes up to 60 percent of total cost.

Upped salaries of degree teachers $150 for 1957–58 and $50 more for 1958–59; authorized retirement benefits to State college employees; amended tenure act for merging local and State systems; required joint board-superintendent action to transfer teachers; set certification standards; end exams for county superintendents; modified sick leave.

Regulated board's power over transportation; provided for pupil assignment, admission, and transfer.

Authorized scholarships for blind high school graduates; granted dependents of deceased military personnel free admittance to State colleges. Appropriated $160,000 for training the severely mentally retarded.

Designated State board for vocational education to accept Federal vocational funds.

Permitted local boards to provide separate schools for white and Negro children and for males and females. Regulated private schools; set standards for operating isolated public schools; clarified State report terminology; required records and board meetings to be open to public.

VERMONT

Authorized $1.8-million bond issue for building aid and allocated 30 percent to high schools; changed basis of aid from ADA to ADM.

Increased minimum basic salaries, the lowest to $2,700, highest to $4,800; appropriated $475,000 for increases in 1957–58 and $662,500 in 1958–59; authorized 10 days sick leave a year, accumulation up to 20 days.

Increased to $325 the limit on high school tuition that may be authorized without vote; removed ceiling on elementary tuition.

Required insuring of pupil safety patrol; said municipalities must register and pay fees for their school buses.

Appropriated $9,000 for handicapped children, including transportation up to $100 per child.

Required open legislative meetings and records, written ballots for reorganization.

WASHINGTON

Authorized additional levy not to exceed 5 mills for public purposes, and a 40-mill maximum on assessed value of real property; provided privilege taxes on electrical plants, tax on public real property, excess levy on property in recreational districts; exempted activity program of elementary and secondary schools from additional taxes; appropriated $190,000 for refunding taxes illegally collected.

Appropriated $1.4 million to make up deficiency for public institutions, $2.6 million for current funds.

Authorized directors to condemn up to 15 acres for elementary schools, 25 for junior high, 40 for senior high; appropriated for construction $52 million for districts, $4.7 million for university.

Authorized Department of Institutions to lease parental school facilities now operated by school districts.

Increased range of county superintendents' salaries, $2,200 to $12,000; authorized Governor to contract for Federal social security for public employees under OASI, including members of retirement system and college faculties; provided up to 15 days' military leave for public employees; regulated election, term, and duties of school directors; permitted payment of association dues from school fund.

Appropriated $10,000 for State census board for enrollment forecast.

Regulated safety devices on school buses; required $10 occupational operators licenses for drivers.

Increased State College of Education's board of trustees to 5 members.

Provided comprehensive program for the handicapped; authorized State board for vocational education to administer Federal funds for vocational education, public service training, and rehabilitation of the handicapped.

Regulated election procedures for district reorganization.

Prohibited discrimination because of race, creed, color, or origin; authorized Governor to assume jurisdiction over Indians upon petition from tribe.

Created division of natural resources in State department of education.

Established statute of limitations for claims against cities.

Regulated purchases and contracts for student activities in colleges; authorized acquisition of Federal surpluses for State institutions; provided for disposal of public records.

OFFICE OF EDUCATION PUBLICATIONS

IN 1957–58

(For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

1957 Bulletins

1. Accredited Higher Institutions, 1956, 55¢.
2. Austrian Teachers and Their Education Since 1945, 35¢.
3. Teachers of Children Who Are Mentally Retarded, 45¢.
4. Financial Accounting for Local and State School Systems, $1.
5. Work Experience Education Programs in American Secondary Schools, 45¢.
6. U. S. Government Films for Public Educational Use, Supplement No. 1, 35¢.
7. Scholarships and Fellowships: A Selected Bibliography, 15¢.
8. American Cooperation With Higher Education Abroad, 75¢.
9. Costs of Attending College, 45¢.
10. Improving Reading in the Junior High School, 60¢.
11. Teachers of Children Who Are Socially and Emotionally Maladjusted, 45¢.
12. Germany Revisited, Education in the Federal Republic, 55¢.
13. Provisions Governing Membership on Local Boards of Education, 30¢.
14. Education in the USSR, $1.25.
15. Retention in High Schools in Large Cities, 20¢.
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