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## Knowledge Is Power

The effect on our lives of recent scientific and technological developments is just the latest manifestation of a profound truth summed up by Francis Bacon 400 years ago: knowledge is power. For the United States, knowledge and skilled intelligence are the new raw materials of international commerce and will define our nation's place in the world's future economic order. Yet our national investment in basic research, the source of new knowledge, has declined as a percentage of gross national product since the late 1960's.

Another trend, further reaching in its implications, is the deterioration in the quality of our nation's schools. The 1983 report of the National Commission on Excellence in Education asserts that the educational foundations of our society are badly damaged, a condition threatening our future as a nation and as a people. Here are some statistics brought to the commission's attention:

- Comparisons of student achievement, completed a decade ago, reveal that on 19 academic tests U.S. students were never first or second and, in comparison with other industrialized nations, were last seven times.

- Some 23 million U.S. adults are functionally illiterate as judged by the simplest tests of everyday reading, writing, and comprehension.

- From 1963 to 1980, average verbal scores on the College Board's Scholastic Aptitude Tests dropped over 50 points, and average mathematics scores dropped nearly 40 points.

- The proportion of high school students in general studies programs was 12 percent in 1964 and 42 percent in 1979. This is a telling statistic: a general program of study prepares students neither for college nor for work.

In light of these and similar findings, the commission arrived at three major conclusions. First, our educational problems are real enough and serious enough to put the nation at risk. Second, there is a growing impatience with the shoddiness in many walks of American life, a shoddiness that is all too often reflected in our schools and colleges. Third, the decline in American education stems more from weakness of purpose, confusion of vision, underuse of talent, and lack of leadership than from conditions beyond our control.

The good news is that this country is ready for educational reform. Many encouraging developments have occurred, at least partly in response to the various reports issued last year. Department of Education figures, as of April 1984, indicate that (i) 47 states have proposals to increase high school graduation requirements, and 34 states have enacted them; (ii) 34 states are in the process of raising college admission requirements, and 22 have done so; (iii) 37 states are experimenting with ways to find more time for academic instruction—7 have enacted a longer school day, 7 have instituted a longer school year, and 18 are enacting policies for participation in athletic programs and limiting extracurricular activities during the school day; (iv) 17 states are exploring merit pay proposals, 29 are examining career ladders for teachers, and 6 have adopted such programs; (v) 275 state-level task forces have been established in 50 states, including among their members professional educators, parents, legislators, employers, and other concerned citizens. A gratifying number of local school districts have begun comprehensive planning efforts, reviewing the curriculum, studying the status of teaching, and improving school leadership.

The educational reforms now under way will help our society make the transition from the old economic order to the new. This transition will not be easy. But if we care about our future economic strength and the vitality of our social institutions, we will pay attention to this transition and to the educational system that underpins it, for it is upon the success or failure of our schools, colleges, and universities that America's place in the world will be either secured or forfeited.—DAVID PIERPONT GARDNER, *President, University of California*