

DOCUMENT RESUME

ED 306 651

EA 020 835

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 TITLE Educational Reform.
 PUB DATE 98
 NOTE 41p.
 PUB TYPE Viewpoints (120) -- Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Competence; *Curriculum Development; *Educational Change; Elementary Secondary Education; *Public Support; Scores; *Vocational Education

ABSTRACT

The need exists for educational reform. Student achievement scores are down, unemployment and dropout rates are up, social and welfare costs are up, economic productivity has declined, and shortages of qualified teachers are imminent. After Chapter 1 of this paper provides background and history for school reform, Chapter 2 reviews the literature, highlighting the national educational crisis and developments concerning test scores, curriculum reform, the return to basics movement, course and text book content, and the teacher-preparation-versus-curriculum controversy. Chapter 3 discusses educational reform objectives advanced by professional educators, such as a continuing need for the basics, economics, and vocational education. This chapter also rebuts three of Robert J. Samuelson's educational reform pronouncements concerning community college access, academic requirements for guaranteed student loans, and teacher certification. In closing, this chapter stresses education's purpose (to provide today's youth with survival skills needed for tomorrow) and calls privatization of education good in theory, but impossible in practice. A summary suggests that educational reform decisions should be based on a variety of criteria, not on one statistic or opinion. Proclamations based on isolated test results are especially suspect. Serious reformers must compare reports and analyze their validity. From this base, educators can judge the merits of proposed reforms and devise appropriate plans for improvement. (37 references) (MLH)

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ED306651

EDUCATIONAL REFORM

by

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Fall, 1988

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

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CHAPTER 1

Introduction and Background

According to many reports today, America is a nation at risk. Student scores are down; international competition is getting ahead of us; teacher scores are down; unemployment is up; the future is rushing at us and we are not prepared to meet it. Few people would deny that as our education system goes, so goes our nation. Several quick fixes have been suggested for the improvement of the educational system and the betterment of humankind in the United States. Experts from all walks of life are proposing drastic reforms in the country's educational programs.

The problem presented to educators today is how to mobilize for change. How do we determine where changes are necessary? Exactly what changes are needed and in what order of priority? Who should implement these changes? Who will be affected, and how will the effects be felt?

One of the biggest hurdles in planning for educational reform is that it requires public support, which in turn requires that accurate information be disseminated to the public. The educational system should be designed so as to meet the needs of society; therefore, it must seek advice and information from the members of society. The schools are charged with preparing all students for useful occupations and good citizenship; in addition to preparing them to meet personal goals, such as good health habits and rewarding recreational pursuits.

The formulation of appropriate educational goals, therefore, necessitates input from a cross-section of the populations. The problem with educational reform movements is that they are often spurred by reports from people who are only partially informed.

Need for the Study

Most states report that about half of all their revenues are expended on education. With 17,000 school districts, more than 85,000 school board members, and 40 million students attending school each day, the quality of education affects our nation substantially. The several factors that are involved in achieving a satisfactory education system will be discussed in this study. The calls for reform related to these factors come from many diverse sources, including education itself.

Recent reports of national test results show that scores on the Scholastic Aptitude Test (SAT), administered to those high school students who stay in school long enough to take it, have declined in recent years. Concerned critics call for drastic and immediate reforms to raise academic standards.

The curriculum is the hardest hit in this call for a revitalization of programs. Proponents of reform stress a wide variety of emphasis: basics, science, occupational education, the arts, knowledge of history, whole-person learning such as problem-solving and citizenship. There seems to be little consensus among

critics and the variety in schools suggests that different reforms may be needed in different schools.

One set of critics blame textbook publishers for the current decline in educational achievement, at least in part. They claim that the curriculum is directed by textbook publishers, rather than . . . (they rarely specify who is the best qualified to determine the curriculum, but probably have a few definite ideas themselves about what should and should not be included in curriculum offerings). Hence, scholastic publishers must begin the reformation process.

The economic effects of poor education as seen in the statistics of dropouts initiate the concern of another group of critics. The later costs to society of the school leavers are much higher than the initial cost of educating them would be, and reformers demand that schools provide more concentrated instruction in order to keep these students in school. Related to this problem is that of the handicapped or disadvantaged, many of whom drop out because the schools are not relevant for them or are unable to meet their special needs.

Some reformers propose a simplistic solution which requires only that students spend more time at school work. This could involve increasing the number of school days per year, the number of minutes per day, or the amount of homework assigned to students.

Other reformers, claiming to have "real insight," blame the delivery of the instruction. They assert that teacher education programs should be reformed and teacher certification requirements should be raised; which, in turn, suggests that teachers would then be better prepared to educate, thus solving the problem. Along with this proposal is one to force more "professionalism" on teachers; but, in effect, this approach could create merely a "dedicated slave" rather than a competent classroom teacher.

Other groups demand more commitment from educators and school administrators. These reformers often have a personal stake in the future of a particular young person, but without the time themselves to commit to their own children.

The need exists for educational reform (as it has been for the duration of the American education system). It is a reality that student achievement scores are down, unemployment is up, dropout rates are up, the social and welfare costs of supporting unemployable dropouts are up, teacher candidate scores are down, shortages of qualified teachers are imminent, economic productivity is down, and shortages of skilled workers are evident. The task of those concerned about the future of the country and its people is to determine where the changes must be made and to formulate plans for implementing them.

History of the Progress of Educational Achievement

A review of the history of education and its goals should provide some direction for reforms in educational practice. In its earliest form, education was by "apprenticeship"--of a son to his father or a daughter to her mother. Children were taught by their parents the very basic survival skills they needed for life; and they also received the historical, cultural and social education necessary to make them integrated, productive members of their local communities. Sometimes these tasks were accomplished with a formal instructional session; other times it was "learning by doing."

As religion became more important to cultures, and also more segmented and systematized, children were also taught in formal groups by their spiritual leaders. This kind of instruction varied from community to community, but the basic purpose was to prepare the child to assume his or her responsibilities in the religious community; which often extended to the secular world as well.

With the translation of oral language into written symbols, education of a more erudite kind evolved. Anyone who had a book and could read it was qualified to teach. The instructional method at this time was based on the premise that you graduated from one tutor and his books, to another tutor and his books, as soon as you had memorized the first one(s). For scribes this was a very useful kind of training, but it had little benefit for anyone else.

Education based on recalling the content of books was the foundation of the classical education, which appealed to the elite; but which had little purpose or practicality in it, particularly for the masses.

It was only a few centuries ago that educational reformers began to offer more practical kinds of training for the poor. From this decision followed the realization that commerce needed a formal system of communication and recordkeeping. The first school in the New World offered three courses, one of which was casting accounts--a basic form of arithmetic. Although the more popular educational programs for the early settlers of North America were established by religious groups and had a nonsecular emphasis, they also provided students with the skills necessary to function in a civilization that was just starting to become interdependent.

As business and politics became more sophisticated, reformers like Benjamin Franklin and Thomas Jefferson realized that the study of the classics (the educational tradition inherited from Europe) was inappropriate for the students of the new nation. As competition increased during the industrial revolution, reformers gradually realized that more sophisticated and relevant instruction was required, with reference to both content and delivery. From their first efforts, the comprehensive high school of today evolved.

Thus, in the late 19th century, relevance was brought to the educational scene. Agricultural colleges began teaching improved farming methods. Following in their footsteps, specific vocational training programs were added to the curriculum to prepare students to get jobs, and to own and manage businesses and farms in the competitive marketplace.

In 1910, the public demanded that school curricula return to fundamental education. Reformers claimed students were not able to think, could not function in the world, and were not taught any real knowledge.

After World War II, Charles Prosser called for reforms in the education of noncollege or vocational students. By the 1950s, accusations against education addressed teacher incompetence, irrelevant curricula, poorly prepared graduates, and the absence of minimum standards. The parents of the mid-1950s wanted their youngsters to receive a "cultural" or "humanistic" education. But the Soviet Union's 1957 launching of Sputnik refocused the emphasis of education to concentrate vigorously on science and mathematics, because it was perceived that students of the future would need technological background to cope with the demands of the economic world.

Education in the 1960s attempted to meet the needs for more science in the high school curriculum. But by the early 1980s, educational reformers again reported on "the need to save the

country's high schools through requiring a tougher curriculum, better teachers, and increased community support" (Kent, 1987, p. 147).

Kent further diagnoses the current educational reform movement:

When more of today's earnest reformers recognize that current educational problems do not easily lend themselves to isolated analysis and deliberation, we will begin to deal with the root causes of the crisis in education. Educational problems must be studied in context with the matrix of society, where they manifest themselves in the actual lives of students and teachers. The study of history can therefore assist us by providing the proper perspective in which to examine those issues. As long as reformers refuse to situate education in the larger society and place it into the historical context of the educational reform movement, we can expect to see the continuation of the familiar demand pattern for reform; namely, a short burst of intense attention, followed by longer periods of inaction and neglect (Kent, 1987, p. 147-148).

Paul E. Peterson (1985, p. 194) makes this cryptic comment: "In periods of economic adversity, the success enjoyed by groups supporting school reform varied according to the soundness of the schools' finances." As educators, we dare not lose sight of the fact that our reforms must be relevant to the times and for the people. We need to continue to work for excellence, which includes conducting research about the needs of society in general and about

students in particular, and then address how the education system can best meet these needs. The implementation of research findings and recommendations requires community support and education.

CHAPTER 2

Review of the Literature

The purpose of this project was to gather ideas about educational reform in today's school system. Over the years, numerous educational practitioners and educational observers have proposed and tested methods to bring about reform in American schools. Sources included specific references from articles in educational journals, newspapers, a television talk show, and national news magazines. Because of the speed with which society's needs change in this age, the review covers only the last five years.

A Nation in Crisis

The crisis facing the United States as a result of the present state of education is not that student scores are low or that teachers are not producing significant student results. The problem, rather, is that students are not being prepared to function in our society. For most self-proclaimed reformers, some of whom are within the confines of the educational system and some of whom are outside, one or two statistics seem sufficient for a global pronouncement as to the nature of the reform needed.

The National Coalition of Advocates for Students reported that the dropout rates for disadvantaged and poor students multiply over time. Children of dropouts possess a great potential for being

dropouts themselves (Howe, Edelman, et al., 1985). This cycle continually reduces the economics power of the nation, because most experts agree that the greatest natural resource of a country and its business enterprises is the human resource. The educational system should be designed to help maximize use of this resource.

Test Scores

When the media announced the shocking news that SAT scores were declining, the cause was taken up by many partially informed groups and critics in the media who laid the blame at the door of public schools. Several task forces were mobilized to study this problem and to report on the ramifications and possible solutions to the dilemma.

A study of graduation requirements and course offerings as they related to SAT scores was initiated and reported in 1986 (Sinh, abstract). The variables were the number of units in English and mathematics required for graduation. The results indicated no statistically significant relationship between the number of required units and the test scores. The results of this study would lead us to believe that the amount of instruction provided in these two basic areas was not the cause of the low scores.

Silberman (1984) reported findings that indicated that although overall SAT scores declined, the average test scores of low-income students in special programs actually increased.

A special report published in the American School Board Journal in 1987 (Ordovensky, 1987) reported that, after small gains in two years, the national average for SAT scores remained at 906, unchanged from the year before. The same report listed Middlebury College in Vermont as the fourth institution to drop the SAT score as an admission requirement. Officials stated that the test provided no useful information about student abilities.

A comparison of the achievements of U.S. students in mathematics and science with that of their counterparts in Japan indicates that American eighth graders are way behind these foreign students. In light of the rise of Japan as an economic power, critics of the schools are crying for higher standards to match the Japanese. Reports on Japanese schools indicate that students have more homework and more parental support for education. This might suggest that American parents are largely to blame for their youngsters' poor science and math scores.

In an article entitled, "The Danger of Standardized Test-Driven Score Reform," the Clearing House reported that "The public has been influenced to think that the quality of schools is equivalent to SAT, ACT, and other achievement test scores" (O'Rourke, 1986, p. 136). The author suggests that we, as educators, need to try to change the way the public thinks, rather than trying to change the educational system to match the public's opinion.

Curriculum Reform

A warning comes from T. R. McDaniel. He predicts that criticism only creates "resentment, not repentance" (1987, p. 244). He maintains that the excellence that is called for may take precedence over the equity which we have sought for so long. In addition, McDaniel expresses the fear that the emphasis on cognitive learning (left-brain function) will overshadow the concern for character development and affective learning (right-brain function). If this author is correct, schools will become very dull, gloomy, impersonal places, concerned with scores rather than with student needs.

Carl Glickman, a noted spokesman on how to create effective schools, describes (1987) a school that is devoted almost totally to covering the curriculum. Recess, athletics, and sports have been eliminated and field trips and the like are no longer permitted. Drill and practice are the orders of the day. Learning is concentrated in structured group settings. He discusses the difference between good schools and effective schools. Although higher scores resulted from this strict school plan, Glickman asks if it is the goal of education. He writes that "We educators must be accountable to ourselves. What we see as worthy should mediate what we do. What are our educational goals for students?" (p. 624).

Return to the "basics." The movement for a return to the basics has lost much of its momentum, but schools are still trying to design curricula that will meet the needs of students and also satisfy those who consider fundamental instruction to be the sole purpose of schools. M. Hershey searches in vain for a definition for basics, in his report "Some Basics about the 'Basics'" (1986, p. 148).

What are the basics? To a Samoan fisherman, it would certainly refer to the skill of fishing. To a starving Ethiopian, it would involve gathering food. To a socially maladjusted child, it must include the development of social skills. To a world that could be destroyed by one madman, there is only one "basic"--the hope that sanity will prevail.

M. Hershey reports the following anecdote about a great American philosopher (p. 148): "Thoreau once watched the kind of teacher our man on the street had in mind when he talked about 'basics.' After observing this saga on the stage for several hours, he inquired, 'Why do you want your students to be just like you? Isn't one of you enough?'"

Hershey borrows an idea from another great American, Thomas Jefferson (p. 148): "There is nothing as unequal as the equal treatment of the unequal." The author's conclusion is that the basics should be appropriate, not standardized by an educational reformer.

Writing skills are reported to be "woefully inadequate" (Ordovensky, 1987 p. A4). Varnam (1986) suggests three possible reasons for the reported literacy problem in the schools. The first is that a legitimate decline has occurred in the system. The second reason is that the results indicate a lower standard than that shown by another educational system. And the third reason is that expectations have actually been raised. Varnam claims that the last reason is in operation now; that national standards have been raised because of the increasing educational levels across the total population. Silberman (1984) reports that mean IQ tests for a representative sample of the population improved by 13.8 points.

Dr. Blai evaluates reports on American students who perform at lower average levels than students of other industrial countries, but states that "this comparative performance instrument is somewhat flawed" (1986 p. 38). In European countries, education is for the elite. In the United States, education is for all. A comparison of United States students with their academic counterparts in other educational systems reveals little or no difference in achievement levels. He summarizes recent research in the area of learning time by saying that although research does support the theory that "time on task" bears a direct relationship to amount of learning achieved, simply adding more time, more homework and more courses may have an adverse effect if there are no rewards in this new system. Therefore, he concludes that the value of

increasing the amount of time spent on education is dependent upon how it is used.

In "Underprepared Students and Public Research Universities," Martin Trow (1985) presents his view of the goal for reform in the 1980s. He reports that colleges and universities are accustomed to having to provide remedial instruction and opportunities for course repeaters. He relates current problems to those of the 19th century, saying that all of these problems of adequate schooling have been symptoms of our national education system from the time it was first organized.

Increasing standards and requirements. The attention to raising standards and increasing requirements as a part of curriculum reform concerns educators because it will almost surely produce an increasing number of dropouts. This problem will in turn result in lower economic achievements and the need for more social programs and higher taxes to support the dropouts. Education should be appropriate and useful, and not simply produce a minimum performance level established by the most influential group.

K. E. Lane (1987) posits that an increase in standards does not necessarily result in an increase in quality. True educational reform, he maintains, is a product of teacher innovation, not of legislation. The strongest laws in the land will not produce improved test results.

The increase in school standards will lead also to more retention of students and more repeats as well. The cost of holding a student back is about five times that of educating him or her for the first time. Norton says ". . . failure does not inspire future success or does it serve to develop a realistic sense of one's own strengths and weaknesses" (1987, p. 327). Few of the studies on student retention consider it to be a useful practice. One technique that has been used successfully is to provide a nongraded system where the student would work at an individual pace to make up the deficient area. (This plan, of course, would involve additional staff and money.)

The controversy over what should be taught. Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, warns that we need a common core culture, including history and political development. He rejects the theory that the plurality of our culture creates a stronger bond--one to the "homeland," and on to the United States. According to this theory, and with the knowledge base doubling every ten years and history increasing minute by minute, high school graduation would be the culmination of about 32 years of elementary and secondary education! The lack of basic knowledge has been blamed on the elective system, where students are allowed to choose their courses of study. An expert in the field suggests that because educators

do not know what their students should know, they leave the course-selection decisions to ill-equipped students.

Estimates of the proliferation of knowledge suggest that more mathematics have been created in this century than in the entire rest of history. Graduate programs in engineering are now teaching content that will be outdated in a decade. By the time one reaches middle age, half of one's knowledge will be obsolete (Ornstein, 1987). Allan Ornstein warns that what is taught in curricula now must have a purpose in the future or be outdated before it is learned. He enlists support for his theory by referring to Alvin Toffler, Herbert Spencer, and Plato.

One of Ornstein's premises is that knowledge should be a tool that facilitates lifelong learning. Perhaps our most useful function is not to teach content at all, but to teach a type of discovery learning wherein pupil learns how to learn and develops a love of exploration into new frontiers of knowledge.

In vocational education, reformers support the goals of increased excellence in academic achievement. Educators also stress the need for vocational competence and related work experience (Adams, Pratzner, Anderson, & Zimmerer, 1987). Perhaps this plan is a valuable goal for educators in other subject areas. If all educators sought to provide the student with a practical skill or knowledge base, we might see a lower dropout rate and higher achievement levels.

An Indictment of Textbooks. Reformers on the rampage attack textbook publishers, accusing them of being responsible for the watered-down knowledge that trickles over students' consciousnesses by way of the curriculum (Joyce, 1986). Current educational reformers claim that instructional materials contain very little real content.

Henry Billings (1987), author of textbooks, takes a stand in defense of textbook authors. Billings says that the pressure of retaining the markets here is a very real battle for textbook publishers. Standards for social equity have required that much of our school book material be couched in terms that are in-offensive to anyone, even to the point of distorting accounts of historical events.

Teachers and Teacher Education vs. Curricula

There are two schools of thought concerning where changes in the schools should occur to solve its problems. From one group comes the idea that the curriculum is at fault, and from the other, that the teacher preparation standards are the culprits. The two are interrelated because, despite what content is specified by the school curriculum, it is from the teacher in the classroom that the learning goals will emanate.

The Iowa State Teachers' Association prepared this summary of the Carnegie Report (Sutton, 1987, p. 2):

Schools must be redesigned for the economic and social conditions of the 21st century. To remain competitive, America must shift its economy from goods to knowledge. Americans' work will shift from rote to higher-order skills. Work involving higher-order skills is more complex and increases interdependency. Increased interdependency requires a broadening knowledge of events to maintain democracy in a technocracy. A new system of education will be necessary to insure the competitiveness of our economy; the competence of the workforce; and the health of the democracy.

The American Federation of Teachers (1986) concurs with this opinion--that professional educators must be involved in the process of updating and maintaining the curriculum. The goal of providing each student with an appropriate education must provide the impetus for any educational reform movement.

Sutton (1987) supports this view for educator-directed reform with an analogy. She asks who sets the requirements for medical school and facetiously illustrates her point by suggesting that perhaps business people would be the best qualified to assess medical certification requirements.

In a recent issue, Phi Delta Kappan (Oakes, 1986) addressed the idea of tracking. This educational practice serves to increase the differences between students, lower achievement levels for low achievers, and raising achievement levels for high achievers. If the intention of tracking is to provide equality of educational opportunity . . . it seems to fall short of the mark.

In Western Europe and Japan, students are expected to know language, culture, and national history. The depressing report, "What Americans Should Know," denigrates many teaching practices that are firmly rooted in sound pedagogical theory. This particular writer for U.S. News and World Report makes this pronouncement (Sanoff, 1987, p. 86):

Scholars say that the crux of the problem is the curriculum. It has become so diffuse and undemanding that there is no longer a core of information most Americans possess. Instead, an intellectual Tower of Babel poses a threat to democracy.

The report by the Holmes Group is a straw that many people have grasped as a way to immediately solve all economic ills and fix the schools. The plan originally called for strict federal controls of teacher certification standards and increased requirements for teachers, including a basic competency test and an extended program of professional preparation. Reports indicate that the scholastic level of teacher entrants has declined, and reports from different sources (Watts, 1986, and Ford, 1986) reveal that 9% of all public school teachers were not certified to teach in the areas to which they were assigned, and 21% of private school teachers were similarly uncertified. (Perhaps these "experts" assume that teacher competency has fallen about 9% to 21%, and it is this phenomenon that has produced the subsequent decline in student achievement scores.)

Although most nationally-published reports are calling for increased content requirements, several professional educators are disclaiming this factor as the cure. K. P. Cross (187) notes that 30 or more major reports for educational reform have appeared since "A Nation At Risk." The author reports the following (1987, p. 6):

The general conclusion from research on the question seems to be that people will perform at their best in environments that encourage and reward excellence and demonstrate respect for individual workers. There is a shift today from scientific management techniques to the cultivation of environments which nurture people and their ideas. Excellence necessarily begins with people.

Perhaps this problem could be alleviated by requiring that undergraduate education majors take courses only from certified professional educators.

Gary Rhoades (1987), a teacher educator in Arizona, discusses differences in Japanese and American schools in terms of student achievement and teacher preparation. The higher scores among Japanese students are considered to be a result of intense content preparation, but no educational theory for their instructors. This factor, however, is considered to be a defect of the Japanese system. The British teacher-preparation plan is similar. Their teacher performance is compared to that of an academic tutor for the gifted--someone unprepared to instruct the diverse masses. Rote learning is the easiest form of education in this situation;

problem-solving and higher-level thinking skills have little place in an educational system where teachers are experts in the practical aspects of their fields and not in the actual application of the information or skill.

CHAPTER 3

The Objectives of Educational Reform

Before any recommendations can be formulated, the goal or end result must be determined. In order to define our objectives, we turn again to the professional educators for suggestions.

A continuing need for the basics. Professor of Education at Loyola University of Chicago, Allan C. Ornstein, is a widely published curriculum specialist. His recommendations are that knowledge should consist of the basic tools of reading, writing, arithmetic, oral communication, and computer literacy (1987). These tools should be taught in such a way that they aid the learner in dealing with the world. They should assist the individual in developing skills for lifelong learning. Ornstein breaks these principles down into ten points, but his fundamental premise is that education should prepare the student for life--for the demands of the work world, the economic marketplace, the social world, and for democratic responsibility. The process of education should allow the student to grow and realize personal satisfaction and success.

K. P. Cross purports that quality in education is dependent upon meeting the needs of the constituents: "Excellence necessarily begins with people" (1987, p. 6). Without a clear idea of the individuals we are serving and their needs, education will be purposeless and will always be in need of massive reform.

The author of "Where is the 'Real' Problem?" (a member of the Investigational Maths Project in Essex, England) asks some basic questions about mathematics: ". . . when is mathematics useful? To whom? Who decides? On what criteria?" (1987, p. 196). He recommends studying the world in which we live in order to produce answers to help solve the dilemma of curriculum content. Relating learning to problem-solving for daily life is the purpose of education, he says.

J. S. Swift in 1987 reported a consensus among more than 1,400 educators as to the basic academic competencies needed by students. They include reading, writing, communication, mathematics, reasoning, and study. Swift warns that education must not become a servant of the test, and he recommends that new methods be found to evaluate the success of the educational program in preparing students for life in the future society.

A need for economics. In a survey of a representative sample of middle-class Americans, 86% recommended that economics be taught in at least one level of the school system, and the majority of respondents recommended that it be taught at more than one level (Beltrami, 1985).

A need for vocational education. The U. S. Secretary of Labor, William E. Brock (1987) believes that the key to the economic future of the nation is education. He stated that most workers will change jobs five or six times in their lifetimes and

will need additional training and complete retraining in order to meet the demands of the technological work world. Brock believes vocational education will be one of the key factors in reducing the unemployment and the dropout rates. He calls for a renewed commitment to updating and providing opportunities for cooperative education in vocational education.

Quoting from The Wall Street Journal, the executive director of the American Vocational Association (1987) reports skilled craftsmen are in demand. Bricklayers, roofers, carpenters, seam fitters, sheetmetal workers, and repair workers are in short supply--but they are needed by our nation's businesses. Unless vocational education is permitted to offer appropriate programs, the United States may lose even more ground in its economic position in the international market.

Vocational education has a proven success record in reducing the number of high school dropouts. Of those that do drop out, some already have the vocational skills to make it in the real world (Weber & Mertens, 1987).

Using data from a 1983 study (Campbell & Puelo, 1986), the National Center for Research in Vocational Education published statistics for high school students in public school curricula. The center reported that of the 76 out of 100 students who graduate from high school, 34 come from a vocational curriculum, 31 are from the general curriculum, and 11 graduate from an academic

curriculum. Of the 100 students, 38 went directly to work upon graduation. Since students in the vocational education curriculum are more likely to be low achievers or disadvantaged, the increase in academic requirements and reduction of vocational programs will probably affect them directly and result in a much higher rate of dropouts.

Rebuttal to Some Views

Robert J. Samuelson (1987, p. 79) "wrote" to William J. Bennett, Secretary of Education, and made his pronouncements as to the reforms needed in education. His three statements are provided below, with rebuttal from a vocational education teacher following.

1. The states should close 15% to 20% of their universities, colleges and community colleges. Almost anyone who wants to go to college can. All that's required is a high school degree. Only elite state and private schools remain selective. Standards suffer. High school loses its relevance because students know they can go on to the next stage. Once in college, they're less prepared. The result is huge waste and personal disappointment. About half of college freshmen don't graduate.

Samuelson assumes that dropouts achieve no success in college or university. The reality is that many students attend tertiary institutions for a particular purpose and then "drop out." The purpose of the institution is to serve the population, not to create a body of elite scholars. The community colleges serve a

different function from the universities. They strive to fill the work force's needs for retraining, a program that requires speedy mobilization--not one that allows a student the luxury of attending a program to "complete high school first." As pedagogues, we establish what we believe to be curricula requirements that will benefit the student the most. In certain cases we err. A brilliant scientist may be lost due to a deficiency in English. The author confesses to a deficiency in mathematics caused by transfer from an Australian syllabus ninth grade to an American syllabus tenth grade. Placement in the more advanced course resulted in a gap in basic algebra. This author graduated from high school with a less-than-admirable mathematics score, but passed the required college algebra course with flying colors.

The cases must be individualized to meet the student's needs and to meet the nation's needs for a qualified, but largely specialized work force. Perhaps the elimination stage should be at the grade school, rather than the high school. Probably Grade 2 would be the ideal place to begin eliminating students for low achievement. That would definitely improve college scores!

2. The federal government should adopt academic requirements--minimum scores on standardized tests--for guaranteed college loans. States should raise tuitions at their colleges and universities. Subsidizing those who are unqualified or can afford to pay is senseless. Student tuition and fees at state schools average only 40% of those charged by private colleges and

universities. Higher tuition revenues should be used to raise scholarships for needy, qualified students.

That the federal government adopt academic requirements for guaranteed school loans is a logical conclusion. This would only exclude those adult re-entry students who have been out of school for several years and find it difficult to get back into the routine of school. It might also eliminate returned servicemen and women, for whom the government invests large amounts in retraining as a reward for risking their lives in service to their country. Naturally, this would also curtail a large number of rehabilitation programs for worthy members of society such as "cured" alcoholics and handicapped adults. Samuelson assumes that a student who does not do well in high school (naturally, this couldn't be the fault of the home life, economic or social conditions, or of the high school) will not do well in college either.

This may be true, but perhaps a psychological test to determine motivation and determination would be more beneficial. Many rich, well-educated students attend college for the sole purpose of partying, because they intend to go into business with Daddy anyway.

3. States should end the standard certification route for public-school teachers--a degree (of course) from teachers colleges. To get better teachers requires a larger pool of candidates. Teachers should know more about what they teach; science, mathematics, English, history. We need tougher teacher-competency tests that

anyone could take. Teachers colleges would then focus more on substance, less on teaching methods. These are vital, but should be taught by the schools. New teachers shouldn't be tossed into classrooms; they need better orientation courses and more time as assistants to experienced teachers.

Samuelson contradicts himself by saying that we need tougher teacher competency testing and that teachers should have more background in their specific subject areas. The competency test will not measure subject areas except the very basic. It must, by the nature of education programs today, be weighted in favor of one particular group of teachers over another. Competency in a particular subject area depends upon the particular college program and, to a certain extent, on the needs of the local education systems. He also states that new teachers should have a period of apprenticeship; apparently he has not heard about student-teaching. As with all vocations, rote ^{***} knowledge is not the test of ability to perform in a profession. The measure of a teacher is the student's learning, not the teacher's learning. After completing 16 years of school, most beginning teachers know how to learn. It's how to teach that gives them problems.

What we probably need is a course on how to educate yourself, and another one on how to educate your students. For each individual teacher, subject area needs vary with the school and

with the students. In-service and out-service (summer school, etc.) would be more useful in helping the instructor make valuable decisions about what further education and training are relevant, based on his or her own specific needs.

In addition to these three recommendations, Samuelson also states that the power of regulating the schools must be centralized. Certainly, the only way to make sweeping educational reforms of a specific nature is to dictate them from a federal level. This was how vocational education was funded in the early days. After struggling with it for over 30 years, finally the legislature and the educators turned to block grants to allow the states to divide federal funds among local programs as needed. Administering programs in all the high schools in the United States is a monumental, even ludicrous, responsibility to assign to one office of education.

Rationale for Reform

The purpose of education is to provide the youth of today with the survival skills they will need for tomorrow. Education is a service provided for two populations--the students and the society. In a free enterprise system, we should perhaps privatize our educational systems and force them to compete in the global marketplace. This is one suggestion that has been made to improve our schools. The theory is good, but is neither practical nor feasible, for several reasons. A single school system in a small community

functions more economically than several competing ones in terms of building, support staff, energy costs, etc. A large classroom with one master teacher and an aide handling a class of perhaps 50 students would be more economical and effective than these same classes taught separately by the individuals (on the theory that two heads are better than one, and our students deserve the best).

Although the actual practice of privatization is impractical for many situations, the theory is excellent and has produced greater student achievement (Time for Results, 1986). These achievements resulted because schools were able to specialize and because parents felt more committed to the school that they had chosen than they did to one that was forced on them. (Or perhaps the parent who wanted to choose their own schools were more likely to encourage their children to greater heights anyway.)

On the tenet that education is a business, let us again consider education from a marketing standpoint. First, we must assess the needs of the customer. This is a two-pronged approach. The direct customer is the student, but the student's customer is the employer and society in general. Therefore, we need to consider the needs of both. If the student is not amenable to what society requires of him or her, it is the task of education to convince the student that this is the best and most desirable avenue of education. In other words, if the market is not there,

it must be created through marketing techniques such as advertising and other promotional activities.

Educational reform cannot be based on one person's view of the situation. It must be a consensus of opinion of those involved in the educational process and of the society as a whole.

Summary

Determining the place and process for educational reform is a task that should involve analysis of the school system and of the needs of society and of individual students. Periodically, reports of astounding findings in education are publicized. A knowledgeable source will proclaim that the results of some test or project reveal that a particular area needs to be reformed (time on task, textbooks, discipline, teacher education programs, certification requirements, etc.).

Such proclamations are frequently based on isolated test results. In the case of the declining national test scores, the reformers announce that standards are declining and that something must be done to bring them back to their former levels. No effort is made, however, to determine if the test is relevant or has ever been relevant in determining educational needs of students and of society. In comparing American student scores with foreign student scores, no effort is made to analyze whether the test criteria are valid for the needs of the individual student in each individual

country. A wide variety of sources need to be researched in the attempt to give direction to the educational reform movement.

A distinct problem with many of the research efforts is the slant of the researcher in defining and addressing the problem issues. If the person directing the project is a reactionary and believes that the past was perfect, the use of facts that show lower scores in the present will be most useful. A scientist determined to show that more general science is needed in the schools will use data that show total science scores as being deficient based on past scores or in comparison of student scores in other nations.

Although not a new topic, the educational reform movement is probably more comprehensive than in the past, perhaps for two basic reasons. One reason is the move towards a global economy that is affecting a greater portion of the nation than ever before in terms of foreign trade imbalance and competition for the market share.

The second reason is the improvement of mass communication methods that can inform a larger number of people than in the past. The problem arises when the information disseminated through these improved channels of communication is biased, prejudiced, or has little direct bearing on the subject of educational reform.

Recently several sensational reports from a variety of sources have provoked criticism of specific areas of the educational system

and have caused general criticism of the performance of the entire public school system and its professional educators.

Enthusiastic reformers have addressed isolated areas of the educational processes and have demanded or proposed sweeping reforms in particular areas. Although many of these suggested reforms are, in fact, needed in many of our schools, the solutions usually address only a portion of the problem.

Decisions for educational reform should be based on a variety of criteria, not on one statistic or opinion. A consensus of opinion should be reached as a result of consultation with students, parents, employers, political and religious leaders, business people, and professional educators. The economic and social future of the nation depends on the quality and effectiveness of the education provided to its citizens.

Based on the insightful commentaries by numerous educators in the past two years alone, this author is convinced that movements for reform in education have not been dormant, as it might appear from some media reports.

The charge to each serious reformer, then, is to compare reports and analyze their validity. From this base, the educator will be able to judge the merits of the particular reforms being proposed and devise plans for improvement of education on a local and even a national basis. The reformer must always keep in mind, however, that the purpose of reform is to improve the quality of

the educational system for the purpose of meeting the needs of the society and its student population; its purpose is not to bow to the demands of public opinion.

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