In 1970 James E. Allen, U.S. commissioner of education, announced a major drive to remove illiteracy in the United States by launching the program "Right to Read." It endeavored to focus national attention on the fact that our modern technological society had close to 19 million adults and 7 million children who were functionally illiterate. Right to Read tried to coordinate federal, state, and local governments, industry, foundations, public interest groups, professional associations, schools, and adult training centers to improve reading instruction for all ages. The goal? Eliminate illiteracy by 1980.

Right to Read

In the first five years total expenditures were slightly under 40 million dollars. The administration was criticized for its slowness in attacking the problem, and Congress reacted by appropriating 413.5 million dollars for the next four fiscal years to combat illiteracy.¹

According to *Newsweek*, the federal government "pumped \$40 million into eleven New York City ghetto schools over a period of four years from 1969 to 1973. The result: all eleven schools still report much the same low achievement-test scores and high truancy rates. In Pittsburgh, Houston and San Diego, millions more have been spent on the government's attempts to tailor teaching to the needs of individual students. There has been scant success in improving school wide performance. . . . The failure of the affluent society of the 1960s and early '70s to improve schools—at an estimated cost of \$10 billion in Federal funds—is the subject of a report in the current issue of Columbia University's Teachers College Record. Dale Mann, a political scientist at Teachers College who has been studying educational change for the Rand Corp., assembled the work of a group of social scientists who have analyzed typical Federal projects of the 1960s."²

In referring to this study, *Time* said, "Billions of dollars were spent in the name of those reforms, but very little concrete evidence of success could be found. Rand Corp. researchers, for example, discovered that for every study identifying a school program that worked, another equally good study concluded that the practice was ineffective. To many observers, the discouraging results did not mean that the reforms had failed, just that

more time—and better-run programs—were needed."3

The federal government has shown its great concern over the massive illiteracy problems by its enormous appropriations. Unfortunately, it treated the symptoms instead of attacking the disease. It endeavored to eliminate illiteracy by 1980, but if the schools continue to train children in the same manner, illiteracy will not be wiped out by 1990, or by the year 2000.

When Commissioner Allen became aware of the "full dimensions of the national reading scandal," he said, "I concluded that the single most important thing I could do on behalf of the nation's schoolchildren was to establish the right of *all* children to learn to read as the educational goal for the 1970s." He talked with state education officials, teacher organizations, and other interested groups about the feasibility of the goal. To his great satisfaction, the experts assured him that the goal was achievable. Then Allen said, "How a school system goes about correcting reading deficiencies is not as important as that it begin *here and now* to tackle the problem."

This is the exact reason why the Right to Read program will fail and all other programs have failed. The most important aspect of teaching children to read is *how* schools go about teaching them to read and learn, and this item has most often been neglected.

The way to combat illiteracy is not just to pump money into schools and hope that somehow this shotgun method will cure the nation's reading problems. An \$180,000 study by the Educational Testing Service found, after reviewing 1,800 reading documents, that it was difficult to turn up a new reading-teaching method not described in a 1908 survey of methods. There has been a continuous eruption of new reading-teaching materials, but the study, financed by the U.S. Office of Education, indicated "today's teachers have been brain-washed into feeling that they must have the latest gadgets, programs and publications or they cannot teach reading." Some of the reading hardware contains magic-lantern projectors, jigsaw puzzles, word dice, tutorgrams, automated flash cards with talk-back recording devices, alphabet games, "dictionary-pictionary," word games, floor games, all sorts of instructional films and cassette lessons, and the new technological wonder—the computer.

Much ruin has been caused by educational theorists sitting in their cushioned chairs far removed from reality. They push their idealistic concepts on educators to get them to try their innovative programs. The charisma of the leader causes the program to work temporarily. It is

then hailed as a great success. In time it fails, and another generation of children suffers. On the other hand, education should not just live in the past and reject all innovations. There should be experimental programs for new and creative concepts, but they should be implemented only after conclusively proving their worth.

Mastery of reading is the most important educational issue. Unless a child becomes literate he is lost, for nearly every field of endeavor relies on reading mastery. With the recent unparalleled increase in human discoveries, writing and reading have become crucial to the accumulation and dissemination of knowledge. It is imperative that educational leaders provide proper methods to teach reading and supervise schools so that students truly learn how to read.

Phonics vs. Look-Say

The early Egyptians developed a highly elaborate system called hieroglyphics, which consisted mainly of pictorial characters for words. The need for a simpler system was obvious, so about 1600 B.C. the alphabet was invented. Instead of being a multitude of symbols, language was reduced to basic letters and sounds. Now learning to read consisted in mastering the alphabet and acquiring the ability to learn the sounds. This method was used until the early 1800's.

Reading difficulties became acute because in the 1700's scholars, knowing little of linguistics, fixed our English. Instead of stabilizing and producing a coherent, logical system of spelling and sounds, they gave us today's language. The problem is that the scholars adapted the alphabet from Latin with its 26 letters to do the job of representing 44 sounds. Efforts to simplify and regularize our language have so far all failed.

In 1820 there was a clamor for instructional reform to incorporate a shortcut to learning to read. Thomas H. Gallaudet, director of the Hartford Asylum for the Deaf and Dumb, had been teaching children at that institution by the sight-symbol method. He endeavored to teach normal children the same way, and in 1837 a primer published by him was adopted by the Boston school system. For the next eight years the "look-say" method was used; it was a return to the hieroglyphic system of learning to read. The results were disastrous. However, look-say did not die; it went underground.

Back in the 1920's when progressive education came into vogue, educators took a new look at what was taking place in the schools. They did not like the lock-step education children received: every child learning

and repeating the same things. In order to have children use adult words and sentences as soon as possible, educators reinstituted the old look-say method.

In 1955 Rudolf Flesch published, Why Johnny Can't Read. In it he said:

What I found is absolutely fantastic. The teaching of readingall over the United States, in all the schools, in all the textbooks is totally wrong and flies in the face of all logic and common sense. Johnny couldn't read until half a year ago for the simple reason that nobody ever showed him how. Johnny's only problem was that he was unfortunately exposed to an ordinary American school.

You know that I was born and raised in Austria. Do you know that there are no remedial reading cases in Austrian schools? Do you know that there are no remedial reading cases in Germany, in France, in Italy, in Norway, in Spain—practically anywhere in the world except in the United States? Do you know that there was no such thing as remedial reading in this country either until about thirty years ago? Do you know that the teaching of reading never was a problem anywhere in the world until the United States switched to the present method around about 1925?⁶

Twenty years after its publication Samuel L. Blumenfeld, commenting about the book *Why Johnny Can't Read*, said:

It is probably the single most important book on American education published in the twentieth century, because it identified and exposed to public view the cause of the most serious educational problem this country has ever faced, to wit: the inability of our educational system to teach our children to read at the level required by the complexity of our civilization. Rudolf Flesch made America aware that there was indeed an identifiable cause to what was already, in 1955, a staggering reading problem: the cause was the wholesale adoption by virtually all of our schools of the look-say or sight vocabulary method of teaching children to read.⁷

But many of the reading books utilized today still train children to read

by means of the sight-reading vocabulary. How is it done? In the Lyons and Carnahan set of readers, the first-grade book has 349 new words; second-grade, 467; third, 763; fourth, 813; and fifth, 744. Words are carefully presented, and previous words are repeated over and over until fixed in children's minds by memorization. In the first three years of education, children are expected to learn 1,579 words. The Scott, Foresman set has 1,778 words for three years. This does not mean children can read any third-grade book or reader, for each book uses different words. Only words fixed by memorization can be read. Anyone dealing with memorization knows how hard it is to memorize more than 1,500 different independent words. Many children cannot master this task. Consequently, they fail to read.

Children using phonics, however, are taught to analyze an unknown word by deciphering its sounds. If children know the sound and also the letters *b*, *c*, *d*. *f*, *m*, *p*, *r*, *t*, *v*, and the sound of "an", they can say each word: ban, can, Dan, fan, Jan, etc., even though they have never seen these words. This method eliminates memorizing each word.

Some words in our language are not phonetical and must be memorized. Critics of phonics point out these inconsistencies, as in the sound of *ough* in *rough*, *cough*, *bough*, *dough*, *through* and *thorough*. (Incidentally, this is the worst single example of sound spelling in English.) However, advocates emphasize that 85 percent of our words are phonetically based, and almost all the rest have partial phonic constructions.

Phonics does not say that students should not memorize; rather, along with memorization, they use logic and reason to decipher words. Children who know phonics are able to read words they do not know. Take the word *procrastination*: Pupils trained in phonics will break it into *parts—pro-cras-tin-a-tion*. Since children's vocabularies far exceed their ability to read, students properly trained in phonics will discover words by themselves.

After Flesch published his book, pressure became so strong that educators added phonics to look-say. But instead of putting it first, where it would help unlock and decode the mysteries of language, they put phonics in the second grade. There, according to one leading researcher, the college-trained teacher in look-say often forgot to use it.

Dr. Jeanne Chall, professor of education at Harvard University and author of *Learning to Read: The Great Debate*, did an in-depth study of teaching beginning reading. Chall investigated the research done on reading from 1912 to 1965; examined in detail all books, teachers' manuals

and workbooks offered by reading system publishers; and visited more than 300 teachers of beginning reading in the United States and England. After thorough investigation she concluded:

My review of the research from the laboratory, the classroom, and the clinic points to the need for a correction in the beginning reading instructional methods. Most school children in the United States are taught to read by what I have termed a meaning-emphasis method (that is look-say). Yet the research from 1912 to 1965 indicates that a code-emphasis [phonics] method—i.e., one that views beginning reading as essentially different from mature reading and emphasizes learning of the printed code for the spoken language—produces better results, at least up to the point where sufficient evidence seems to be available, the end of the third grade.⁸

Phonics should be not just a supplemental tool but a systematic approach to the entire reading program. The whole problem boils down to a simple fact—multitudes of children cannot read properly. If look-say works, let's keep it. But if it's not working, let's get a system that will work. "Forty years of this sight-vocabulary nightmare are enough," says Samuel L. Blumenfeld, author of *The New Illiterates*, "Let's get back to the alphabet and get American education back on the road to sanity."

One would imagine that after such a clear disclosure from Rudolf Flesch's book educators would seriously try to remedy the reading problems. The book was copyrighted in 1955, yet nearly three decades later the same methods are being employed while reading scores continue to decline. What does this show? It reveals the tremendous sluggishness of the educational system to change in spite of evidence of failure.

Dyslexia

In recent years a new term has been coined to describe children's severe reading difficulties: dyslexia. To assist the dyslexic, Dr. Joyce Hood advised, "Parents can help by not demanding too much of these children or the school. Mothers and fathers can emphasize their children's strong areas so that these boys and girls can feel worthwhile in spite of their reading disability. Parents can also ask the teacher *not* to try to teach too much at once." ¹⁰

Frank W. Freshour, assistant professor of reading education at the

University of South Florida, says, "Some experts have stated the percent of 'dyslexics' varies from one-tenth of 1 percent to 40 percent. Obviously this range could not exist if there were any kind of agreement as to what constitutes this disability. Since no one knows what it is or what causes it, how can anyone's definition be wrong? As a result, any self-proclaimed expert can espouse his ideas, and this is what has happened. If the clinic gives a diagnosis of 'dyslexia' who can dispute it?" Freshour discloses some of the other terms falling under the umbrella of dyslexia: "visual dyslexia, auditory dyslexia, minimal brain damage, strephosymbolia, specific learning disability, word blindness, primary learning disability, cerebral dysfunction, neurological disorganization, and Gerstmann's syndrome." 11

Samuel L. Blumenfeld defined dyslexia as "an exotic word invented to describe the condition of a perfectly normal, intelligent child, who can't learn to read in the way he is being taught in school." Commenting about the reasons for reading failure, Rudolf Flesch mockingly said it was "due to poor eyesight, or a nervous stomach, or poor posture, or heredity, or a broken home, or undernourishment, or a wicked stepmother, or an Oedipus complex, or sibling rivalry, or God knows what. The teacher or the school are never at fault." Certainly few children have legitimate reasons for not mastering reading; according to Ruth L. Holloway, director of the Right to Read program at the US. Office of Education, only 1 percent of reading deficiencies are related to the child's innate ability. In

New Math

The "new math" was another system to enhance learning by endeavoring to teach mathematical concepts rather than mechanical rote processes. Children were to learn the meaning of math rather than simply memorize how to divide, multiply, borrow, or count decimal places. Since the introduction of new math, scores in math have plummeted. Morris Kline, mathematics professor at N.Y.U. and author of the book *Why Johnny Can't Add*, declared, "We are producing a generation of mathematical illiterates, kids who won't know enough arithmetic to balance their checkbooks or figure out their income tax on the short form." ¹⁵

The shocking deficiencies of high school graduates became apparent during World War II. Incoming personnel were inadequately prepared in math to be trained in radar, navigation, and other technical specialties. After the war, engineering schools recognized that incoming students needed math remedial help. In 1952 the late Max Beberman, one of the two

fathers of new math and head of the Committee on School Mathematics at the University of Illinois, began devising an improved curriculum. Estimators say it takes about 25 years for a new idea to be developed and become incorporated. But in 1957 a shock wave hit the smug security of America's technology sending shudders throughout our educational system. Sputnik—the first earth satellite—was launched by the Russians. Overnight that little silver globe knocked Americans from their pinnacle of technological supremacy. Legislators and editorialists demanded that something be done, and federal agencies responded. Funds were provided for basic education, over 100 million dollars for modernization of mathematics for national security.

The money was distributed primarily to universities and other institutions to find a new approach to teaching math at all levels. The most influential was the School Mathematics Study Group (SMSG), led by Professor Edward G. Begle of Stanford University, the second father of new math. These scholars restructured the entire curriculum from kindergarten to grade 12. New math was devised by educators at the university and high school level; elementary teachers had little influence. However, many experts warned that implementing new math might do more damage than good.

There was no question that the approach to teaching mathematics needed changing. With modern technology advancing at such a rapid pace, mathematics could not remain the same. Although few educators would dispute the value of learning the logic and development of math, many challenged the fact that social and business applications were ignored. "Words dealing with measurement, taxation, insurance, and the like," reports John H. Lawson, superintendent of schools at Shaker Heights, Ohio, "gave way to a new vocabulary dealing with properties of numbers, set theory, and systems of numeration." Memorization, drills, and rote learning were replaced with the "discovery method" and "deductive logic." The new math was designed to help students understand what they were doing, instead of learning by the drudgery of multiplication tables and repetitious rote methods.

The new math became a status symbol, and despite warnings from many experts, it swept into about 85 percent of American schools. It introduced such sophisticated concepts as sets and bases, algebra, geometry, statistics, graphs, and laws of probability. In high school, students were taught such college subjects as advanced algebra, analytic geometry, topology, calculus, and a smattering of Boolean algebra and symbolic logic.

U.S. News and World Report noted, "In the late 1950s, 'new math' was hailed as a breakthrough in teaching a subject that generations of children have found distasteful. By abolishing the systematic progression from arithmetic through algebra and geometry, the 'new math' was touted as making it easy for children to understand and enjoy mathematics." The Cambridge Conference stated that high school graduates would have received "training comparable to three years of top-level college training today." ¹⁸

The new program was not a total failure. Bright students were stimulated and challenged by the difficult curriculum. But, as achievement scores showed, the great majority did not benefit from the new math. One state supervisor said, "Some leave elementary school unable to make change for a dollar." 19

Ronald Schiller cited one reason for the failure of new math: "The language was formidable. Addition, subtraction, multiplication and division were taught by means of the 'commutative, associative and distributive axioms.' A sum became a 'union of sets'; subtraction became the 'additive inverse'; a triangle was defined as 'the union of three noncollinear points and the line segments joining them." Shiller adds, "the 'senseless abstractions' of the new math, the 'prissy pedantry which is used to give the impression of deep mathematical insight" evokes scorn. Nobel Prize-winning physicist Richard P. Feynman says, "The total number of facts that are learned is often very small, while the total number of new words may be great."

James M. Shackleford, a chemist with the U.S. Environmental Protection Agency, showed his colleagues math problems from his daughter's fourth-grade math textbook. Results? His colleagues in science could not solve them! Shackleford complained that the new math spends too much time on confusing and useless mathematics theory instead of devoting time to basic arithmetic skills.²²

In the view of Dr. Samuel L. Greitzer, professor emeritus of the mathematics department at Rutgers University, mathematics teachers should now know that new math is officially dead. "Nevertheless, there are still many educators and more teachers who appear to be unaware of this situation," he said.²³

Math and Science

The United States is "indulging in unilateral economic disarmament," stated Glenn Seaborg, Nobel Prize winner in chemistry, former head of the

Atomic Energy Commission, and member of the National Commission on Excellence in Education. The economic disarmament is caused primarily by "our failure to educate our own people in science and math to compete in a high-technology world."²⁴

Paul DeHart Hurd, professor of education emeritus at Stanford University, in a paper to the National Convocation on Precollege Education in Mathematics and Science, said, "During the 1970's. the United States experienced a 77-percent decline in the number of secondary-school mathematics teachers being trained and a 65-percent decline in science teachers. Moreover, of those trained to teach science or mathematics, fewer are going into teaching; many choose to work in industry instead." Across our nation, Hurd pointed out, 50 percent of high school teachers employed "to teach math or science for 1981-82 were unqualified; they taught with emergency certificates." He gave this report of what is happening in American classrooms:

Our children are introduced to science and arithmetic in elementary school. Of the 25 hours available for teaching in a school week, children receive, on the average, one hour of science and fewer than four of arithmetic. Students continue math in junior high, but most don't start algebra—the first rung on the ladder of higher mathematics—until the ninth grade, and then only two-thirds do so. Science programs fare even less well: Most junior-high schools offer few opportunities to explore scientific topics in any systematic or cumulative way.

More than 3 million young people graduate from our high schools each year. Most seniors have had a biology course, a little over a third have had chemistry, but less than a fifth have had three years of science. A traditional physics course is part of this sequence for only 10 percent of high-school graduates. Only 34 percent have completed three years of math. This may help explain the 70-percent increase in remedial mathematics courses offered by public four-year colleges over the last five years.²⁵

This deficiency in mathematics and science is a serious threat to American economic strength and security. Time reports, "Fewer than 240.000 U.S. high school students take any calculus at all, while at least 20 times as many teenagers in the Soviet Union study the subject for two years. American youngsters take eight or nine years of basic arithmetic;

in most European countries, the same material is covered in two-thirds the time."²⁶ The future belongs to those nations that can compete in a modern, technological, sophisticated world; educators need aggressively to pursue those programs that train students for a strong America.

Mainstreaming

Another issue in public education is "mainstreaming": the introduction of handicapped children, the blind, deaf, physically crippled, and retarded, into regular classes for all or part of their schooling. Mainstreaming is profitable if children have the mental ability to function in regular classes. Otherwise they will benefit more in special education classes. The danger is that teachers may have the problem of teaching simultaneously at many levels, thereby causing everyone to suffer, particularly the handicapped.

Gifted Children

Education should make adequate provision for the underprivileged. However, there should also be adequate provision for the opposite end of the spectrum—the gifted. The popular concept that bright children will make it on their own is false. According to a U.S. Office of Education report, "Intellectual and creative talent cannot survive educational neglect and apathy." Susan B. Thomas, writing in *The Gifted Child Quarterly*, says, "But what happens to children in the public school who are intellectually superior? All too often the bright child reads a library book, runs errands for the teacher, or does another twenty-five arithmetic problems of the same level of difficulty. He frequently either withdraws completely or becomes a discipline problem. He is often ignored or treated as an average student." ²⁸

"A gifted child in the United States stands less than one chance in four of even being identified as gifted," commented Dr. Bruce O. Boston of the Council for Exceptional Children. "Of the country's 2.5 million gifted children, probably no more than one in 20 is being touched by some kind of program for the gifted, and that says nothing about the quality of the programs."²⁹

Dr. Hilde Bruch, who has spent more than 20 years in the practice of pediatrics and then in child psychiatry and psychoanalysis, told how the "elimination of 'competition' is often accomplished by underrating the importance of intellectual achievement." She points out:

What is often underplayed is not native intelligence but effort

and striving toward achievement. There is great concern that the less gifted child may be made to feel inferior by not doing well, and the gifted child is apt to be held back to the pace of the average. Parents who want to know how they can help their children to adjust to school life so that it becomes an all-around profitable and enjoyable experience are admonished not to be too much concerned with marks in reading and arithmetic. After all, if the little fellow does not do so well in these subjects, they can take just as much pride in his prowess on the athletic field. This is a sound concept—only it has led to a reversal, that athletic ability is rated higher than academic achievement. . . .

Thirst for knowledge and independent clear thinking is not encouraged—as contrasted with the vague and emotionally charged discussions and opinions exchanged on all world issues. The student who tries to learn more than is necessary to pass the next test is looked upon with suspicion as not playing the game correctly.³⁰

Educators debate the concepts of aristocracy or elitism (man receives benefits because of birth), meritocracy (man receives benefits according to his ability and hard work), and egalitarianism (everyone receives the same benefits regardless of birth or effort). America has prospered largely because it has adopted the principle of meritocracy. One of the primary reasons for the erosion of educational standards is the egalitarian philosophy, which belittles individual effort. Education, instead of having as its goal the fullest development of each individual, has often produced the opposite result by dragging everyone down to a common denominator because it endeavored to eliminate the stigma of superior and inferior students. The result: Many schools have become anti-intellectual. One wonders whether today's ideal school, in failing to make children bright, is fulfilling its goal of equality by keeping everyone dumb.

To support the fullest intellectual development of every child, some industrialized nations provide a longer school day for their students. In addition, they have academic high school students spend 220 days in school per year compared to America's typical 180-day school year. America's school year should be increased, for in our industrialized society it is no longer essential for students to have from 21/2 to 3 months off for the summer. America needs to beware, for either it provides a more rigorous educational system or it will lose its future status as a technological world leader.

To support egalitarian concepts against promoting superiority, some schools have heterogeneous grouping: Children with various abilities are put in the same class. Here they may be reading at first or sixth-grade level. Other schools have homogeneous grouping: Children with similar abilities are placed together. The top third-grade classes can have an honor grade, with the various classes descending according to student abilities. Some object: "In ability grouping you are discriminating against slow students." Not true. This method provides a means whereby teachers can provide the best instruction to all students, bright and slow. Because of the appalling decline in Scholastic Aptitude Test scores, a report was published, "Guidelines for Improving S.A.T. Scores," by the National Association of Secondary School Principals. It concluded that one way scores could be raised would be to group students by abilities.³¹

New York City schools have many educational deficiencies. Yet, in spite of the problems, there are schools in the city that provide excellent education. Some of these superior high schools require an entrance examination; others provide homogeneous grouping by placing children in honor, regular, and modified classes. Out of the 40 finalists in the nationwide Westinghouse Science Talent Search, 11 were from New York City high schools.³² I went to investigate which schools produced such students. Seven came from Bronx High School of Science and two from Stuyvesant High School; both are specialized schools requiring an entrance examination, which is basically a system of ability grouping.

Test and Grades

One method commonly used to reward ability and effort is the giving of tests and grades. However, some educators endeavor to eliminate tests and grades altogether, believing they are detrimental to the learning process. Education Professor Sidney B. Simon of the University of Massachusetts says, "The grading system is the most destructive, demeaning and pointless thing in American education. It allows certain administrative conveniences—permitting assistant principals to decide who goes on probation and who can take an honors course—but it doesn't help learning." Simon's ultimate goal would be to "banish from the land the cry, 'Whadjaget?"

Some of the alternatives to grades are: (1) written evaluations: the teacher periodically describes the student's strengths and weaknesses; (2) contract grading: students decide with the teacher the course content and grading procedure; (3) performance curriculum: the teacher stipulates in

the beginning of the course the work required for an A or a B, and then students work at their own speed; (4) pass-fail: a student either passes or fails the course with no intermediate grade—this has been the most popular.

Concerning common school tests, John Holt went so far as to say, "Almost all educators feel that testing is a necessary part of education. I wholly disagree—I do not think that testing is necessary, or useful, or even excusable. At best, testing does more harm than good; at worst, it hinders, distorts, and corrupts the learning process. Testers say that testing techniques are being continually improved and can eventually be perfected. Maybe so—but no imaginable improvement in testing would overcome my objections to it. Our chief concern should not be to improve testing, but to find ways to eliminate it."³⁴

What is the purpose of testing? Is it solely to have students regurgitate facts so teachers can classify their pupils as A, B, C, D, and F on their report cards, or is it a valuable tool to encourage learning? One of the basic rules of education is: Learning increases in proportion to student involvement.

If students watched a TV program about animals, they would learn a few facts. If they were required to take notes for a class assignment, their knowledge would increase. If the notes were copied, and in one week a test were given, students would learn even more. Why? In order to know the material they would have to rethink the program and memorize important facts. If, after the test, the material were presented again for a midterm and then for a final, students would learn the most. The old rule that repetition is the art of learning is still one of the basic educational facts. Testing enables the teacher to discover how much students have learned, how active they were in the learning process, and how well the material was taught. Furthermore, tests and grades produce healthy competition, which stimulates students to study and learn.

Some people decry competition because it produces winners and losers, causes children to compare their unequal talents, creates inferiority complexes, and hurts feelings. Dr. Lee Salk, professor of psychology in pediatrics and psychiatry at the Cornell University Medical College, believes that, ideally, children as well as adults should compete against themselves. "One person's success shouldn't depend upon the failure of another," he said. "To strive to do a better job than you did before is the impetus to greatest growth."³⁵

There is no justification for unjust competition that forces children to

try to go beyond their abilities. Parents who do not regard their children's innate capacity do irreparable harm when they force their children with an academic shoehorn to fit their preconceived notions. On the other hand, reasonable and fair competition is an important influence in human motivation; for human nature has an element that leads people to become complacent, self-satisfied, and just plain lazy. Individuals often need encouragement to act. Imagine two teams that did not keep scores for fear of hurting one another's feelings. The thrill of sports is competition; it causes individuals to do their best in order to get the satisfaction of winning. Some educators would encourage physical or athletic rivalry but warn of the terrible effects of intellectual competition. One wonders how the battle of sports could be so beneficial while the battle of wits produces such serious consequences.

Why does achievement decline when grades are eliminated? Pupils are insufficiently rewarded when receiving only "pass" or "fail" grades. What happens when one pupil receives 100 on every test while another receives all 65's, but both get the same rating— "pass"? The student who diligently studied to achieve high marks will soon get the message that such study is useless. Let this same class receive grades, and it will achieve greater learning activity. Humans desire to succeed and be acknowledged. Grades and marks motivate students by acknowledging and rewarding their efforts. Finally, when the term is over, which students benefit the most? Indeed, if only self-competition is stressed, children failing to work at their own speed and advance to third-grade reading level in the sixth grade; they are successful.

Wishing to have much free time, teachers can use the following rationale to justify their lazy way of teaching: Good teachers need not give meaningless homework assignments to cover up faulty teaching. Class time is adequate for learning. Tests are unessential and create unnecessary stress. Children should enjoy their youth instead of staying home doing homework and studying for tests. Such attitudes will certainly engender friendship on the part of many students. Since most children abhor work, undemanding teachers are an accommodation to their aversion. Teachers of this type, however, must guard against student reaction. They grade liberally in order to avoid criticism. Imagine classes with no homework, no tests, and high grades. How many students would object? But it is this failure to develop proper work habits in children that is a major cause of their ruin.

Truancy and Dropouts

Joe David, describing his teaching experience in Washington, D.C., says, "Most children with whom I've worked are sensitive and easily discouraged. The slightest rejection can often shatter their fragile egos." In teaching low achievers I have detected the same low frustration level; they cannot handle discouragement and they readily give up. These children have not been trained to be persistent. Eagerly they start projects, but when difficulties are encountered, discouragement enters and the projects are abandoned. They are great followers of the pleasure instinct. Many take the easy road of truancy, then the ultimate trip—dropout.

The National Association of Secondary School Principals reports that the number one problem in our schools is truancy. The average attendance in New York City schools is 76 percent. "The 76% figure is a disgrace in and of itself," states Dr. Howard L. Hurwitz, former principal of Long Island City High School in New York City. During one of the last threemonth reporting periods in his school the average daily attendance was 90 percent. However, Hurwitz points out, "Even the 24% absence rate admitted by the reporting schools fails to reflect an even worse picture of actual attendance in our schools." Children report to their homerooms for attendance and then cut some or all of their classes. Hurwitz declares, "I challenge any member of the Board of Education to accompany a team of three reporters (one from each of the major dailies) to visit any one of 50 high schools I shall name (with registers of 2,000 to 4,000). Time of arrival should be about 1 P.M. on a regular school day. I predict that on that day, when the school is reporting 75% attendance, fewer than 50% of the students will be in the building."37

On a national average for the past decade, 26 students leave school for every 100 that graduate; but Washington, DC.; Philadelphia; Cleveland; Baltimore; New York; Detroit; St. Louis; and Chicago report that between 40 and 52 percent drop out. The problem becomes more acute because many previously available low-skilled jobs are now being rapidly phased out by new technologies. Today industries have more knowledge-oriented jobs, leaving many dropouts with the likely prospect of being jobless and dependent on public welfare—and possible involvement in criminal activities. Yet hundreds of thousands of skilled job openings go begging. Edwin W. Bowers, writing in *Iron Age*, a magazine for metalworking management, says, "The National Tooling and Machining Association (NTMA) puts the current skilled worker shortage at closer to 60,000 and rising rapidly. NTMA President Harold Corner says that by 1985 the

U.S. could be deficient in skilled metal craft workers by about 285,000 persons."³⁹

Strange, with all the stress on making schools so pleasant and meaningful, with educators trying hard not to damage children's particularly slow children's—self-esteem, that these staggering numbers of turned-off youth are fleeing the comfortable institutions meant to protect them.

A South Carolina study found that the typical dropout was a tenth grade 17-year-old white male; though reading two and a half grades below reading norm, he surprisingly never failed a grade. The reason the dropout cites for leaving school is that he dislikes it, but at the time of dropping out he is receiving in all his school majors a failing mark.⁴⁰

What is the real solution to this immense dropout problem? "If a student knows how to read, how to compute and how to write," says San Francisco School Superintendent Robert F. Alioto, a firm believer in the traditional approach, "then he will get an ego boost that no amount of social boosting can provide in the classroom. We are conning our children if we think we can pass them up grade to grade without giving them the tools they need to get along in our society. Youngsters who don't learn the basics are doomed to failure."

James E. Allen said that "for most slow learners, the trouble really started when they were not taught how to read in the critical early years. Given special I.0 tests that depend on interpreting diagrams or pictures instead of reading, two thirds of all problem readers turn out to have average or above average intelligence." ¹⁴²

Robert E. Grinder, author of the book *Adolescence*, says it has been demonstrated that the important time to help failing children is in elementary school rather than later on. Grinder reports:

Baymur and Patterson (1960) administered both pre- and post-experimental measures of personal adjustment, study habits, attitudes, and achievement motivation to 32 high school juniors divided into four matched groups; one group received individual counseling, another received group counseling, a third group had a "one-session motivated experience," and the last group received nothing. No differences were noted at all. During a three-year work-study experience for potential dropouts, in which school assignments were devised to maximize success, stable pupil-teacher relations were established, counselors were always available, and afternoon jobs for pay and school credit were

provided, Longstreth, Shanley, and Rice (1964) found that those who received special attention dropped out of school as often as those in regular school programs. Honn (1965) reported similar results from a one-year Back-to-School Project in Los Angeles. In spite of individualized programs, financial assistance, vocational guidance, and close, personal relations with counselors, 70 of 105 dropped out of the project during that time.⁴³

Billy Don Jackson, star linebacker for the University of California at Los Angeles, had great ambitions. Unfortunately, he is now serving a prison term for stabbing his drug dealer. Jackson, from Sherman, Texas, was one of the most valuable football players in America. Scouts from everywhere coveted him, Billy Don chose UCLA.

Billy Don had one drawback—he could not read. However, there were college classes that did not require much reading. After his freshman term he was voted by his team "most inspiring player."

By his sophomore year his honeymoon was over. His teammates discovered that he could not read; they began to tease him by challenging him to spell words. They sang "Billy Don Dumb Dumb," to the tune of "The Little Drummer Boy." He was embarrassed to go to his remedial reading class. In his junior year he would not attend all his football practice sessions and was suspended from the team. Increasingly he went to his marijuana dealer—the man he later stabbed to death.

Looking back, he regrets his crime, but he feels that his life could have been different. Now he wishes he had been made to study while attending Sherman High. "The more I got better known in town, the more each teacher didn't want to be the one to hold me back," he told the court. "They gave me better grades than I deserved." He analyzed that the core of his problem was his inability to read. Jackson claims he's not stupid; when the court gave him an IQ test, he scored 106.⁴⁴

Children must be helped before they settle into defeatism. This is a long-range program, but if we want to train successful students, solid proven methods of learning reading, writing, and math must be implemented in the early grades. Educators should honestly evaluate their programs so that every child receives a decent education, both the slow and the gifted. To hold back bright children in the name of equality is an injustice to their freedom. True equality exists when all children, bright and slow, are given the best education to develop their native talent to its fullest. This is training for excellence.