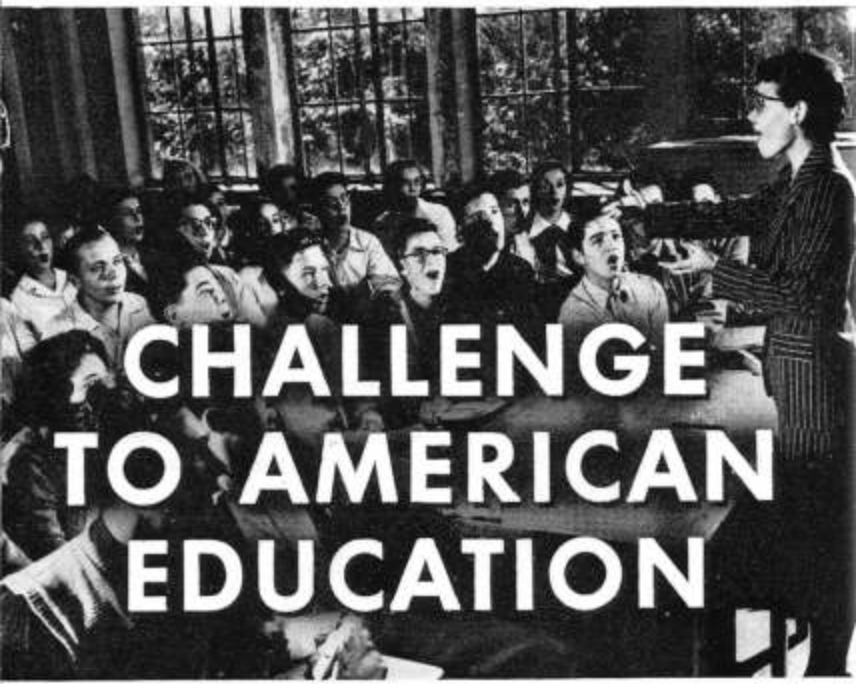
DISCUSSION MANUAL
DECEMBER, 1958
A FILMSTRIP ON CURRENT AFFAIRS



The New York Times

Produced by Office of Educational Activities

The New York Times
Filmstrips on Current Affairs

are issued monthly during the school year and deal with important topics in the news. They are prepared and edited by The New York Times especially for high school students from the eighth through the twelfth grades. However, they have also been found suitable for use at higher and lower levels. Each strip treats a single topic that is in the public eye, and the method used is:

1. To explain the background.
2. To present the current problem.
3. To pose questions for discussion.

In producing these filmstrips, the vast editorial resources and picture files of The Times are used. Headlines from The Times are reproduced to stress the importance of a daily newspaper as an aid to study. For only by following the news can one win a full understanding of the forces that are shaping tomorrow.

Suggestions for Using the Filmstrip and Teachers' Manual

The New York Times current affairs filmstrips may be used in several ways:

1. *To introduce the topic.* When the filmstrip is used in this way, the teacher presents it, asks a few questions and makes just enough comments to arouse interest.

2. *For intense study.* The filmstrips are designed for intensive study, for they contain vital information and authentic pictures. When a strip is used in this way, the teacher may make full use of the information in the manual and of the questions for discussion and suggested activities listed in the back of it. For intensive study it is often desirable to show the filmstrip twice.

3. *For review.* The Times filmstrips are valuable for review of the work on the topic, or review of a unit of study based on the topic. A showing of the strip serves as a quick summary and recalls facts which may have been overlooked or forgotten.

4. *For testing.* After intensive study of the topic the filmstrip may be conveniently used for testing. The teacher asks questions about each frame or a selected number of frames to find out how effective the teaching was.

The teacher will find in the manual comments accompanying most of the frames. These comments contain information on which questions to the class can be based. In this way, the teacher may devise questions suitable to the students.

CHALLENGE TO AMERICAN EDUCATION

INTRODUCTION

The beeps of the Soviet sputniks broadcast a warning to the American way of life, and especially to the U.S. system of education. Overnight Americans have come to realize that the Russian school system, with purposes and methods very different from ours, has produced scientists able to design and orbit the first earth satellite.

Our school system, which now includes 150,000 schools, 2 million teachers and 43 million pupils, has long been the pride of the U.S. Recently, it has been the subject of intensified study and criticism. Some people even held that we should adopt the educational methods of a dictatorship to prepare ourselves for the defense of democracy.

Learning about the Russian schools, many Americans were impressed with the courses taken by Soviet students. If all pupils in Russian schools can take physics, chemistry, mathematics and a foreign language, why is it, they asked, that these subjects are considered too advanced for most American high school children?

Ironically, while Americans wrestled with the problem of increasing scientific training, Premier Khrushchev ordered a reorganization of the Russian school system, which, he said, was not preparing students for productive labor in factories and on farms. According to Khrushchev, too many high school graduates, who have received training in science and other academic subjects, shun physical labor.

From now on it appears that the great majority of Russian youths will leave school at the age of 15 and go to work.

Russian schools exhibit few of the discipline problems that plague many American city schools. Students rise at the entrance of the teachers, and obey orders and instructions promptly and with respect.

Finally, comparisons of Russian and American study time make our students seem pampered. Russian schools are in session six days a week, and even first graders receive homework. The "no nonsense" spirit of the Soviet schools is viewed favorably by Americans critical of modern educational methods used in this country.

A more thorough examination of the Russian schools, however, reveals the inappropriateness of their methods for our purposes. Despite the impressive facade, the difficult academic courses prove unsuited to most of their students. More importantly, it has been realized that a system based on acceptance of authority and conformity to official thought patterns has no place in a democracy in which education serves to help each individual develop his own talents.

THE NEED FOR IMPROVEMENT

In this country, the primary responsibility for the schools remains in each local community. The challenge to American education is a test of the ability of a grass-roots democracy to meet new problems. The deficiencies in American education, spotlighted since the first sputnik's ascent last October, have actually been a cause of concern for many years.

In 1955, for example, following meetings at local and state levels, representatives of all forty-eight states gathered in Washington for a citizens' White House Conference on Education. The foremost concern was the necessity of finding more teachers and of building new schools to accommodate our fast growing school population. In the decade from 1945 to 1955, enrollment in public schools had grown from 23,225,784 to 29,677,000. This 6,451,216 pupil increase—over one-fourth the total 1945 enrollment—created an urgent need for more educational facilities. By 1975, there will be twice as many people in the 5-19 year old age group as there were in 1955. The White House conference, noting this problem, recommended emergency Federal aid for school construction. U.S. government assistance in this form has not yet been adopted, however.

More than ten billion dollars was spent last year in support of public schools, but much more is needed if we are to provide real opportunities in education for students throughout the country. In many areas, school standards are too low. The country is short 142,000 classrooms and 227,000 teachers. It has been recognized that the most vital problem is the lack of teachers and facilities needed to end substandard instruction in crowded, dilapidated schools.

There are many questions, however, facing the American schools, aside from the challenge of numbers. The schools present a broad and varied curriculum. The number and kind of courses that American high school students can elect to take often amazes foreign visitors. The schools have accepted the responsibility of training pupils in many diverse fields, from classics to cooking, from sing-

ing to auto mechanics. In presenting instruction that will provide some meaningful education for every student, the schools have incurred the criticism of those who would prefer to see teaching confined to more academic subjects.

The basic challenge to American education comes not from sputniks, but from ourselves—from the demands of a democracy on those who have the task of training each new generation of citizens. We face today the same basic problem of creating an informed citizenry as our Colonial ancestors did when they established the basis of our modern school system. The perils of our age demand, according to President Eisenhower, the efforts of every American in improving our schools.

WHOM TO TEACH

It has long been the American tradition that free public education be available to all, and, since 1918, every state has compelled all children from ages 6-16 to attend school. Originally, only primary school was considered necessary for most students, with apprenticeship or on-the-job training providing the necessary additional preparation for work. The New England States (especially Massachusetts, which led the way in many educational reforms) made high schools available to those who were not planning to continue their education, as well as to those who wanted college preparation. The founding of Boston English High School in 1821 to teach boys "intending to become merchants and mechanics" was followed by a Massachusetts law establishing high schools in all towns with over 500 families.

No provision was made at first for girls to receive high school education, but the women could not be denied. In 1826 Boston again led the way by opening a high school for girls. Gradually, separate schools for girls were started, or "female departments" of high schools created. Complete co-education was but a step away, and the U.S. has provided equal education for men and women for many years.

In Europe, it has been customary for students to be divided before they are 12, into one group that will prepare for the universities, and another that will not have higher education. The American system has been to keep the same opportunities available to all students. This principle of education for all is firmly rooted in the democratic traditions of the United States, but it creates difficulties along with its great rewards.

The basic and important aim of providing an education that suits every pupil in a diverse student body provides a continual challenge. Recently, the need to stimulate the better and academically talented student has been stressed. The increasing importance of the development of highly trained scientific and other leaders has become apparent. Educators now emphasize that equality of educational opportunity means recognition of differences in abilities to learn.

WHAT TO TEACH

The problem of what to include in the school curriculum is not a new one. Men like Benjamin Franklin objected

to the narrow, classical education provided by Latin and grammar schools of their time. Franklin helped found a new school in Philadelphia in 1750. This Academy provided instruction in modern subjects, such as "merchant accounts, navigation, natural and mechanical philosophy," and modern languages. Constant reform has served to broaden the curriculum and to introduce "useful" subjects. Reading, writing, and arithmetic (called the three R's) were considered the basic courses. They took 90 per cent of school time in 1850, 60 per cent in 1900, but under 50 per cent by 1950. Before 1900, drawing, nature study, science, physical training, sewing, cooking and manual arts had been added, and more recently, commercial and specialized vocational training have been introduced in many schools.

Critics of our schools have complained that the difficult academic courses are being neglected for the "frills." They cite for evidence the fact that under 10 per cent of high school students now take Latin, though in 1900 it was over half. Geometry, taken by 30 per cent of pupils in 1910, was studied by only 13 per cent in 1949. Educators point out, however, that where 15½ million pupils or 66 per cent of the school age population, were enrolled in public schools in 1900, 30 million or 86 per cent of all children were in public schools in 1955. The average public school attendance in 1900 was only half the number of children of school age.

New efforts are being made to provide both good students (top 15-20%) and gifted students (top 2%) with better courses and an opportunity to develop their potential.

These bright students must first be identified, and then given special instruction or classes to cover material at the level their abilities demand. The Federal Government is now giving states financial aid to sponsor aptitude tests for the discovery of talent, though no one test will decide a student's future.

Another aspect of this problem is the apparent weakness of American science instruction. In Russia, science is required in six of the ten years of schooling, including five years of physics and four years of chemistry. By contrast, only one-third of American high school graduates have had a year of chemistry, and one-fourth a year of physics.

Now, 8,000 science teachers are needed, but it is difficult to keep men in science teaching when the pay they can get is below that for other jobs for which they are qualified. It is in science that the Russian challenge is most evident, and it is in this field that the effort to improve the quality of teaching and facilities seems to be concentrated. The Federal government and several states and private foundations are devoting resources to the training of science and mathematics teachers to raise the level of their instruction. More scholarships and new U.S. Government loans are enabling students to receive advanced training in these fields. The Federally-supported National Science Foundation finances studies for many beyond the college level. Efforts are being made to get better science courses within a well-balanced curriculum, not to eliminate instruction in other fields to get more time for science teaching.

Like other problems in education, the question of what to teach remains unsolved. There is a realization that more advanced courses and better instruction must be provided for the academically able students, but educators also stress the need for schools to continue to provide an education for all students. Many agree with the recent Report on Education for the Rockefeller Brothers Fund and with Dr. James B. Conant, a leading American educator. Both suggest that at least four years of English and Social Studies, and one year each of mathematics and science be part of the program of every student with any academic ability. Good students would be expected to take more mathematics and science and instruction in a foreign language.

HOW TO TEACH

Modern methods of teaching have been challenged for their supposed failure to provide the incentive for disciplined study of difficult material. To a greater degree than elsewhere, U.S. teachers concentrate in the study of methods of education when they are trained, rather than specializing in the subject that they will teach. Most teachers have learned educational methods reflecting the influences of recent reformers, especially John Dewey (1859-1952).

In the past, emphasis in teaching lay in the learning and memorization of materials in fields considered important parts of our cultural heritage. Dewey and others objected that much of what was learned had no relation to

the actual problems that students would face in American society, and that the schools did not prepare children for useful citizenship in the community. He argued that the school must be a live institution where children learn by experience.

Through the influence of these ideas, the importance of recitation has largely been replaced by a belief in pupil action and problem solving. Attempts have been made to confront pupils with "genuine situations of experience" so that they will concern themselves with problems they consider important. Study of subjects for the sake of mental discipline has been discredited and memorization of material called meaningless. Harsh punishments and strict formality in the classroom are less and less a part of the American educational scene.

In some cases, extremes of new methods have left students unprepared to understand important problems in fields such as science. While no responsible critic of modern education wishes to return to nineteenth-century methods, some feel that increased discipline and formal content of courses are desirable.

"THE NEXT PHASE"—THE PURSUIT OF EXCELLENCE

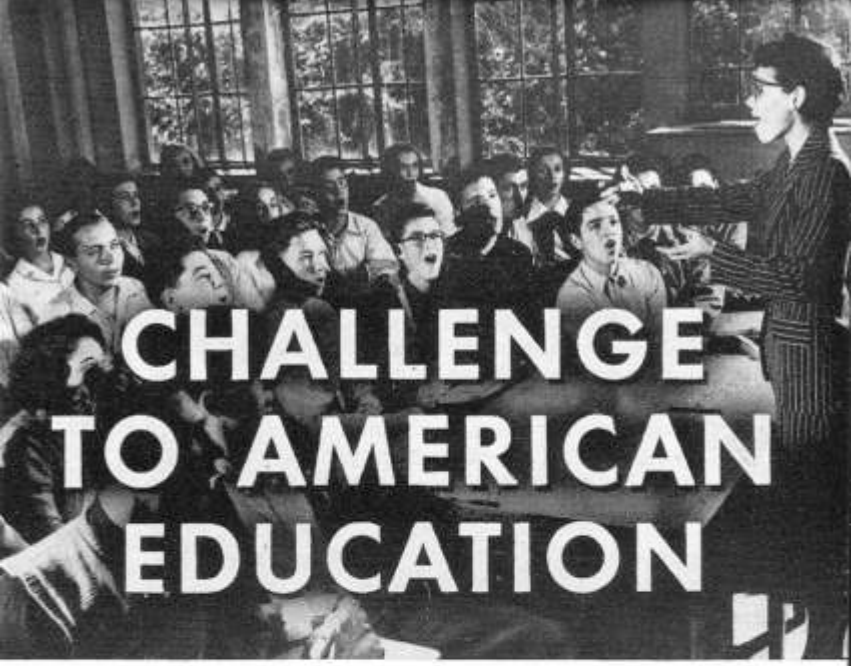
Those responsible for the schools are responding to these new challenges. Leading educators have joined together in several panels and made recommendations on revisions of educational programs. Local school boards have formed citizens committees to help revitalize areas of

instruction. Special courses for teachers are being organized by several universities and states. For the first time since the Morrill Act of 1862, the Federal Government is providing direct aid to education. In the next four years it is spending 900 million dollars on student loans, student aptitude tests, and teachers' training.

In the reconsideration of the content and extent of our education, there is agreement that public schools have the duty to continue providing education for every person of school age. There is also agreement on the direction of our renewed efforts in this field—in the improvement of instruction and courses that the best students will need to prepare for leadership of the world during the Atomic Age. This can be done only after there are enough school facilities and teachers to provide an adequate education for all students throughout the country.

James R. Killian, Special Assistant to President Eisenhower for Science and Technology, and former President of MIT, summarized the new challenge in an address last spring:

> "In the development of our public school system, we have concentrated in recent years on making it universally available and of the greatest help to the greatest number. The next phase—the next great mission of our educational system—should be to introduce more extensively into our system of mass education the opportunities and means for differentiation in order to permit the fullest encouragement of our high talent."



CHALLENGE TO AMERICAN EDUCATION

1 From earliest Colonial times, Americans have relied heavily on their schools to prepare children for the world in which they will live. As the schools have developed, they have undertaken more and more of the training of young Americans. Now, social as well as intellectual skills are developed, vocational as well as academic subjects taught.

Like other parts of a democratic government, the school system must face periodic public re-examination. Education has been and remains a constant concern.

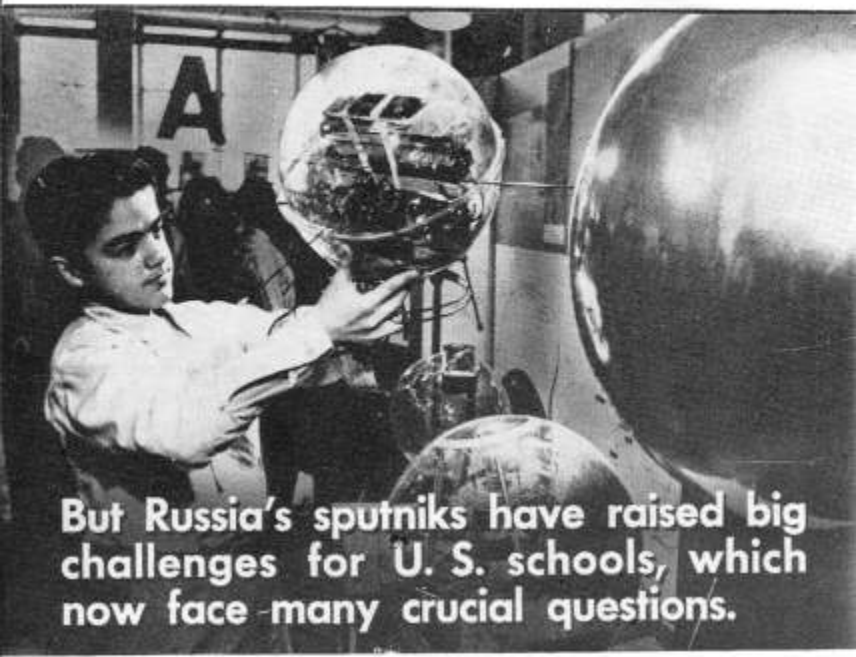
Our schools now face many challenges presented by the politically divided but fast-moving world of the space age. There is renewed doubt of the ability of our current methods to provide the kind of training that new technology requires. Our own educational system and those in other lands are being re-examined in the face of the increased demands of the age of science.

2 The students pictured on the title frame start off their day at New York's High School of Music and Art by singing in harmony. Such classes are being criticized for failing to equip young Americans for the race for survival with Russia.

The emphasis on preparation of well-rounded citizens, and training in the development of non-academic skills for personal enrichment and enjoyment is being questioned. Critics call for a reduction of time spent in such classes as these, and an increase in teaching of more traditional academic subjects.

3 These men and women discussing American problems in a civics course in an adult education program, are among the 45 million Americans who go to school. Americans attend 150,000 institutions of learning where they are educated by 2 million teachers.

The United States has long been the leader in providing educational opportunities for all its citizens. In a world in which 44 per cent of the adults cannot read or write, only about 2 per cent of the residents of the U.S. are illiterate. Our educational roots stretch back to the first settlers in Colonial times. When the Federal government was formed under the Articles of Confederation, it demonstrated the national concern for education by setting aside a square mile for the support of public schools in each township of the States being formed in the Northwest Territory.

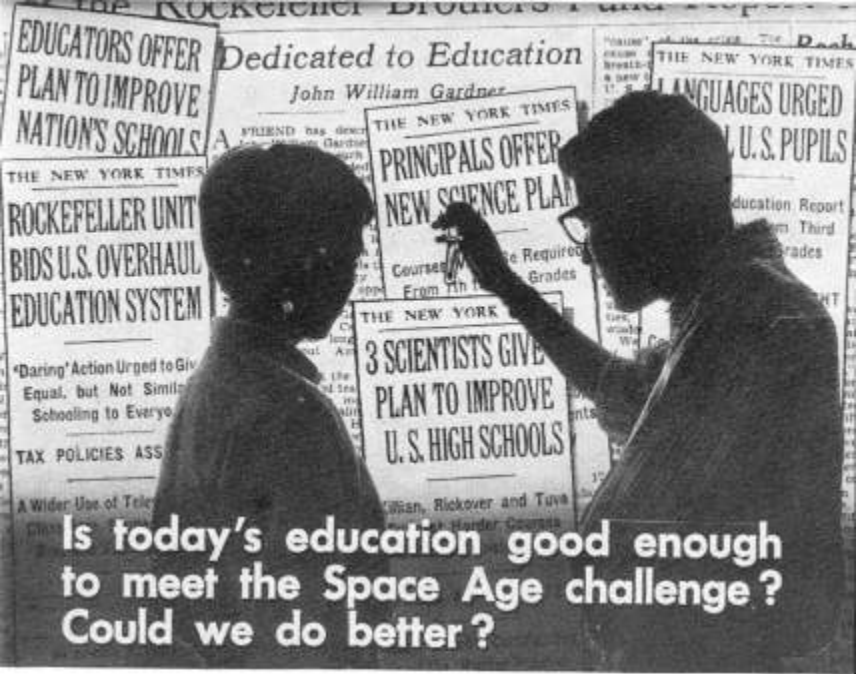


But Russia's sputniks have raised big challenges for U. S. schools, which now face many crucial questions.

4 This 14-year-old is holding a model of a U.S. satellite, which he built on the pattern of the full scale Navy model on the table. Some fear that such interests and skills are not encouraged enough in our schools to assure America's safety.

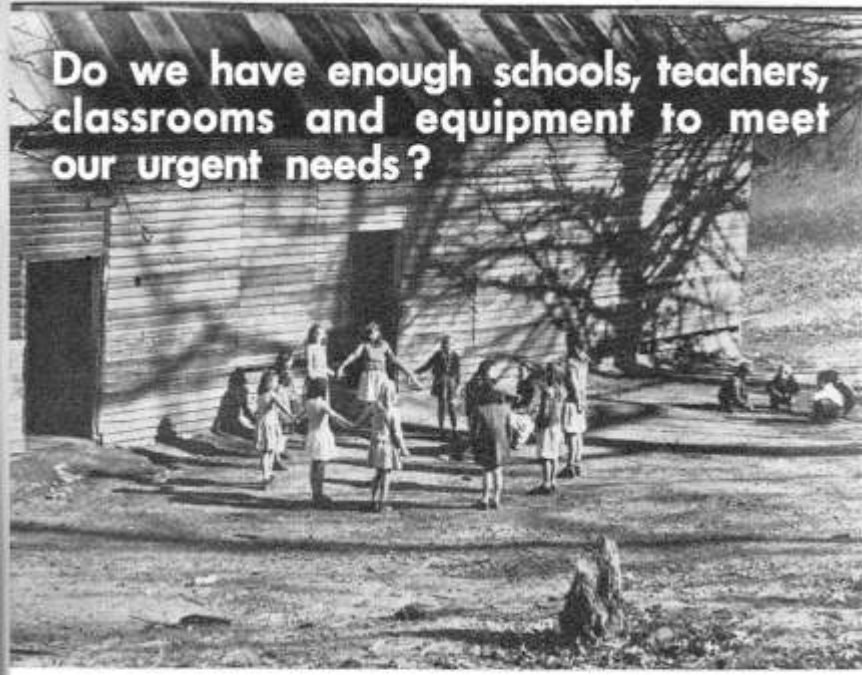
The launching of the Russian earth satellites was a spectacular demonstration of the success of an educational system that differs drastically from our own. It caused Americans to question the assumed superiority of their school system.

Thoughtful citizens had been pointing out that Russia was catching up and pulling ahead in the contest of scientific education (see frame 13), but it was Sputnik I that served to crystallize many doubts. President Eisenhower, addressing himself to every PTA and school board, urged them to scrutinize their schools' curriculums to see whether they meet "the stern demands of the era we are entering."



5 New doubts about the quality of U.S. education and the increased efforts to provide improved training have resulted in many comprehensive studies of our schools.

Most of these studies conclude that it is too easy for even the most able students to avoid taking difficult courses or studying the amount necessary for mastery of complicated problems. Everyone agrees that the basic educational philosophy of providing opportunities for all must be preserved. They also support teaching methods relating the studies to problems that seem important to the students, and the schools' role in citizenship training. Almost all have found, however, in the words of the Rockefeller Report, that "we must recognize that in many areas our educational facilities are poor, and our educational efforts slovenly." They argue that we could and must do better.



6 Students who are taught in substandard buildings, such as this rural school, do not have the surroundings and facilities to get the most from their school. Such situations are not unusual. We are now short 142,000 classrooms, according to the U.S. Department of Health, Education, and Welfare. Each year we need 50,000 additional classrooms just to keep up with expanding enrollment.

Of our 1,197,000 public school teachers, 80,000 have less than the minimum standard training—one-third of elementary school teachers do not have a college degree. With our growing school population, 227,000 more teachers are needed. Even minimum educational standards cannot be maintained when over half the mathematics, science and elementary school teachers hired are not fully qualified to teach their subjects, as was true in 1956-7.

Are bright students being encouraged to take harder courses vital for leadership in the Atomic Age?

7 Many believe that with mass education, students are not being encouraged to work to the best of their abilities.

Hard courses are avoided—only one-third of high school graduates have had a year of chemistry or a mathematics course beyond elementary algebra, and only one-fourth have taken a year of physics. A mere 15 per cent of high school pupils are taking a foreign language at a time when communication among peoples is increasing.

This third grade French class in a New York City elementary school (here learning to type in French) demonstrates that programs are being tried to give better students good education. The U.S. Department of Education recently recommended that *all* students should study a foreign language starting in the third grade.

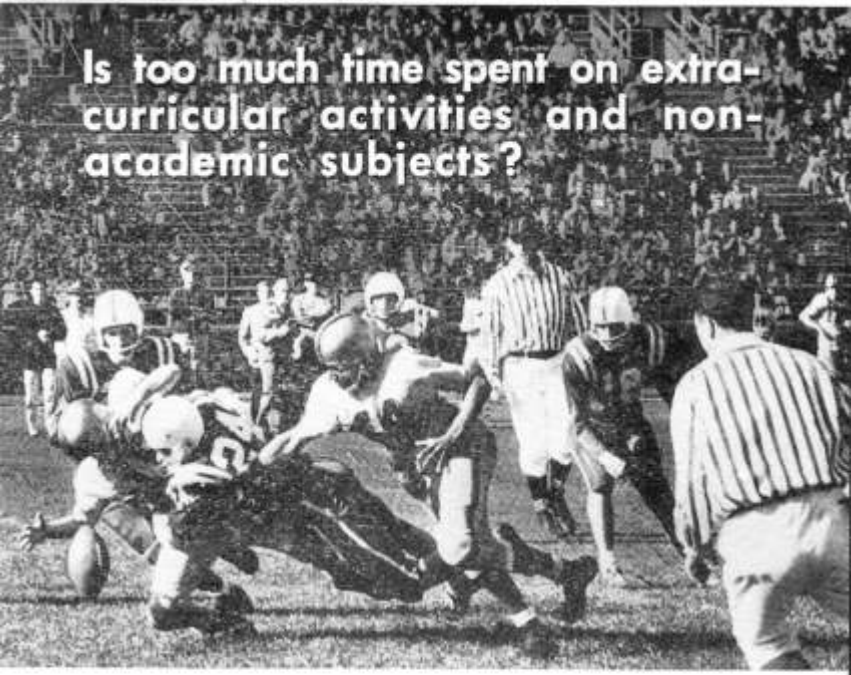
There is an urgent need to provide more advanced training for the bright or gifted students.

Are good work habits neglected in efforts to teach cooperation and social skills?

8 This cartoon illustrates a now common complaint that discipline and subject matter are ignored in the effort to produce a socially well adjusted child. The drawing here was included in an experimental personality test taken by applicants for teaching positions in New York City schools. The prospective teachers were asked to give their reaction.

There is general agreement that schools must help students in their social adjustments, especially in areas where the stability of the school must offset the turmoil of broken homes and gang life. But it is also agreed that in the education of the "whole child," discipline and academic training cannot be ignored if students and society are to benefit from the schooling.

Is too much time spent on extra-curricular activities and non-academic subjects?



9 Some challenge the emphasis on extra-curricular activities. These activities have developed in most American high schools since 1900. The boy who recovers the fumble in Saturday's football game is likely to be more respected than the student who excels in his studies. When students spend most of their time training for the next athletic event, rehearsing for a play, or editing a newspaper, it is feared that homework and studies are neglected. Such activities can, however, provide a valuable supplement to school work, and an avenue of both social and academic training.

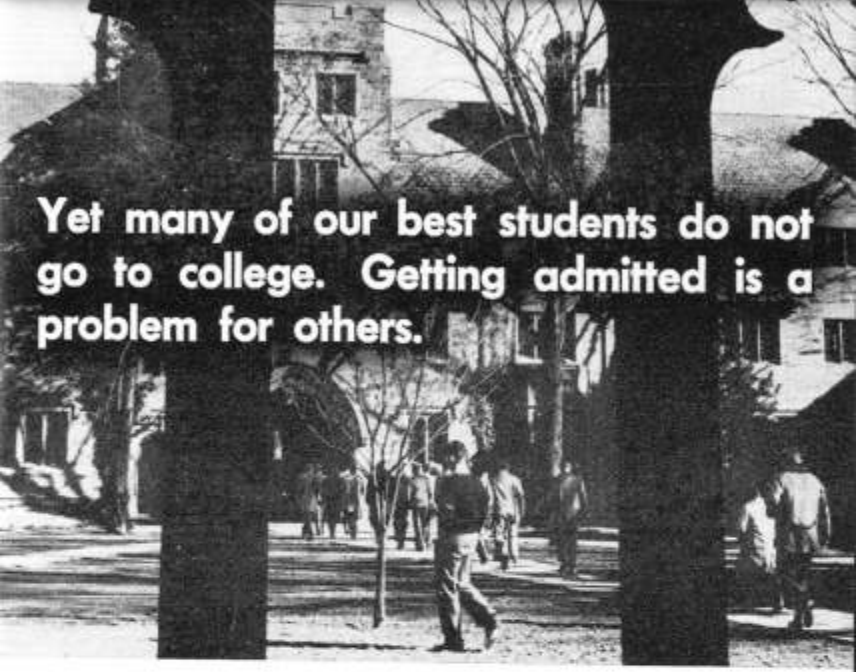
Some schools have a "work-study-play" program, such as that started by William Wirt in Gary, Indiana. In this plan, school credits are given for extra-curricular activities, which are considered an integral part of every student's education.

Education is a key factor in the struggle between the free world and the Communist bloc.

10 Jefferson warned, in 1816, that "if a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be." America heeded this lesson and provided universal education, but the quality of our scientific education may not match the Russians'.

The Russians realize the crucial importance of schooling and emphasize that it is only through education that they can "Reach and Overreach America." The U.S. Commissioner of Education, after a tour of Russian schools, told the American people that the Russians have an "education-centered economy," and that in their concentration on education, they are just like a people at war.

As the cartoon here shows, we too are beginning to realize that the "cold war" may be decided in the classroom.

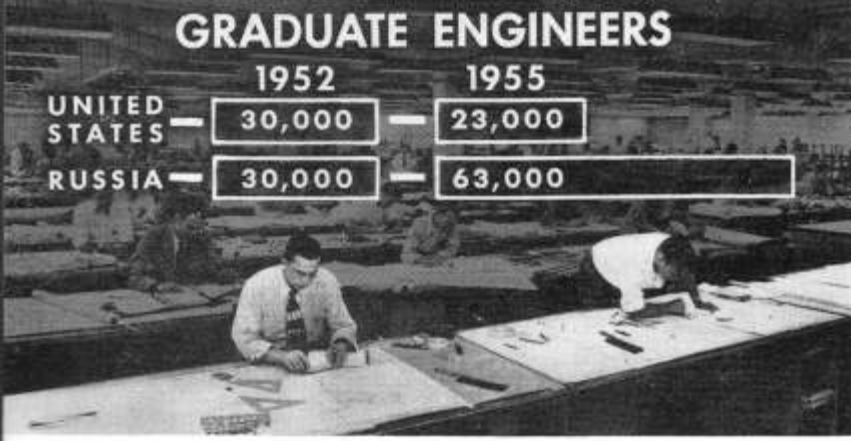


Yet many of our best students do not go to college. Getting admitted is a problem for others.

11 About a third of the brightest high school graduates do not continue their education. It is estimated that each year 200,000 able students do not choose or cannot afford to go on to college. This has spurred Federal, state, and private philanthropic assistance to schools to aid in establishing better guidance programs and more scholarships. A nation-wide testing program to discover and encourage talent is now being started with Federal aid.

Colleges have grown with the increasing demand for higher education, but the desire of many students to go to a few popular schools discourages many potential applicants. This "Ivy League Myopia" causes colleges like Princeton, pictured here, and other established Eastern colleges to get more applications than they can accept, while some other schools have room for more students than apply.

Soviet schools now produce more engineers and scientists than ours. The U. S. faces a critical shortage in these fields.



12 Russia claims space conquest and the opening of the Space Age as the fruit of "the labor of the people of the new socialist society [which] turns even the most daring of man's dreams into a reality."

The Soviet Union has the intercontinental ballistic missile as well as earth satellites. Our defense and prestige require rapid advances in space technology and missile development.

Russian gains in educating trained personnel can be seen in this chart. Although there were more American than Russian engineers in 1954, the Soviet Union graduated more than three times as many new engineers. This trend can also be seen in the extent of advanced scientific training. In 1955 there were 1.1 million students in Soviet universities, while there were 2.6 million in the U.S., but the Russians produced almost twice as many Ph.D's or advance degree holders, most of them in science.

THE RUSSIAN WAY

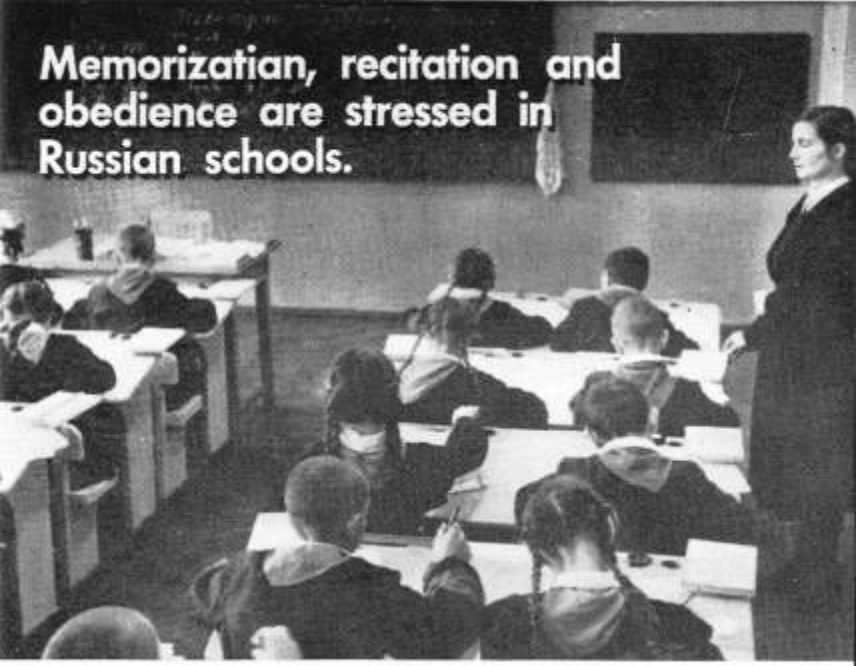
13 The U.S.S.R. spends 10-15 per cent of its national income on education, while we spend only 3-5 per cent. Their nationwide interest can be seen in the number of working people attending school. About 70,000 men and women in Leningrad alone are on double shift, spending one shift working and the second as full-time pupils. The students pictured here are in a physics class in a Moscow Young Workers' School.

Dr. Lawrence G. Derthick, U.S. Education Commissioner warned, after a trip to Russia, that the U.S. cannot afford to disregard "the challenge imposed upon us by the Russian race for knowledge." He found: 1) reasonable size classes, 2) no teacher shortage, 3) wide teaching of foreign languages, 4) assistants for teachers, 5) good financial support for schools, 6) respect for teachers, and pay that equalled that of a physician or engineer, and 7) parental responsibility for the children's conduct.

Soviet students go to school 6 days a week and study harder than Americans.

14 Study is a serious business in the U.S.S.R.—you see here a second grader (right) concentrating on his homework. Russian primary and secondary education lasts for ten years, from ages 7 to 17. It is compulsory through seventh grade, age 14. In their ten years of schooling, Russian students get as many hours of instruction as Americans do in twelve and they have more courses.

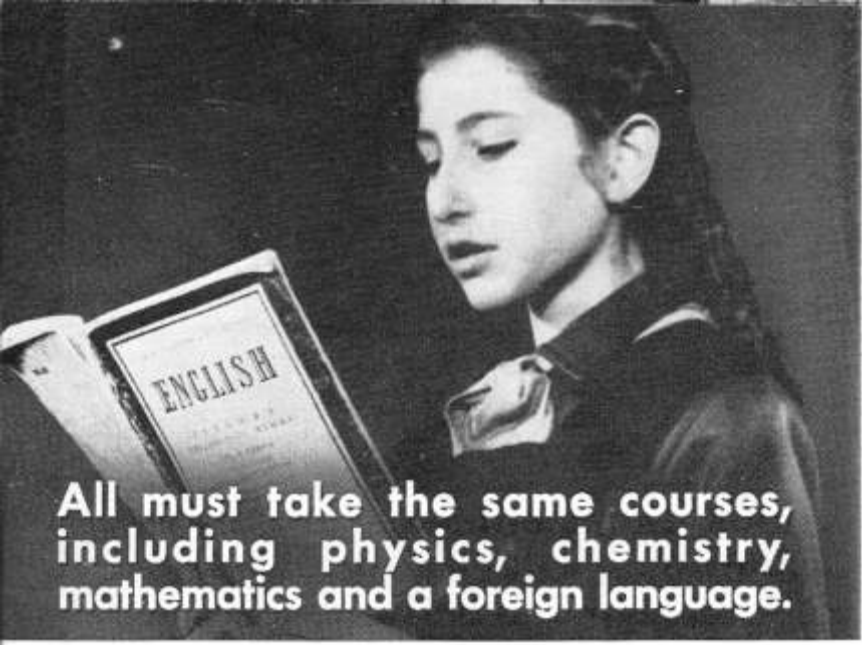
Homework starts early; by a 1952 decree only one hour per day may be assigned to first graders, but three to four hours is allowed in the ninth and tenth grade. Complaints by doctors were published in the Soviet press in 1956 stating that students were doing so much homework that their health was suffering. In 1957, it was reported that "in order further to reduce the overburdening of pupils" homework was abolished on Mondays and days after holidays.



15 According to a recent report by the U.S. Department of Health, Education and Welfare on *Education in the U.S.S.R.*, the "emphasis is placed on training Russian pupils to listen attentively, accept what they read and are told and repeat what they have been assigned." Soviet students' yearly promotions depend on their day-by-day preparation and recitation; exams are given only after the fourth, seventh and tenth grades.

As you see here, students wear uniforms in school. These pupils, fourth graders in a Leningrad school, are studying mathematics. During World War II, separate schools were estalished for boys and girls, but after Stalin's death, co-education was reintroduced.

Discipline is strict. One of the twenty rules for school children, memorized by every student, makes it their duty to rise as the teacher or director enters or leaves.

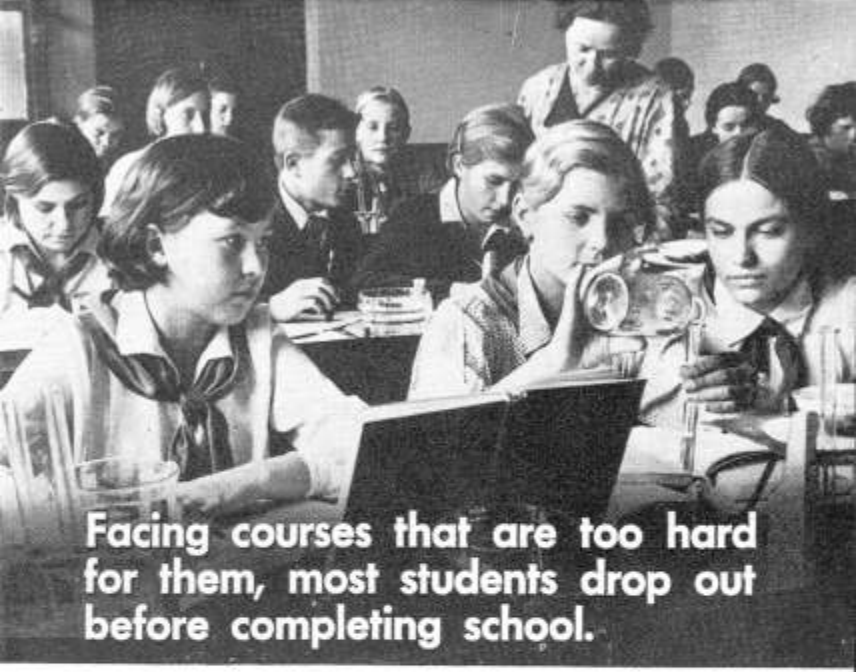


All must take the same courses, including physics, chemistry, mathematics and a foreign language.

16 This girl in a Minsk school, giving a recitation in English class, is one of ten million Russians studying English. Every student has six years of a foreign language in Soviet schools. Only 8,000 Americans study Russian. One half of American high schools do not teach any foreign language.

Soviet students are not allowed any electives; the program is the same for all, and is determined by the central authorities. The curriculum is planned so that teaching is coordinated. The studies are timed, for example, so that certain concepts are taught in geometry shortly before they are needed for the study of optics in physics.

Biology is taught from fourth through tenth grade, mathematics from grades five through ten, physics for five years, chemistry for four, astronomy and psychology for one year each. Some of the Russian studies would be included in the U.S. under general science or shop.



Facing courses that are too hard for them, most students drop out before completing school.

17 The Russians are gradually making the ten-year school available and compulsory for all. Formerly students could get this schooling only in the cities, with a tuition fee for grades eight, nine, and ten. Children in rural areas had only a seven-year education. There are still some differences in standards between urban and rural schools. The Russians claim that ten-year education will be available for all by 1960. Since 1950, enrollment in grades eight through ten has risen from 1½ million to 5¼ million.

Students who are not interested or able to do the studies required by Soviet schools leave after eighth grade and get work-training or are assigned to jobs. Difficult courses, such as this eighth-grade chemistry class in a Moscow school, discourage many. It is clear that the Russians have the same problems as Americans in providing both universal education and specialized academic training.

Russian leaders now complain that many who finish school are not trained for "useful labor" in a planned economy.

18 Many graduates of Russian schools are reluctant to take jobs such as those held by these young workers in an electric meter plant.

In September, 1958 Nikita Khrushchev told the Russian people that there were flaws in the ten-year school program. Though most graduates do not go on to the universities, the Soviet schools are preparing students only for higher education, he complained, and students get a "snobbish, mistaken attitude toward labor." Earlier, the Russian leader had warned that students should "know how to hold a hammer and to tell the difference between a rake and a stick," for all children who go to school must prepare themselves for useful labor. Khrushchev recommended that the majority of graduates quit school at 15 and go to work, relying on night school or correspondence courses if they wished to go ahead.

Other European countries have equally difficult courses, but only for the brightest students.

19 The countries of Western Europe have a tradition of providing advanced education for their best students, far beyond that given by American high schools and probably better than what Russian students get.

In England and France, upon completion of elementary schooling, children are divided into two groups: those who will receive a stiff academic training and a university education, and those who will not go on to the universities.

Since World War II, progress has been made in creating schools like the American comprehensive high schools, in which both the students preparing for college and those who will go right to work are trained.

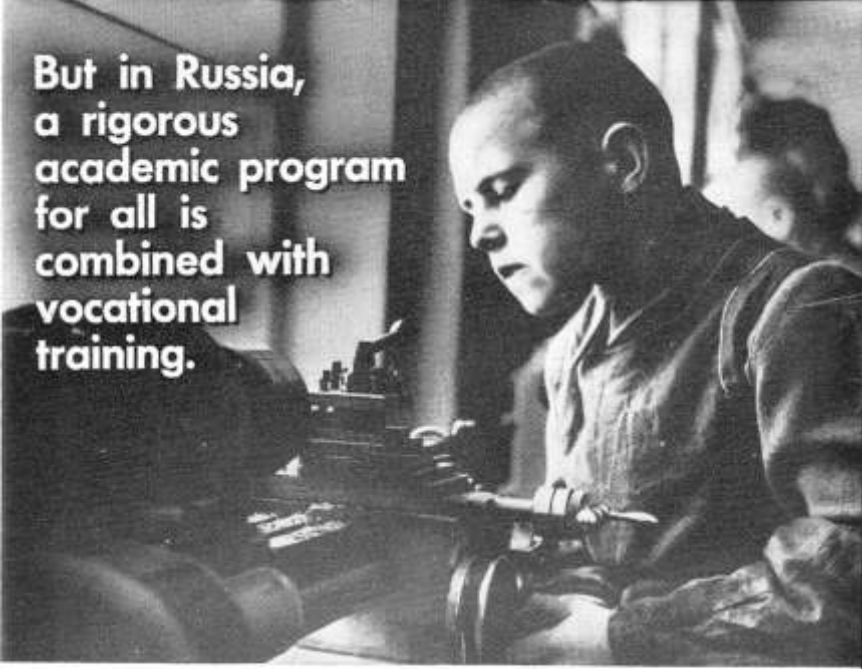
The tradition of a well-educated elite group is still strong, however, and schools with high academic standards, such as Eton, pictured here, continue to flourish in England.

In England and France, most students not bound for college are trained in separate, less academic schools.

20 The strict division in Western Europe between academic education, which serves as a college preparation, and non-academic schools is slow to disappear. A student's path is determined early, and those whose abilities develop late are likely to have no opportunity for advanced education.

The group of boys pictured here are in the Westminster Secondary Technical School in England. They have gathered to discuss matters of student government, an aspect of school life less developed in Europe, than here.

The difference between the traditional European system of education for the few and our system is evident in the fact that only 125,000 students were in college in France in 1951, according to a United Nations survey. In that year there were 2,659,021 Americans studying in institutions of higher learning.



21 The boy at a lathe is in a metal-working class in one of the new boarding schools established under Khrushchev. In each of his ten years of school, every Soviet pupil receives instruction in shop, agriculture or electrotechnology.

Summer work in factories and farms for secondary school and college students provides additional training. For those who leave school at age 14, there are vocational schools administered by the Chief Directorate of Labor Reserves. It can be expected that with the renewed emphasis on the importance of work (frame 18) this training will continue.

Extra-curricular activities are also used to supplement the academic curriculum. Students join circles or workshops in their "Pioneer Palaces" to study scientific subjects and literature. They also have sports and dramatic groups.

22 Most ten-year school graduates are not admitted to institutions of higher education—two or three times as many apply to universities as can go. These students are on their way to a lecture at the University of Moscow, a school that is especially popular and difficult to enter. It has 17,000 students (13,000 in science) and a modern headquarters building—the second tallest structure in Europe. (The Eiffel Tower in Paris is the tallest.)

All but the top graduates of secondary schools must take difficult oral examinations and score 23 out of a possible 25 to gain admission. In addition, the applicant's political record, character recommendations, extra-curricular record and aptitude are examined. Most students must now work for two years before being considered for admission by the universities. There are 800 institutions of higher education.

Almost 2 million others get further technical training. Even athletes have special schools.

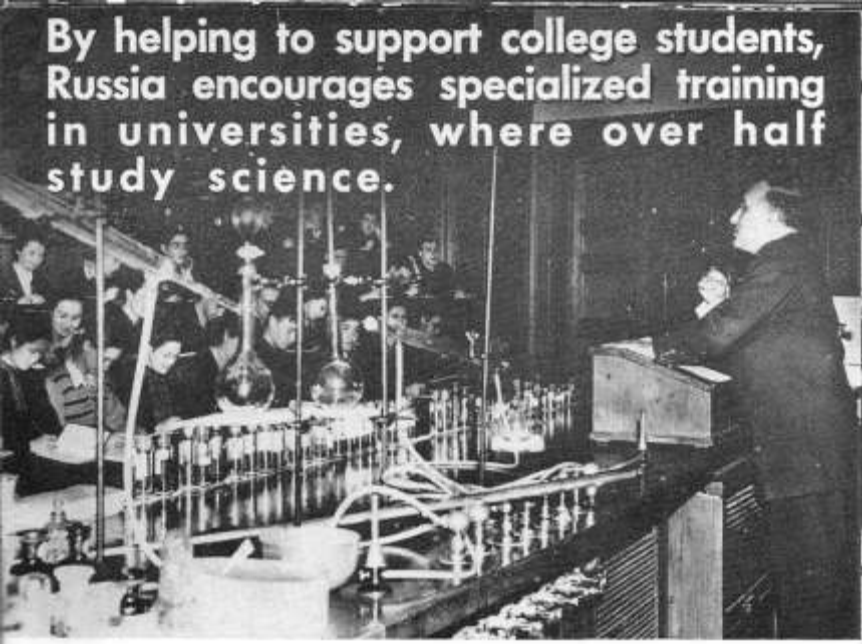
23 This shot-put champion was trained at one of the forty-three special schools for physical culture and sport.

There are almost 4,000 semi-professional schools, often called Technicums, in the U.S.S.R. Originally intended to supplement the seven-year school, the two-to-four-year program now serves increasing numbers of graduates of ten-year schools. Here too, admission is by examination.

There are schools for the fuel, transport, forestry, and chemical industries among others. Other technicians provide training in economics, law, agriculture and art.

The Institutes of higher education provide longer and more advanced courses for ten-year school graduates. Agricultural, socio-economic and teacher training institutes have four-year courses, universities five years, engineering institutes five and a half years, and medical schools six years.

By helping to support college students, Russia encourages specialized training in universities, where over half study science.



24 The universities do not attempt to provide a general education, but rather train intensively in one field. It is estimated that students of chemistry, such as these attending a lecture at Moscow State University, spend one-third more time studying their subject than American students majoring in the field.

There were 1,867,000 students in institutions of higher education in 1956, and 1,960,500 in semi-professional schools. As this picture shows, half of them are women. In medical schools and teachers' institutes, there are more women than men. Full-time students receive government stipends for their support, and the best get very generous grants, which serve as a reward and an incentive.

Higher education is weak in the social sciences, both in material covered and methods of instruction. This was the conclusion of a group of American college educators who visited the Soviet Union in 1958.

In Russia, almost half the time in school is spent on technical subjects. Social studies courses teach Marxist ideology and modern history from a Communist viewpoint. This education serves to emphasize conformity and not to produce well-rounded, thinking citizens.

25 In the planned economy of the U.S.S.R., the government educates young people for the jobs to which they will be assigned, and prepares experts in the areas of greatest need. Recently, scientific training has been emphasized, with 42 per cent of school time devoted to science and mathematics.

In the early days of Communist rule, some educators expected that the schools as well as the State would "wither away." According to an early slogan, "the school is nothing but a branch of the factory."

Now the Russians put a heavy emphasis on academic training. The superior student is regarded as a hero; teachers are highly respected and well paid. The Soviet Union spends 2 per cent of its national income on higher education while the U.S. spends only about 1 per cent. Over $200 million has been invested in the University of Moscow alone in the last nine years.

THE AMERICAN WAY

26 The current criticisms of U.S. schools should not obscure the accomplishments that the present system represents. The U.S. has achieved what was for years only a dream—the opportunity for every person to get an education from first grade through college.

Many kinds of schooling are provided to suit the diverse needs of the 43 million Americans now in schools. Here a class in a commercial high school, which provides business training as well as an academic background for its students. This group is studying current events, for an accepted task of our schools is to help students to become informed and thinking citizens.

Democratic education took root in Puritan times, when schools were set up to end ignorance – held Satan's ally.

27 The Pilgrims were only beginning to penetrate the wilderness of the New World when the Massachusetts legislature passed the first education law, requiring children to learn how to read. This 1642 Act was supplanted by the Massachusetts Law of 1647 declaring it the duty of every town of 50 or more families to hire a school master to teach reading and writing, and every town of 100 families to "set up a grammar school ye master thereof being able to instruct youth so far as they shall be fitted for ye university." This was done because the Puritans believed it was a "chief project of ye old deluder Satan to keep men from knowledge of ye scripture" through ignorance.

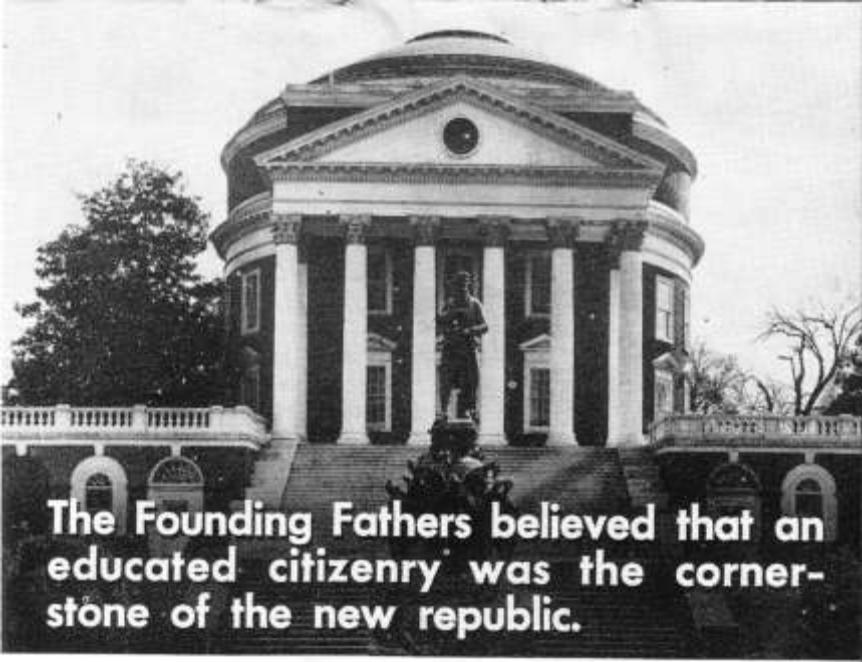
Early schools were crude. Students learned their ABC's from a horn-book. Primers, like this famous New England Primer, came into use around 1700.

All children learned to read the Bible. Writing and ciphering (arithmetic) were soon taught, while a few studied Latin and Greek to prepare for college. Other subjects were gradually added to provide a broader education more related to the needs of American life.

28 Boston Latin School was founded in 1635 to provide a gentlemen's education in classics, and other grammar schools were established in New England to prepare students for college. Soon, students entering these public schools were expected to be able to read and write when they came. Dame schools—groups of youngsters taken into homes by housewives and taught for two or three hours a day—provided elementary learning.

In the Middle Atlantic states, churches continued to sponsor instruction. Private tutors were hired for the children of the wealthier families in the South, and pauper schools were provided out of charity for the very poor.

There was no firm system of public education outside New England, and schooling was confined primarily to simple subjects or a classical preparation for college. As the West was settled, New England "school marms" carried their system into new territories.

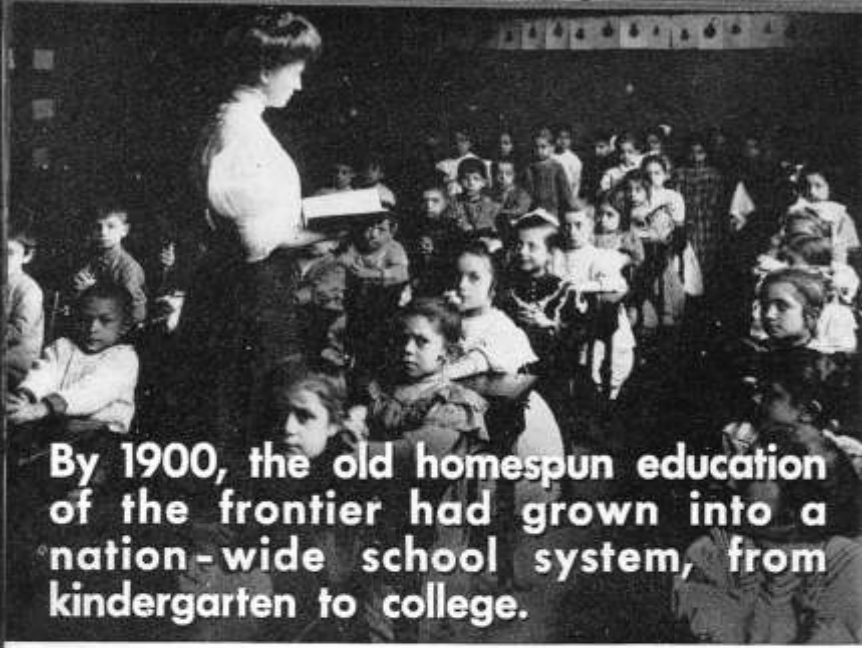


The Founding Fathers believed that an educated citizenry was the cornerstone of the new republic.

29 Jefferson's statue stands before the building he designed as the library of the University of Virginia. Jefferson was a founder and the first Rector of the University as well as its architect. As early as 1779 he had proposed a statewide system of primary and secondary schools for Virginia.

The Founding Fathers of the country were depending on education to make the new form of government a strong and workable one. With others of their time, they saw education as the key to progress.

Washington asked Congress to establish a national university. He even left some money in his will for its founding, though it never came into being. In his Farewell Address, our first President urged that the nation "promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of government gives force to public opinion, it is essential that public opinion be enlightened."



By 1900, the old homespun education of the frontier had grown into a nation-wide school system, from kindergarten to college.

30 In 1789, Massachusetts set up district schools governed by local school committees and supported by local taxes. Here students of all ages were taught together. It was not until the work of men like Horace Mann (1796-1859) and Henry Barnard (1811-1900) that students were separated into grades.

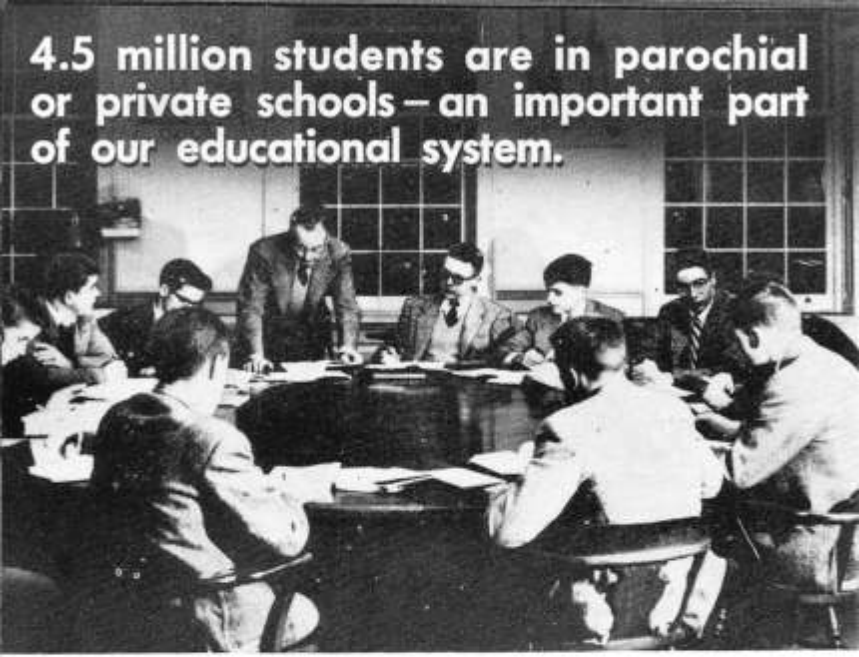
Primary schools were divided into classes, like this one, and separate high schools set up. Earlier, academies had been established to provide a broad education in subjects other than classics, and English schools had been started to supplement the existing Latin schools.

From these varied roots, high schools grew to become an accepted part of public education, though certain areas were slower to provide it. The Kalamazoo decision of the Michigan Supreme Court in 1874 clearly established the right of local school districts to tax to support high schools as well as elementary instruction.

Though public high schools were available, relatively few students chose to complete their education. States then passed laws requiring attendance until the age of 16, and schools were faced with the necessity of providing an education that would be helpful to all students, not just those preparing for college. By 1930, when the Great Depression made jobs difficult to find, 88 per cent of school age children were enrolled in public schools. Between 1870 and 1955, the population of the U.S. increased four times, the number of students in high school, eighty times.

Newer methods were used, and schools modified courses so that subjects studied had some significance to pupils, and were related to their real concerns. In these reforms the ideas of John Dewey had great influence.

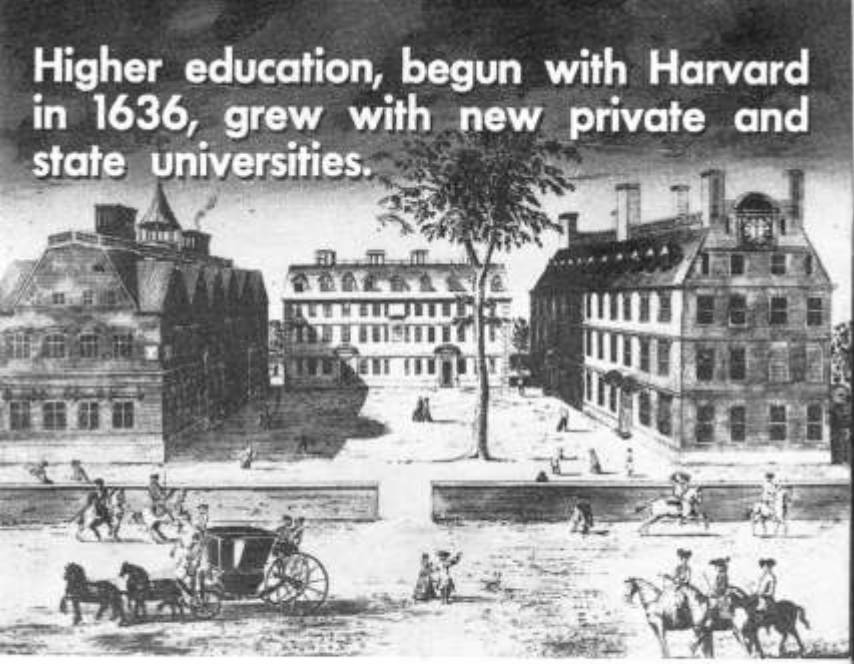
4.5 million students are in parochial or private schools – an important part of our educational system.



32 This class at Phillips Exeter Academy is participating in the "round table" program of their school. A special multi-million dollar gift made possible these small classes and discussion groups.

Private schools have always played a part in the education of American youth. From the early Academies to Dewey's and later experimental schools they have provided an area in which new methods and courses can be tested.

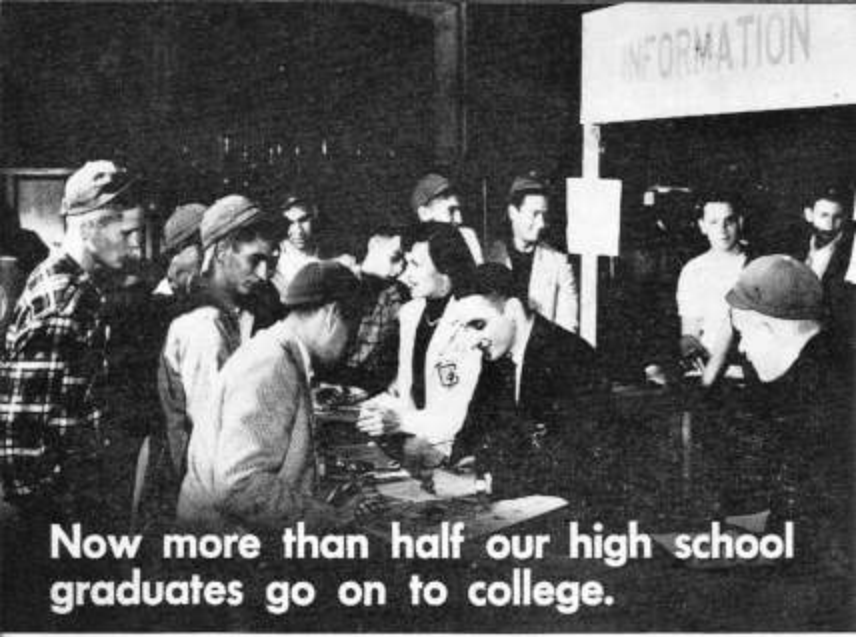
There are 15,625 private schools in the country. Of these, 9,500 elementary schools and 2,400 high schools are under Roman Catholic auspices. In 1884 the Council of Bishops made it the duty of each Catholic parish to establish a parochial school. The Lutheran Church (Missouri Synod) maintains 1,226 primary schools and 16 high schools. Other denominations have only a few schools, though some started to establish systems in the nineteenth century before deciding to rely on public education.



33 The Puritans established Harvard "to advance learning and perpetuate it to posterity." The first students paid their tuition in food, boots, or lumber. Massachusetts towns contributed wheat for the support of their university, and the college received much of its income from wampum taken as fare on a local ferry.

Harvard did not maintain its monopoly on higher education in the Colonies for long. Our college system has constantly expanded, with both public and privately supported colleges. Five of our State Universities were founded before 1800.

Today there are 1,852 denominational and non-denominational national institutions of higher education, including state supported schools and universities in each of the states.



Now more than half our high school graduates go on to college.

34 Freshmen at Cornell, in traditional beanies, are seeking information about the university they have just entered. Three million Americans are now in colleges and universities—one-fourth of all people of college age. Over half are in public universities, and it is expected that within fifteen years the total college enrollment will double, and only one-fourth of the students will be in privately supported schools.

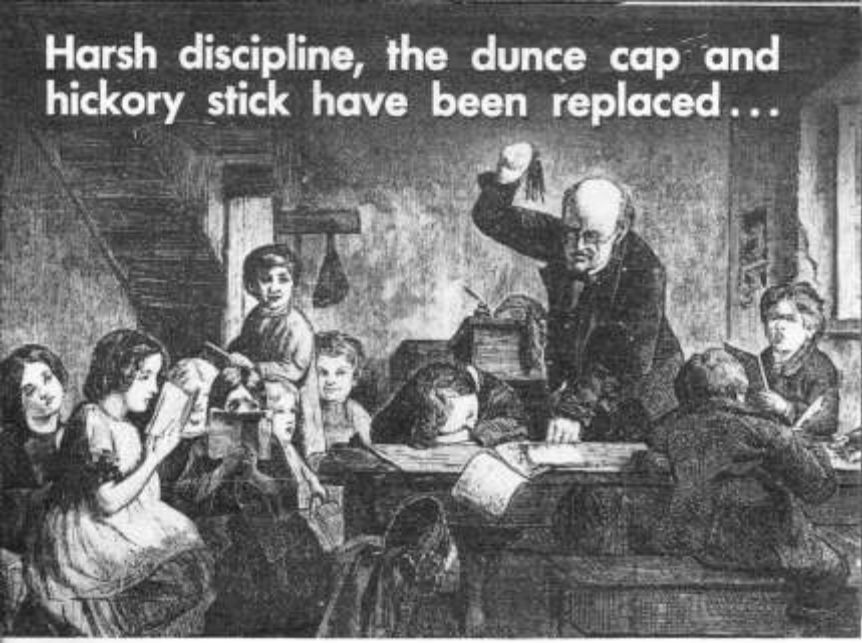
Spurred by gifts of Federal land under the Morrill Act of 1862, state universities have led the way in providing instruction in agricultural sciences at advanced levels, and engineering courses. The U.S. has sought the middle way between the narrow, technical education provided in Soviet universities, and the broad, general and classical education, once considered the only true "higher education."

Those who do not, can prepare for jobs by taking courses in junior colleges, trade and vocational schools.

35 These girls in a vocational high school are learning the beautician's skills by administering a permanent wave to a brave classmate.

As high school enrollment has grown (see frame 31) the need to provide vocational education has increased. What were formerly years of apprenticeship are now spent in schools that train students for a constructive life and give them a basic understanding of our cultural and political heritage. Educators have found that auto mechanics may prove more interesting and important to a non-academically-oriented student than Cicero's orations.

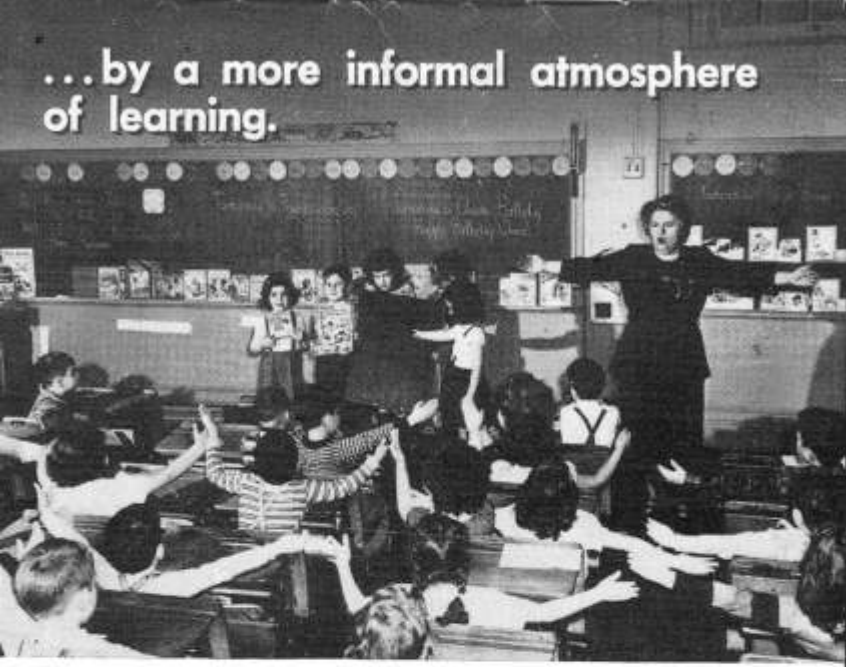
Junior Colleges, which provide two years of specialized training in many fields, or a general Liberal Arts education, have grown from an enrollment of 55,616 in 1930 to 348,283 in 1956.



36 This illustration of the punishment of a "little despiser of learning" appeared in Harpers Weekly Magazine in 1866. In the days before child psychology became a part of every educator's training, teachers often used physical strength to control their pupils, and punishments were severe.

By the latter part of the 19th century, the European theories of Pestalozzi influenced elementary educators to encourage, rather than shame their students. Today physical punishment is rare, and students are taught to accept differences in abilities, not to scoff at the "dunces" or slow learners.

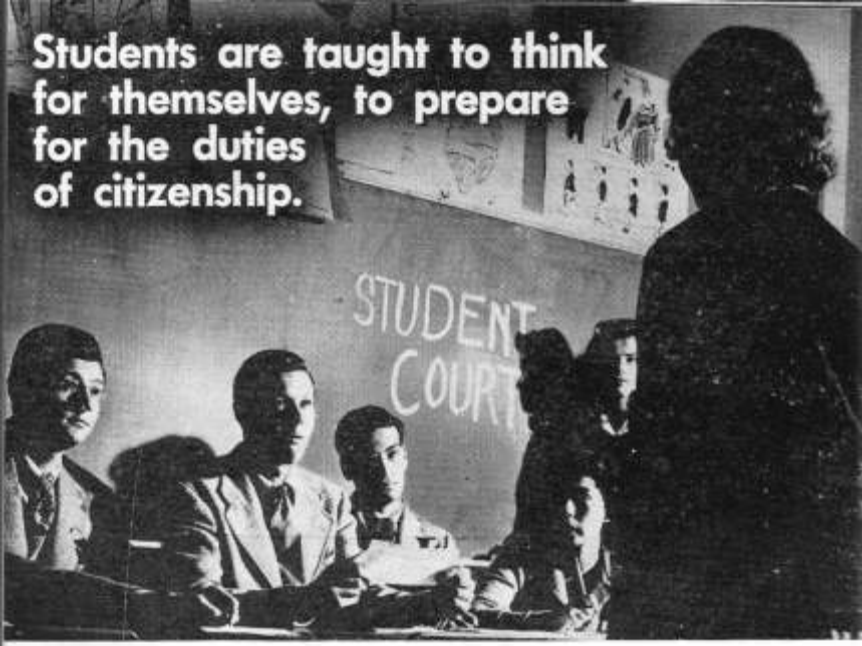
In the 1800's, the work was often tedious. Arithmetic text books included such questions as: 384 is 1286/1348 of what number? and subtract 37 3874/14783 from 64 213/250.



37 Today, methods are entirely different. Children learn through projects, action and participation. These first graders are beginning the study of arithmetic by comparing sizes of books.

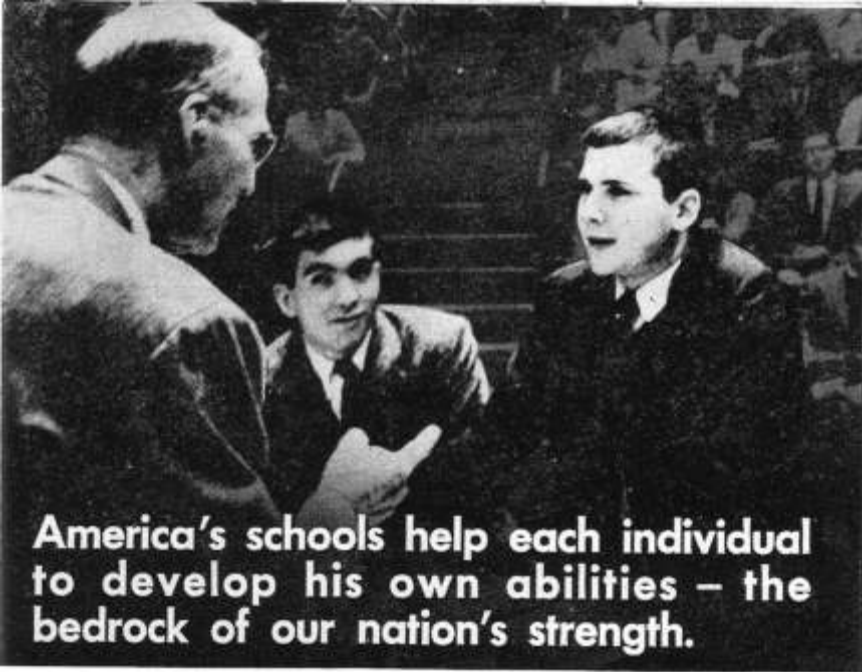
Old methods are considered unsuited in training for the modern world or preparation for democratic citizenship. Each classroom is its own little community. As, for example, here, New York State recommends that all first graders' birthdays be celebrated or at least noted by the class.

Teachers strive to earn the respect of their pupils, not merely to frighten them into good behavior. Following the modern belief that education cannot be separated from life, the curriculum stresses areas that are important to the students.



38 It was realized early in our country's history that, in Woodrow Wilson's words, "without popular education no government which rests on popular action can long endure." As a comparison of this picture with frame 36 indicates, however, it was not until this century that democratic practices and participation by students in their own affairs have been considered good preparation for citizenship. Many leaders of recent educational reforms felt, with John Dewey, that "democracy is more than a form of government, it is primarily a mode of associated living," which must be practiced in the schools as well as outside.

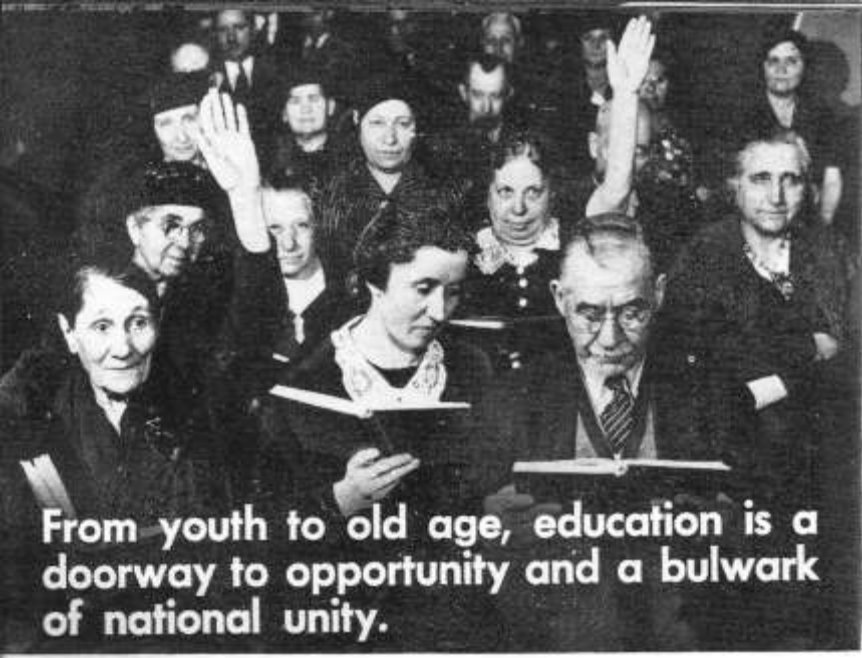
Citizenship training includes practice in group action and self-government. Here is a student court in action. The schools also teach pupils the history, methods, and principles of our democratic form of government in their Social Studies classes.



America's schools help each individual to develop his own abilities – the bedrock of our nation's strength.

39 "If no talent is wasted in our land, no skills will be lacking." This conclusion of the 1955 Citizens' White House Conference on Education stresses the fact that shortages of skilled men and women, such as engineers or scientists, can be met by helping each person develop his own talent. The U.S. would not have fields in which manpower is short if everyone could get the training that will enable him to use his abilities to the utmost, the group indicated.

The free flowering of individual talents has made the U.S. the world's richest country and the leader of the Free World. Learning does not stop when classes are over, as this scene in a university lecture room demonstrates. There students are talking over with the professor after class some matters of particular interest to themselves.



From youth to old age, education is a doorway to opportunity and a bulwark of national unity.

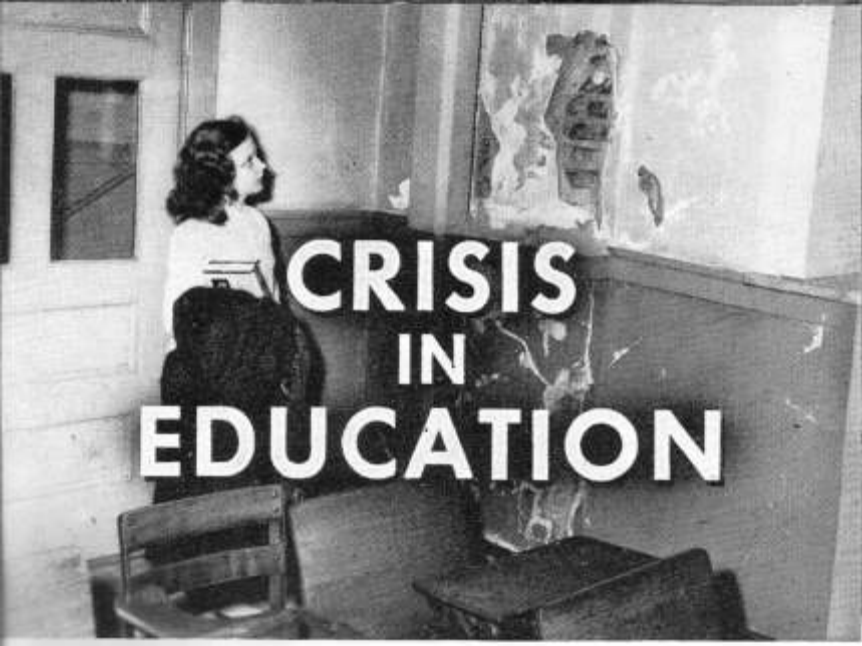
40 Over 42 million people have immigrated to this country since the Revolution. Many, such as those pictured here, attended night school to learn the English language and the customs of their new land.

Our public schools have trained many generations of new Americans. They have brought together children of diverse backgrounds to learn together, and provided Americans with a common experience.

Since each person has the opportunity to receive an education, the possibility for advancement has been open to all, and not confined to any one class.

This teacher is in several places at once, with the aid of modern electronics. She gives help to one student over a microphone while the rest of the class in this Louisiana school is divided into groups that study lessons from the four tape recorders on her desk.

Other new devices are being tried—several school districts are experimenting with closed circuit television. In Washington County, Maryland, for example, 48 schools with 18,000 students are now on one television circuit. A teaching machine invented by a Harvard professor of psychology allows pupils to learn some subjects at their own pace without close supervision of a teacher.

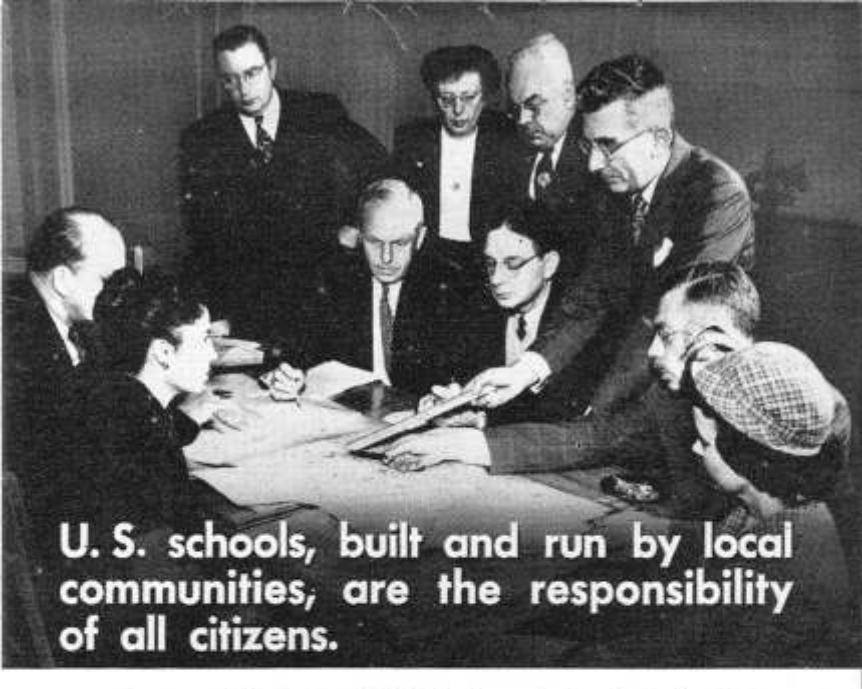


CRISIS IN EDUCATION

42 Sputniks focused attention on our schools and their deficiencies. The problems, however, are not new, nor are the efforts to overcome teacher shortages and poor facilities. The work of improving courses has also been going on for years, but millions of Americans were now awakened, perhaps only temporarily, to the crisis in education.

As long as schools like this one must be used, it is impossible for the educational system to fulfill its responsibility of providing a decent schooling for every child. Many schools are unsafe as well as dilapidated.

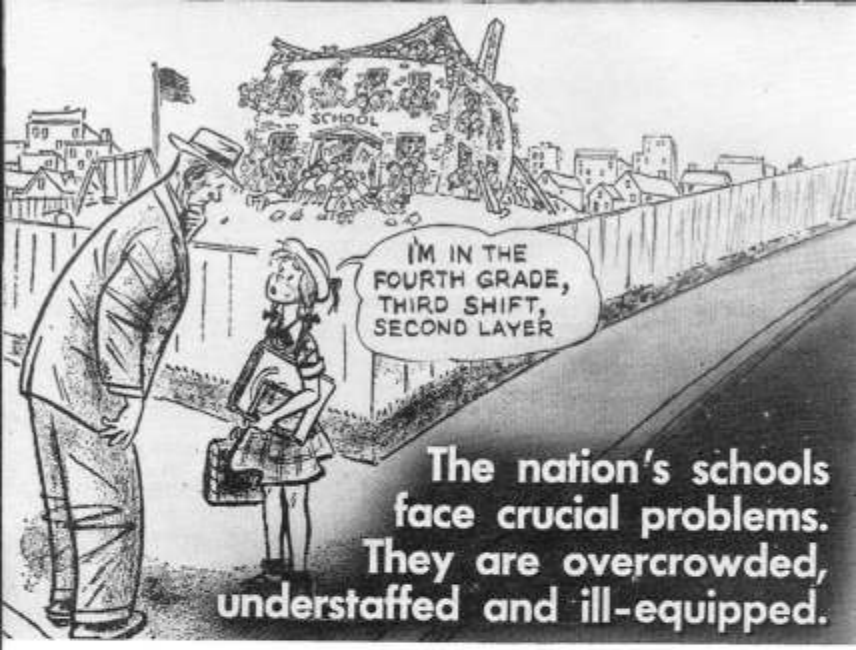
Action is required to meet our basic problems: the lack of schools; the lack of teachers; and the deficiencies in instruction and course material.



U. S. schools, built and run by local communities, are the responsibility of all citizens.

43 There are 53,000 independent school districts in the U.S. The immediate control of the schools rests in each community, whose residents usually elect a School Board or School Committee that has the responsibility for the schools. Here you see a group of citizens and educators planning a new elementary school.

The states hold the final responsibility for schooling. Each state has a department of education, which sets the minimum standards, plans the general curriculum and provides financial aid and advice to the schools. Most of the financial support for education must come from the school tax of each community, however.



44 In 1957, 29 million pupils were enrolled in kindergartens and elementary schools, an increase of 5,700,000, or 24 per cent in five years. In the same period high school enrollment rose 1,800,000 or 25 per cent to reach nine million. The nation's school population is growing at the rate of one million a year.

There are too few schools and teachers for these students. 55,000 classrooms a year are needed to keep up with growing enrollments, but at the start of last year there was already a shortage of 142,000 classrooms. As the cartoon suggests, schools in many areas of the country have been forced to go on double session to fit all the students into the building. In troubled city areas, there is a measurable increase in juvenile delinquency when schools must go from single to double shift.

Rural schools are combining to meet the need for more teachers and equipment, but many small schools remain.

This school in the Ozarks with one room and teacher for all grades is evidence of the need for further consolidation of schools. Many of our thousands of school districts are too small, and good education can be provided only if larger units can be served.

As late as 1954, half the primary schools in the U.S. had only one or two teachers. James B. Conant, former President of Harvard, now studying secondary education, believes that high schools with fewer than 100 in the graduating class are too small to provide an effective education. Half our high schools do not meet this standard—they have under 200 students in the whole school and seven teachers or less.

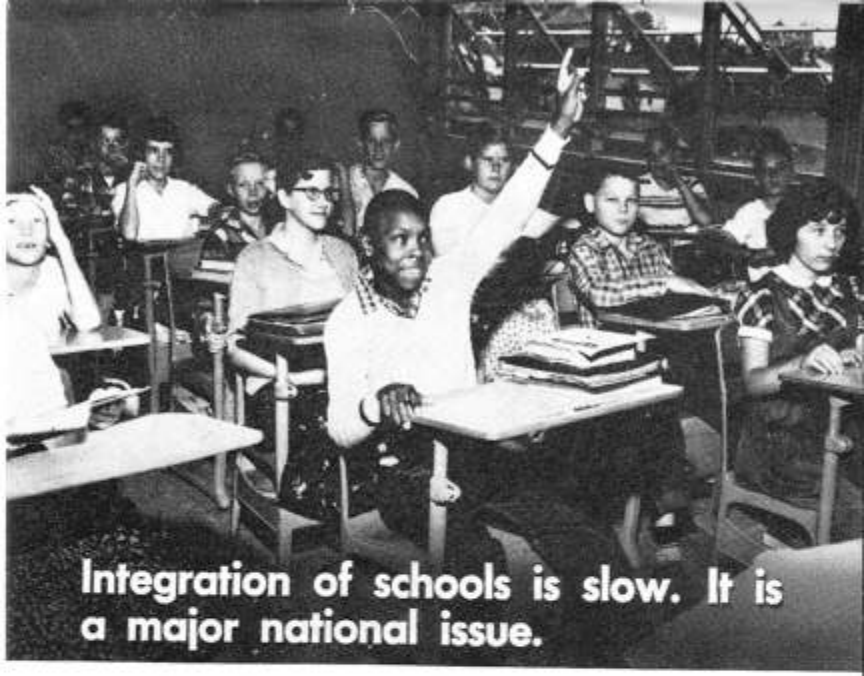
Mergers of rural school districts have enabled many areas to build adequate schools. Bus transport has made central schools possible even in places where pupils are widely scattered.

Segregation in schools has meant unequal schooling and duplication of facilities.

46 On May 17, 1954, the Supreme Court ruled in a unanimous decision that the maintenance of segregated public schools is a denial by the states of "equal protection under the law." Finding that separate schools were inherently unequal, the court ruled that state segregation laws are a violation of the Fourteenth Amendment, and two years later ruled that schools should be integrated "with all deliberate speed."

Integration eliminates the burden of maintaining two separate school systems in areas where the expenditures per pupil for education have been relatively low.

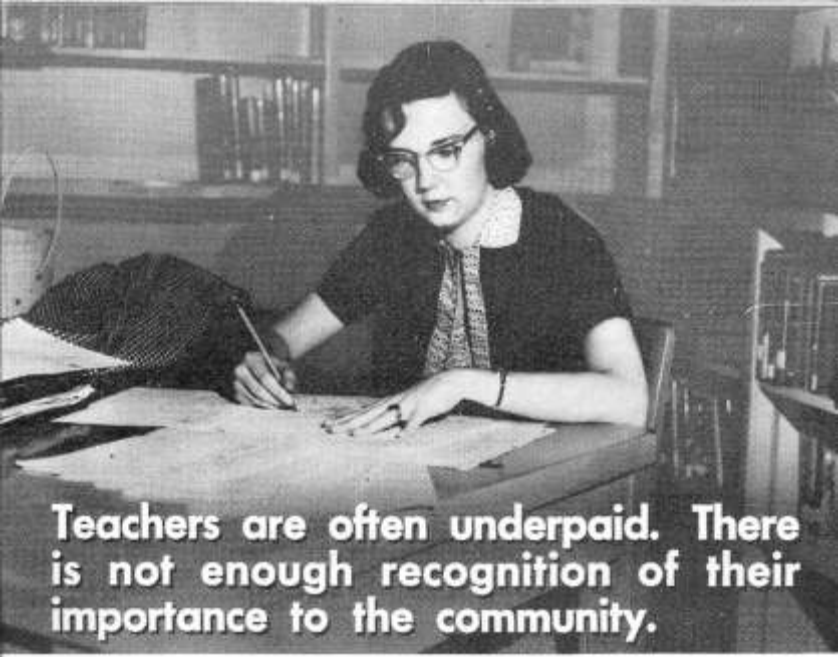
The map shows the extent of integration since the 1954 ruling and the per cent of the states' school districts that now have bi-racial schools.



Integration of schools is slow. It is a major national issue.

47 This Louisville, Kentucky, school typifies the progress that has been made toward integration, but there are still seven states with no school desegregation.

Little Rock, Arkansas, is an outstanding example of the difficulties involved in integration. In 1957, President Eisenhower sent Federal troops to halt violence after Negroes were admitted to Little Rock's Central High School. This year, segregationists led by Arkansas' Governor Orval Faubus have tried to find ways to get around the 1954 Supreme Court decision against segregation in public schools.



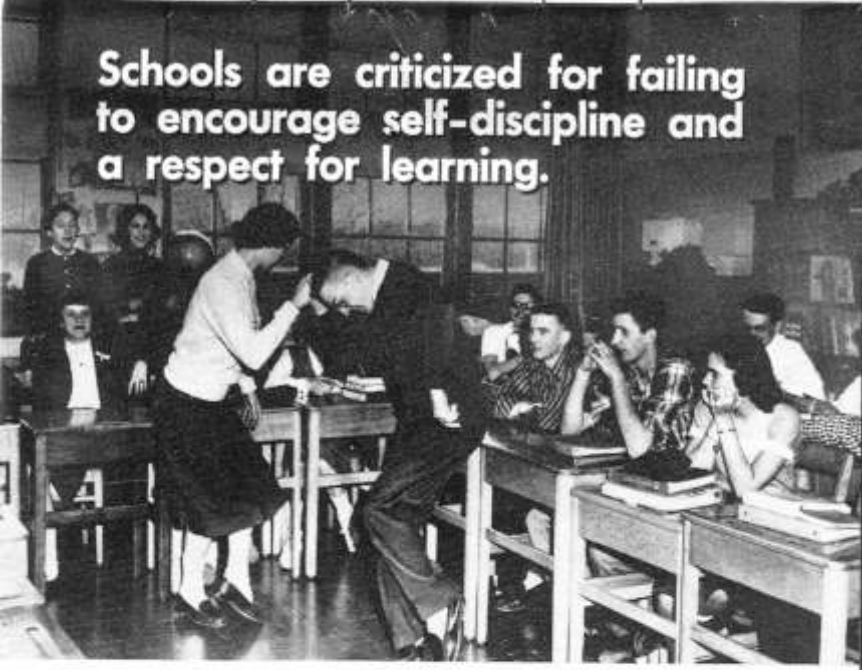
Teachers are often underpaid. There is not enough recognition of their importance to the community.

48 Despite the shortage of teachers, much of their time is taken up with routine chores that require no specialized training, such as the supervision of lunchrooms. Many communities are beginning to provide assistance for clerical and supervisory work, to free teachers for teaching.

It is estimated that 75 per cent of the male teachers in the U.S. must hold outside jobs to supplement their regular income. Even a college instructor averages $1,000 less income a year than a coal miner.

Teachers must have college or more advanced training, but their salaries are below other possible jobs for those with such preparation. This is particularly true for those trained in scientific fields.

Teaching is difficult because classes are large. In 1956, there were 26.9 students to the teacher on the average—in Russia it was only 17.0.



49 This classroom scene is considered typical by many who say our schools have abandoned academic discipline and scholastic standards.

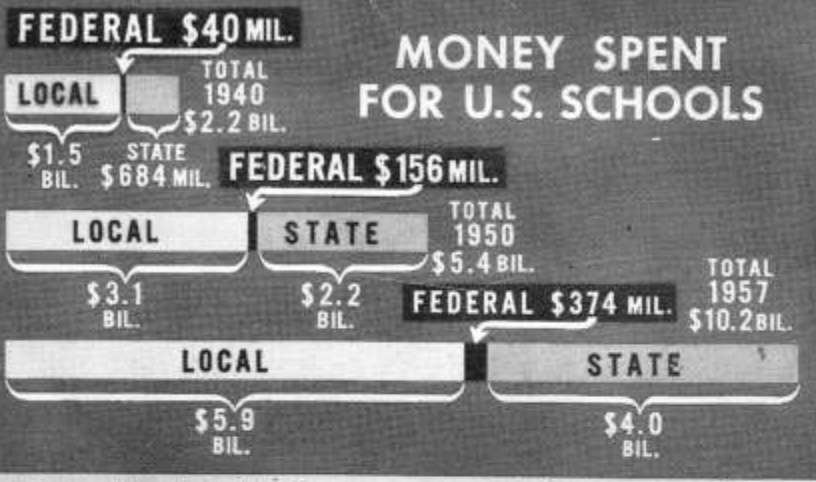
Tests show, nevertheless, that students today learn basic skills, such as reading, better than their parents' generation. A smaller percentage now take traditional academic courses such as Latin and geometry, however. Surveys of student opinion indicate that many of them are not willing to study hard enough to take difficult courses. Teachers complain that the "cult of easiness" has invaded our schools. It is hoped that the nationwide aptitude and scholarship tests will restore the prestige of learning.

In some of our crowded cities, schools have had to cope with problems of delinquency and gang morality. It has been found that the schools are often the most stabilizing force in the lives of the students in such situations.

50 In 1957, Americans spent 14 billion dollars on education, about half the amount used in the purchase of cars and trucks. More income was spent for buying liquor than for higher education.

Our expenditures have not been sufficient to give us schools of the quality we must have in all areas. According to the Rockefeller Report, moreover, "it is likely that ten years hence, our schools and colleges will require at least *double* their present level of financial support to handle our growing school population."

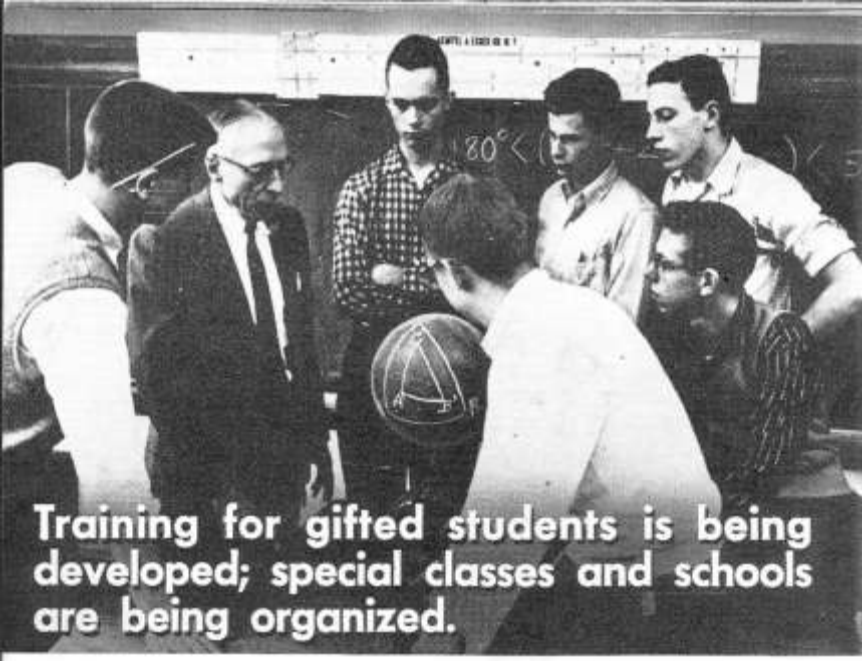
The average (median) cost per pupil of education in the U.S. rose from $20.21 in 1900, to $178.81, in 1948. The cost per pupil in districts with outstanding schools is as high as $950. Decent schools, equipment, and teachers cost money, which means, in turn, increased school taxes. Some citizens and communities, faced with the problem pictured here, are reluctant to pay the necessary bill.



The Federal Government is providing $900 million aid to education from 1958 to 1962.

51 In the summer of 1958, Congress passed the first Federal aid to education bill in this century. In the past such proposals have been defeated because of controversies over racial integration and Federal interference in private education. Many persons felt that increased Federal activity in the field of education would be a threat to local control of schools.

Most of the provisions of the new program are administered through the states or are of a relatively uncontroversial nature. The 1958 bill, providing $900 million over four years, includes appropriations for student loans, scientific equipment for schools, institutes for teachers, a guidance and testing program and aid for vocational education.



Training for gifted students is being developed; special classes and schools are being organized.

52 It is now recognized that true equality of opportunity in education requires recognition of differences in academic abilities. New steps are being taken to assure the top 15 to 20 per cent of students in secondary schools, who are capable of high calibre college work, a good basic training.

They have the opportunity of taking advanced classes, such as this course in solid geometry. Special schools enable students with particular talents and aptitudes to develop them. It is especially important that the top 2 per cent of our students get an education that will develop their abilities and challenge their intellect.

Many school districts are working toward the comprehensive high school in which students of varying abilities and interests meet in home rooms, activities and a few courses. In such schools the better students are often taught in separate classes in some fields.

National security requires improved science training, with better teachers and courses.

53 These science teachers are students in a course designed to increase their knowledge of their subject. This is one of many new classes for teachers to learn how to improve their science and mathematics instruction. It is in these fields that Soviet successes are most apparent, and it is here that most of the immediate post-sputnik action has taken place.

The Federal Government is providing aid for institutes to instruct science teachers. States, such as New York, have appropriated millions of dollars for such instruction, and colleges and schools have organized conferences and training sessions for mathematics and science teachers.

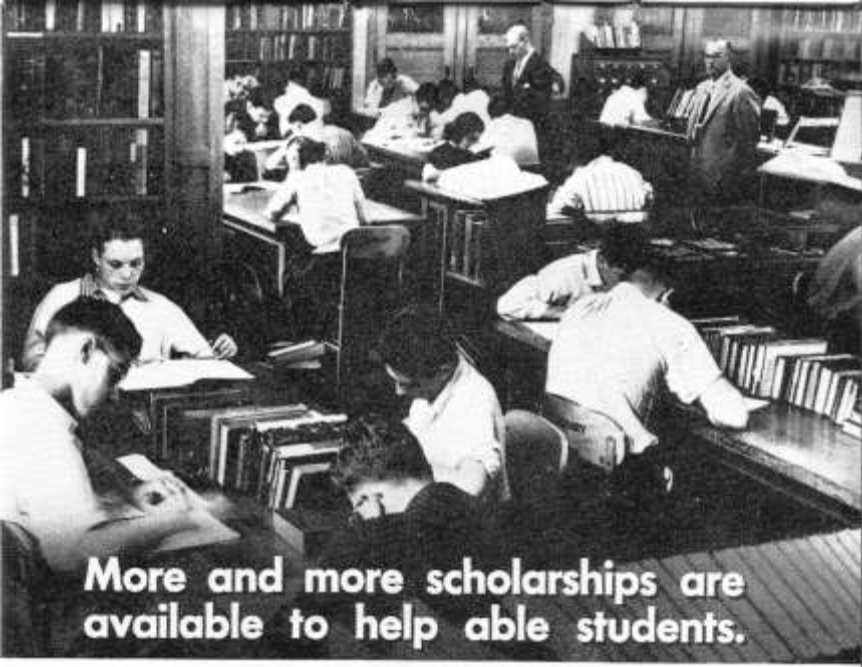
Most high school graduates have not studied physics or chemistry, and those who have often received instruction from teachers who are not versed in the most modern developments in these fields.

Scientific advances open new fields demanding higher skills.

54 The control panel of this first U.S. atomic power plant illustrates the degree to which unskilled labor has been replaced by skilled and semi-skilled workers. In 1957, 47.6 per cent of the working population were in jobs requiring highly developed skills or considerable educational background. In 1910, only 32.8 per cent needed such training.

This increased need for educated and skilled workers is a result of increased specialization, in general, and the kinds of jobs open in new, fast growing industries such as chemicals, plastics and petroleum refining.

The consensus of engineers and economists who have studied the problem is that automation will continue to reduce the number of routine jobs, and will replace them by more demanding tasks of supervision, maintenance and regulation.



More and more scholarships are available to help able students.

55 By 1970 enrollments in colleges—3,036,938 in 1957—is expected to double. More and more students want a college education, but it is becoming increasingly expensive. Yale University, for example, now charges $2,150 a year for tuition, fees, room and board. State universities are far cheaper, but the cost of going to college will double by 1970.

The country's need for highly trained and well educated citizens has led the U.S. Government to provide an extensive loan program for students in the next four years. Private organizations and colleges themselves are offering larger numbers of scholarships or loans.

With skyrocketing costs, financial aid is increasingly important to students like these taking the qualifying test for the National Merit Scholarship. One thousand of these grants were awarded in 1958, for amounts ranging from $100 to $2,000 a year, depending on need.

The U. S. needs men educated in science and in many other fields to help America maintain the full way of life that a democracy requires. Educators and our nation's leaders agree that we must provide better education, building on the firm base of the American school system.

56 Many educators fear that the U.S. will overemphasize science in its education reforms because of the anxiety to counter Russian scientific achievement. They are concerned that much of liberal heritage will be neglected. As Dr. Killian, Special Assistant to the President for Science and Technology, stated, we must maintain training in both science and humanities, for "each needs to cross-breed with the other."

Adlai Stevenson spoke for most who have studied both Russian and American education when he warned that "keeping up with the Russians would be for us the worst form of defeatism, of false emphasis, of idolatrous worship of irrelevant standards."

Americans do not want to build a mass production line for scientists. They want to maintain the system geared to developing individual talents and abilities.

57 A higher proportion of Americans than any other people receive a college education. This graduation ceremony at the Massachusetts Institute of Technology marks the completion of the formal education of some of our best trained scientists and engineers. They are the fruit of an American education system that seeks to provide opportunities for all, while assuring good students a challenging and rewarding training.

Questions for Discussion

1. Is it possible to educate students of diverse interests and abilities in one school, or would they get better training in separate, specialized schools? **Background frames: 21, 26-31, 41, 52.**

2. Are students able to make an intelligent choice of courses, or would the Russians' non-elective method be better? **Background frames: 7, 12, 16, 52.**

3. Is the importance of training for citizenship overemphasized? Do the schools play the role that men like Washington and Jefferson intended them to? **Background frames: 3, 9, 26-29, 38-40.**

4. Do you think modern methods of teaching stressing student participation and action (projects, etc.) are better than the old emphasis on memorization and discipline? **Background frames: 8, 9, 15, 27-28, 36-38.**

5. Do today's students avoid taking difficult subjects? Should courses like foreign languages be required for all students? **Background frames: 5, 7, 54.**

6. What is being done to get enough schools and teachers and to improve instruction, especially in science? Is it enough? **Background frames: 6, 43-52.**

7. Is the new Federal program of aid to education a threat to local and state control of our schools? **Background frames: 43, 44, 51.**

8. Is enough done to assure good students a college education, and are the right number going on to college? **Background frames: 11, 33, 34, 51, 54-56.**

9. What can we learn of the strengths and weaknesses of American education from the Russian and other European systems? **Background frames: 4, 10, 13, 40.**

10. How much of the responsibility for children's development rests with the schools, and how much with the home, and how can the two work together? **Background frames: 3, 26-32, 36-39.**

Suggested Activities

1. Make a chart showing how much each state spends per pupil on education, and the number of students per teacher in each.

2. Write a paper on the work of Horace Mann and the ideas of John Dewey. Discuss their effect on our schools.

3. Write a paper on Thomas Jefferson's plans for education and discuss the efforts of Washington and Franklin in the area of education.

4. Trace the history of the American public schools, and the development of the school system of your state and community.

5. Investigate the work that has been done in your community to get good education. Report on the organizations interested in the schools and the job each performs. Tell how school board members are chosen.

5. Report on the history of your school, find out why it was founded and see if it is still serving its original purpose.

6. Look at newspaper accounts of the steps taken since October, 1957 to improve education. Read about special groups, like the Rockefeller Report panel, which have examined our school system and made recommendations. Discuss these suggestions as they relate to your school.

7. Find out how many graduates in your school went to college last year, and what colleges they attend. Report on scholarships now available to help pupils in your school finance higher education.

8. Make a chart showing the sources of support for your school this year, and 20 years ago.

9. Make a report on the way in which the Federal government is aiding education.

10. Discuss the graduation requirements of your school and the kind of courses that are offered. See how they have changed in the last 50 years.

Useful Reading

Books

Education in the U.S.S.R., U.S. Department of Health, Education, and Welfare, Bulletin 1957 No. 14, Government Printing Office, Washington, 1957.

I Want to Be Like Stalin, from the Russian text on Pedagogy by B. P. Yesipov and N. K. Goncharov, translated by George S. Counts and Nucia P. Lodge, New York, John Day Co., 1947.

An Educational History of the American People by Adolphe E. Meyer, New York, McGraw-Hill, 1957.

A History of American Education by Stuart G. Nobel, New York, Rinehart and Co., 1954.

Our Children Are Cheated by Benjamin Fine, New York, Henry Holt and Co., 1947.

World Survey of Education: Handbook of Educational Organization and Statistics, UNESCO, Paris, 1955.

Pamphlets

The Pursuit of Excellence, America at Mid-Century Series of the Rockefeller Brothers Fund, Inc., Doubleday Headline Series Publication, New York, 1958.

Public Education and the Future of America, The Educational Policies Commission of the National Education Association.

Recent Articles from The New York Times Magazine

1. *We Do Not Teach Them How to Think* by Marc Raeff, January 26, 1958—p. 7.
2. *Rejoinder to Critics of John Dewey* by Oscar Handlin, June 15, 1958—p. 13.
3. *Dual Educational Problem: School and Home* by Adlai E. Stevenson, April 6, 1958—p. 15.
4. *Report on Russia's Big Red Schoolhouse* by Marc Raeff, June 22, 1958—p. 5.
5. *If We Are to Catch Up in Science* by John R. Dunning, November 10, 1957—p. 19.
6. *The 'Invisible Crisis' in Science* by J. R. Killian, Jr., April 7, 1957—p. 26.
7. *Teaching by TV,* April 13, 1958—p. 90.
8. *Our Colleges—Inside View by Outsiders* by Charles Frankel, February 24, 1957—p. 23.
9. *College—Who Should Go* by Dorothy Barclay, February 23, 1958—p. 53.
10. *High School Senior's Agony* by Charlotte Devree, December 15, 1957—p. 14.

Picture Credits

The New York Times, 1, 3, 4, 5, 7, 9, 11, 12, 20, 21, 26, 31, 35, 37, 42, 47, 48, 50, 53, 54, 55, 57; Buddy Colley from The Atlanta Journal, 6; New York Board of Education, 8; Burck in The Chicago Sun-Times, 10; Sovfoto, 13, 14, 17, 18, 22, 23, 24; Magnum, 15, 52; Associated Press, 16, 19, 33, 46; Courtesy of the New York Public Library, 27; University of Virginia, 29; Brown Brothers, 30; Phillips Exeter Academy, 32; Sol Goldberg from Cornell University, 34, 51; Petit, 41; Monkmeyer, 38; Great Neck Public Schools, 43, 49; International, 40; Black Star, 45.

Next Month's Filmstrip:

HOW STRONG IS RUSSIA NOW?

Changes in Russian might, foreign policies and domestic affairs since Stalin's death. The rise of Khrushchev; how Russians live today.

PRINTED IN U.S.A.