Education—Our Inexhaustible Resource

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The American economic and political system has brought living standards for all our people unparalleled in any other country on the face of the earth. There is convincing evidence that "The Great American Dream" of yesterday is constantly translated into better living today.

The economic growth of our nation over the past couple of decades has been truly phenomenal. Our economy has doubled in size in less than 20 years. Reliable predictions are that it will double again in the next 20 years. Real income per person in America has increased by about 50% in the last 20 years and there are indications that it will increase another 50% in the next 20 years. This is a phenomenal rate of increase in the economic well-being of a nation.

If you think for a moment that our people aren't 50% better off, on the average, than they were 20 years ago, just drive 100 miles down any road in your home state and look at the new homes, new factories, new schools, new highways, families with two automobiles, TV antennas on the roof, larger share of youngsters in college, new churches going up all over the place, vast amounts of money spent for vacations and recreation, and a score of other evidences of economic well-being.

Economic growth of this magnitude can be accomplished only on the solid foundation of research and innovation.

A Great Future Lies Ahead

There is a real opportunity ahead for anybody who has imagination enough to participate in the Great American Dream. America is on the threshold of its most challenging and most prosperous decade.

This is the age of science and technology, based on research. The frontiers of the mind have replaced the frontiers of geography. A thrilling experience awaits every citizen in this great land who has the capacity and the imagination to "dream constructively".

The scientific and technological advances we will experience in the next decade will be unparalleled in American agriculture and industry.

The geographic frontier in America is gone. No longer can a young man "Go west" and stake out his claim. But the scientific frontier in America is barely scratched. And the scientific frontier has no effective limit. It is limited only by the mind and the imagination of man. Its horizons are vertical, not horizontal.

Organized and imaginative research is the vehicle which will push the scientific frontier beyond limits we scarcely dare dream of today. It follows logically, therefore, that if we tax the resources of our intellectual and financial institutions, we can keep our economy free and preserve an environment in which individual producers and scientists are free to dare dream of today. It follows logically, therefore, that if we tax the resources of our intellectual and financial institutions, we can keep our economy free and preserve an environment in which individual producers and scientists are free to

It is to this noble purpose that you who sit before me dedicate your energies.

This is a thrilling time to be permitted the opportunity to occupy a front-row seat for the scientific and technological revolution occurring in our colleges and universities, in our research foundations and laboratories, in our industry and financial institutions.

Consider with me for a moment our total agricultural plant in this country, which affords an excellent example of an industry in the very middle of a scientific and technological revolution.

Changes which have occurred in productivity during the past 10 years have been phenomenal. Greater changes lie ahead.

American agriculture is now feeding our population on science and technology. Today the average farm worker in the United States produces enough for himself and 23 others. A generation ago, he produced enough for himself and only 9 others. A generation ago, in 1830, one farm worker produced enough for himself and 3 others.

Technological changes have resulted in startling increases in output per acre, per animal, and in total physical volume of output of U.S. farm products in 1958 was about 50% above a quarter of a century ago. The larger output was produced with about half the existing farm workers. This means that the output of American agriculture has more than doubled in the last quarter century. This is a record of increased productivity that can be matched in very few places in the economy. This has resulted in a higher level of living for farm families, and cheaper food for urban families.

Indeed, the productivity of the American farmer is so high that our problem in America is to learn to live with plenty, rather than to struggle along the road to attempts to restrict farm output the way we've attempted to do in the past. It is not necessary to travel very far among food deficit nations to realize what a blessing it is to have enough food and the problem of too much food. If one must choose between not having enough food and having too much food, I'll always choose the problem of too much food. It's a blessed problem.

Our modern scientific agriculture, based on technology, is so efficient that we now feed the entire population with only 10% of our people in agriculture. The first claim of any society upon its total resources is to get enough food to keep alive. This is true in primitive societies, in semi-developed countries, and in the United States. If we can feed the entire population of the United States with 10% of its people in agriculture, we are vertical, not horizontal.

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