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RAISING LOW INCOMES THROUGH IMPROVED EDUCATION, A STATEMENT
ON NATIONAL POLICY.

COMMITTEE FOR ECONOMIC DEVELOPMENT, NEW YORK, N.Y.

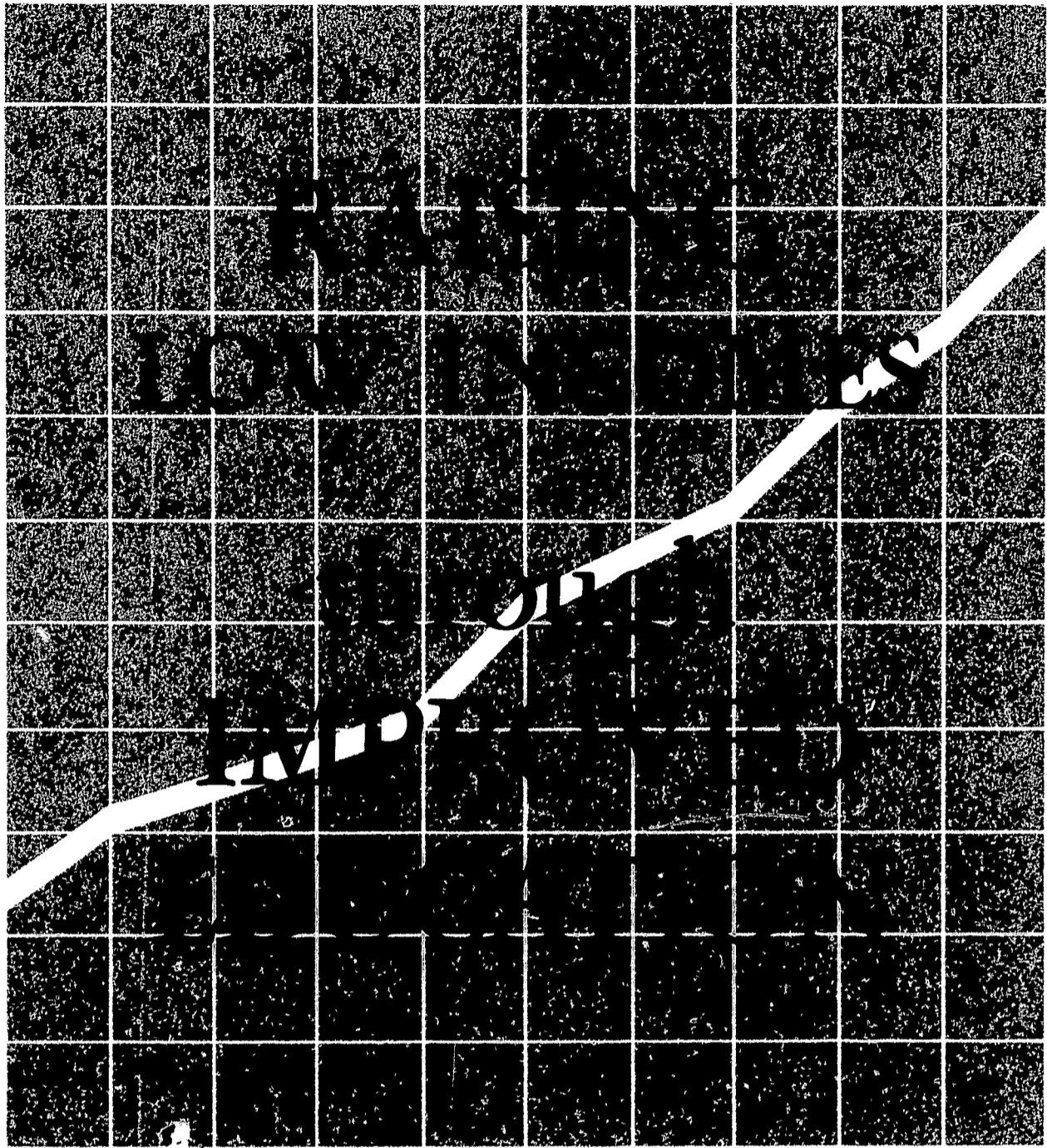
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ILLITERACY, *EDUCATIONAL POLICY, *UNEMPLOYMENT, EMPLOYMENT,
VOCATIONAL REHABILITATION, EDUCATIONAL FINANCE, ECONOMIC
FACTORS,

THE ENLARGED FEDERAL ROLE IN EDUCATION DOES NOT RELIEVE
OTHERS OF THEIR RESPONSIBILITIES. ONE OF THE MAIN PURPOSES OF
THIS POLICY STATEMENT IS TO URGE GREATER EFFORTS BY STATES,
LOCALITIES, AND PRIVATE BUSINESS TO DISCHARGE THEIR
RESPONSIBILITY TO IMPROVE AND EXTEND EDUCATION AND TRAINING
WHICH WOULD CONTRIBUTE TO RAISING THE PRODUCTIVITY, AND
CONSEQUENTLY THE INCOMES, OF MANY AMERICANS WITH BELOW
AVERAGE INCOMES. MORE AND BETTER EARLY EDUCATION, BEGINNING
BEFORE KINDERGARTEN, SHOULD BE PROVIDED FOR DISADVANTAGED
CHILDREN. STATES AND SCHOOL DISTRICTS SHOULD MODERNIZE
VOCATIONAL TRAINING TO BRING IT INTO LINE WITH OCCUPATIONAL
REQUIREMENTS. STATES SHOULD ESTABLISH ADEQUATE SYSTEMS OF
CONVENIENTLY AVAILABLE EDUCATIONAL INSTITUTIONS BEYOND HIGH
SCHOOL. PROGRAMS FOR TRAINING AND RETRAINING ADULTS AND
REHABILITATING THE PHYSICALLY HANDICAPPED SHOULD BE EXPANDED.
PROGRAMS TO ELIMINATE ADULT ILLITERACY SHOULD BE INITIATED.
IN FEDERAL PROGRAMS FOR ASSISTING ECONOMICALLY DISTRESSED
REGIONS, MORE EMPHASIS SHOULD BE PLACED ON FINANCES FOR
CONSTRUCTING AND EQUIPPING EDUCATIONAL AND REHABILITATION
FACILITIES. MORE USE SHOULD BE MADE OF THE CAPACITIES OF
BUSINESS FOR TRAINING WORKERS AND DEVELOPING EFFECTIVE
EDUCATIONAL METHODS. IT WILL BE NECESSARY TO OPERATE THE
EDUCATIONAL SYSTEM MORE EFFICIENTLY, BY BETTER ORGANIZATION
OF SCHOOL DISTRICTS, QUICKER APPLICATION OF MODERN
TECHNIQUES, AND MORE RESEARCH TO DEVELOP BETTER TECHNIQUES.
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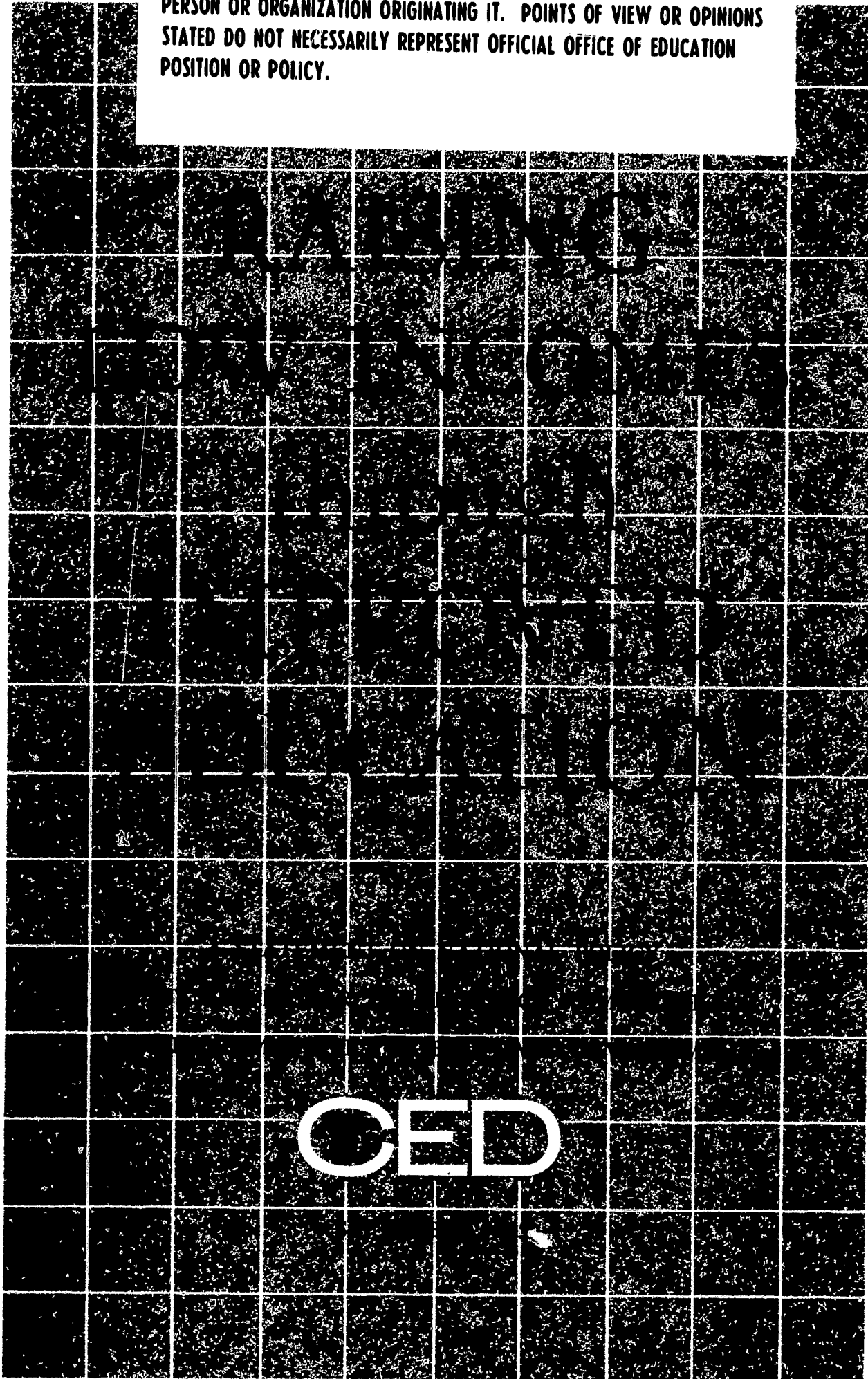
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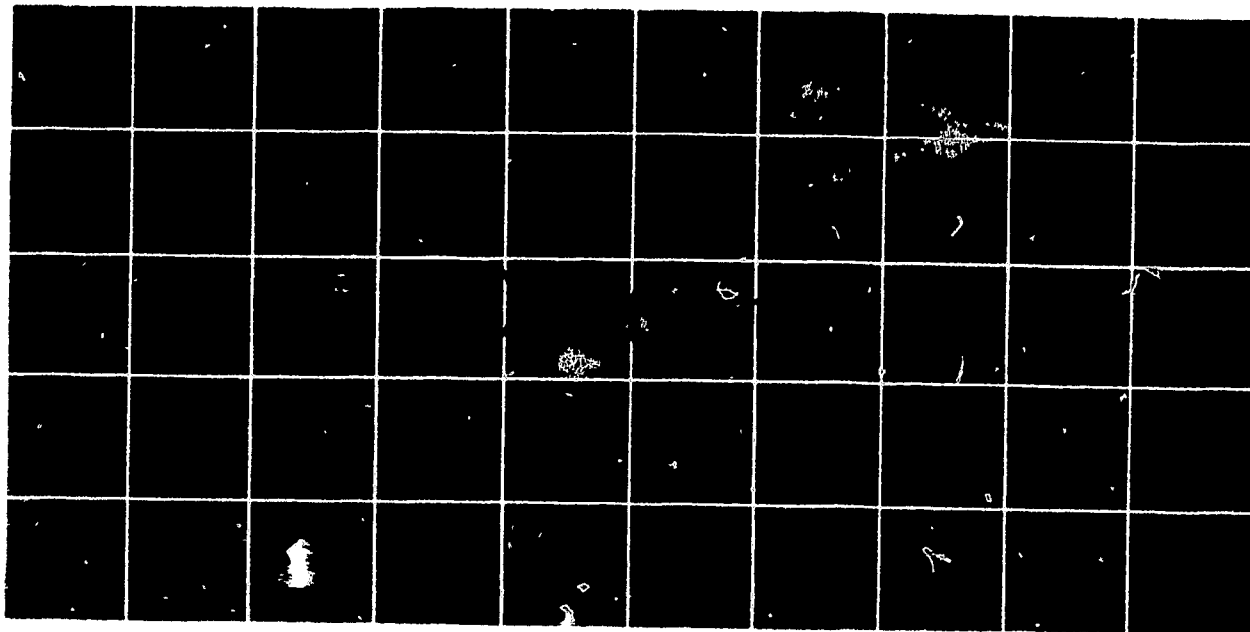
A STATEMENT BY THE RESEARCH AND POLICY COMMITTEE, SEPTEMBER 1965

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

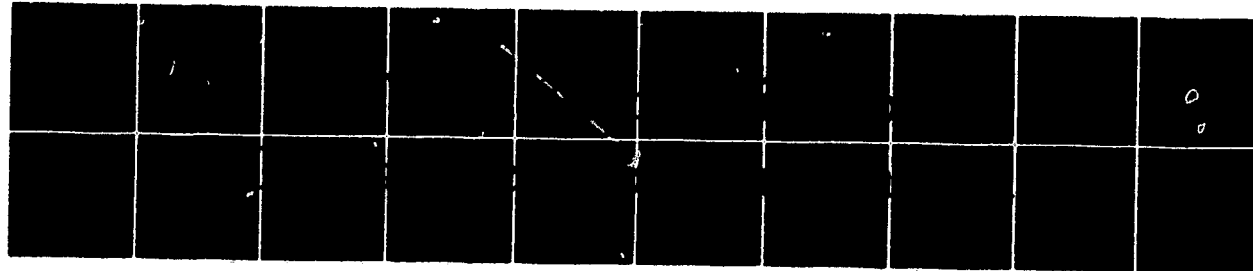
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This statement has been approved for publication as a statement of the Research and Policy Committee by the members of that Committee and its drafting subcommittee, subject to individual dissents or reservations noted herein. The individuals who are responsible for this statement are listed on the opposite page. Company associations are included for identification only; the companies do not share in the responsibility borne by the individuals.

The Research and Policy Committee is directed by CED'S bylaws to:

"Initiate studies into the principles of business policy and of public policy which will foster the full contribution by industry and commerce to the attainment and maintenance of high and secure standards of living for people in all walks of life through maximum employment and high productivity in the domestic economy."

The bylaws emphasize that:

"All research is to be thoroughly objective in character, and the approach in each instance is to be from the standpoint of the general welfare and not from that of any special political or economic group."

The Research and Policy Committee is composed of 50 Trustees from among the 200 businessmen and educators who comprise the Committee for Economic Development. It is aided by a Research Advisory Board of leading economists, a small permanent Research Staff, and by advisors chosen for their competence in the field being considered.

Each Statement on National Policy is preceded by discussions, meetings, and exchanges of memoranda, often stretching over many months. The research is undertaken by a subcommittee, with its advisors, and the full Research and Policy Committee participates in the drafting of findings and recommendations.

Except for the members of the Research and Policy Committee and the responsible subcommittee, the recommendations presented herein are not necessarily endorsed by other Trustees or by the advisors, contributors, staff members, or others associated with CED.

The Research and Policy Committee offers these Statements on National Policy as an aid to clearer understanding of the steps to be taken in achieving sustained growth of the American economy. The Committee is not attempting to pass on any pending specific legislative proposals; its purpose is to urge careful consideration of the objectives set forth in the statement and of the best means of accomplishing those objectives.

4.

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1. Voted to approve the policy statement but submitted memoranda of comment, reservation or dissent, or wished to be associated with memoranda of others. See pages 41-44.
2. Did not participate in the voting on this statement because of absence from the country.

Advisors to the Subcommittee

SOLOMON FABRICANT
National Bureau of Economic Research, Inc.
NEIL H. JACOBY
Dean, Graduate School of Business Administration
University of California
STERLING M. McMURRIN
Department of Philosophy
University of Utah
ALBERT REES
Department of Economics
University of Chicago

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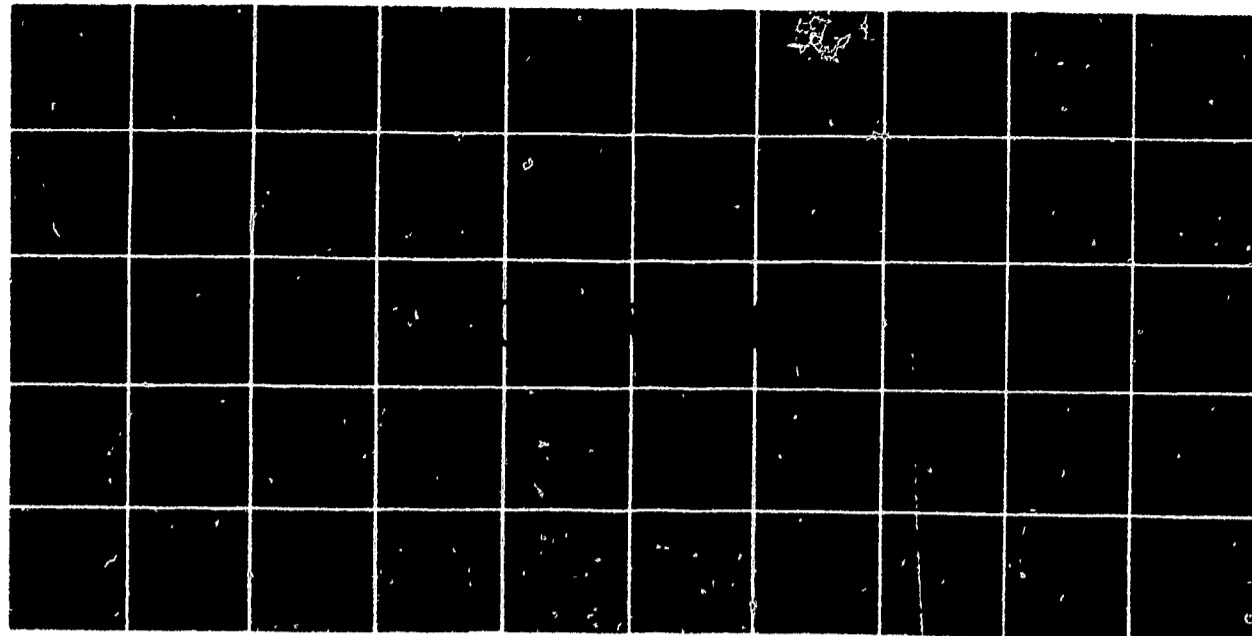
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University of Utah

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Economic Growth Center
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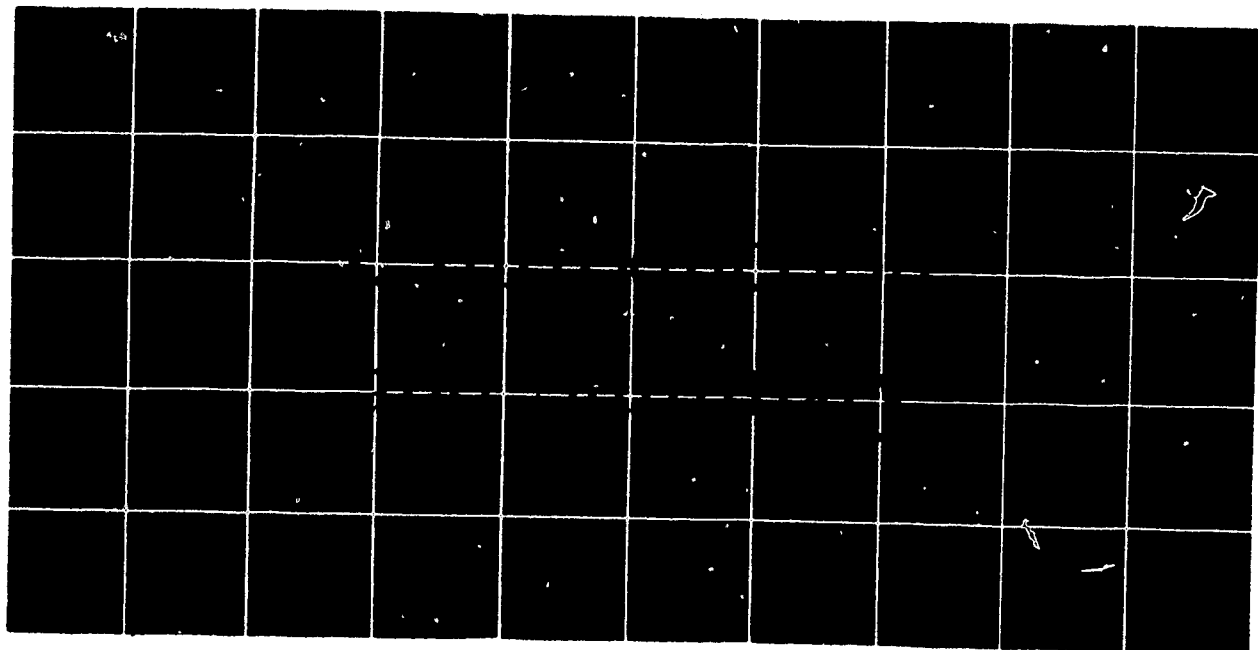
ROBERT M. SOLOW
Professor of Economics
Massachusetts Institute of Technology



The idea that improvements and changes in American education are needed to raise low incomes and reduce unemployment has apparently achieved widespread acceptance in recent years. Several important items of federal legislation of the 1960's reflect this idea. But acceptance of the idea, and its embodiment in federal legislation largely devoted to financial assistance, will not themselves bring about the needed adaptations of education and training. The task is one of the most difficult ever confronted by the American educational system. As our policy statement says, the full resources of the American society — including federal, state, and local governments, and the business and academic communities — must be enlisted. And what is required is not only money but also ingenuity, effort, and good will from many quarters.

In the statement that follows the Research and Policy Committee of CED describes some of the steps that must be taken if education is to meet the new challenge being placed before it. This statement was drafted by a subcommittee under the chairmanship of Marion B. Folsom. On behalf of the Research and Policy Committee I wish to thank the subcommittee and its advisors listed on pages 5 and 6.

Theodore O. Yntema, *Chairman*
Research and Policy Committee



In this statement we describe some of the improvements and extensions of education and training which would contribute to raising the productivity, and consequently the incomes, of many Americans whose incomes would otherwise be far below the American average. We present some of the most useful steps that can be taken by governments—federal, state, and local—and by business, and explain why they should be taken in the near future.

1. *It is a national objective to accelerate progress in reducing the number of people whose income is far below the average.* The effort to achieve this objective is necessarily pragmatic—to push ahead with the steps that seem likely to be effective, to be prepared to reconsider these steps in the light of experience, and to consider further steps as they become possible.

2. *The nation's present concern with the problem of low income families does not mean that the problem is worse than it used to be or than it now is elsewhere.* By any objective standard—such as calories consumed, square feet of housing space, life expectancy, health, education of children—the 10 or 20 per cent of American families with lowest incomes today are much better off than the lowest 10 or 20 per cent a generation ago or than the *average* family of most of the countries of the world today. It is almost only in relation to the average of Americans today that the lowest-income American families today can be said to have low incomes. Our present national concern is evidence not that

the problem of low incomes has grown worse but that our sensitivity to it has increased.

3. *Lack of education is one important reason why some families have extremely low incomes relative to the average, although not the only reason.* Low native capacities, poor family and neighborhood background, weak motivation to learn and to earn, old age, bad health, racial discrimination, barriers to use of capacities, and a number of other factors, including just plain bad luck, are all important elements in the equation that may result in low income. Yet this is not to deny the weight of inadequate education as a cause of low incomes. All studies show that education is, indeed, a factor of great importance.

An intense desire for self-improvement can often overcome severe environmental handicaps. On the other hand weakly-motivated people can fail to take advantage of most favorable opportunities. Nothing we say here, and no recommendations we address to public or private institutions, can relieve individuals of the responsibilities for their own lives. Yet we are confident that by and large if better opportunities are provided they will be taken.

4. *Improvement of education and training is an important thing that can and should be done to better the lot of those with lowest incomes, although not the only thing.* Obstacles to the employment of people in their most productive occupations need to be reduced—including those resulting from racial discrimination, from union barriers against entry, and from artificially maintained wage rates. Better protection needs to be provided for families that are deprived of an adequate income by the death, old age, or illness of the family wage earner. Special measures must be taken to reduce the labor force engaged in agriculture.¹ Continuing attention, in fiscal and monetary policy and in other fields, must be devoted to keeping down the general level of unemployment.² But again, the need to carry out these and other measures does not diminish the importance of educational improvement. Especially if we take a long view, and consider the effects on the potentially low-income families of the next generation and the generations after that, education is a powerful and efficient instrument for raising extremely low incomes.

¹ *An Adaptive Program for Agriculture. A Statement on National Policy by the Research and Policy Committee. Committee for Economic Development. New York: July, 1962.*

² *Fiscal and Monetary Policy for High Employment. A Statement on National Policy by the Research and Policy Committee. Committee for Economic Development. New York: January, 1962.*

5. *While in this statement we emphasize improvements of education to raise productivity, incomes, and employment, we do not suggest that this is the only, or even the most important, goal of educational improvements in America today.* The ultimate goal, the welfare of individuals and the quality of their lives, depends not only on their incomes but also on what they do with their incomes and other capacities, privately and collectively. Our recommendation is that as we extend education in numerous dimensions we should pay attention to the children and adults who might otherwise be left behind the rapidly advancing standard of American education.

We use the term "improvement of education" throughout this statement to mean education better adapted to the capacities, interests, and needs of individuals in the changing world in which they live. This means for some people more years of formal education, although it does not mean that for everybody and probably does not mean mainly that for most people. Moreover, education is not something that ends at graduation from high school, college, or university. Technological change makes continuing education necessary. Also, rising incomes permit more and more people to continue to enjoy throughout their lives the satisfying experience of enlarging their understanding and abilities.

6. *Our recommendations are not for a break with the long history of recent trends of American education but are rather for an increase of efforts in certain directions.* Throughout our history states and localities have supplied the initiative and financing for improvement of education and they are still our chief reliance. In recent years the federal government as well as the state and local governments have taken a number of new educational steps aimed at raising the incomes of poor families and reducing the high rates of unemployment among certain groups of the population. Some localities have inaugurated, and others are planning, special educational programs for children from poor homes and neighborhoods. Several states have improved vocational training in high school and established systems of community colleges and technical institutes to make academic and technical training beyond the high school more readily available. The federal government has recently taken action to support these efforts as well as programs for retraining adults in depressed areas and others suffering from long-term unemployment.

It is not sufficient merely to improve education. The improve-

ment of education must proceed *rapidly*, if we are to keep abreast of, or get ahead of, the forces in the economy that are constantly changing the character of the demand for labor. We are not doing this now.

The federal role in education, always present, has been greatly enlarged in the past several years. The enlarged federal role does not relieve others of their responsibilities. Unless all the resources of our federal, state, local, private-nonprofit and private-business education and training system are brought to bear, our educational goals will not be met.* More than money is needed. To achieve our goals will require leadership, imagination, talent. It also will require better adaptation of our educational system to the needs and opportunities of the economic system and better use of the capacities of the economic system to help meet the needs of education. The federal government alone, for all its great financial capacity, cannot supply these requirements. *One of the main purposes of this statement is to urge greater efforts by states, localities, and private business to discharge their proper responsibilities.*

Progress in education will depend heavily on progress in the educational institutions themselves. The "outside" community, public and private, must supply financial and moral support, some leadership, and much cooperation. But much of the initiative in developing programs for improvement, and most of the effort to carry them out, will have to come from professional people in education — administrators, teachers, and researchers.

Summary of Recommendations

It should be our objective to help prepare young people for a transition from school, at whatever level of schooling that transition occurs, to progressive employment careers. In these careers, experience and training should add further to their skills and their capacities; and the availability of retraining should permit them to adapt to changes in the demand for labor. Most young people are getting this preparation now. Too many are not. For most of these the main deficiency is proba-

*See Memorandum by MR. WILLIAM BENTON, page 41.

bly the failure to acquire in very early years the capabilities and attitudes that will enable them to benefit from the education, experience, and training that would subsequently be available to them. This deficiency remedied, we will have a strong base on which to build an educational structure in which all can realize their full potential.

1. More and better early education, beginning before kindergarten, should be provided for children who suffer the disadvantages of being reared in homes and neighborhoods that generate little learning and motivation. Under the Education Act of 1965 the federal government is providing funds for this purpose. However, the responsibility for creating and carrying out effective programs, and much of the financial responsibility, rests with the states and localities.

2. States and school districts should modernize vocational training in the schools to bring it into line with occupational requirements where they can be foreseen, and to improve the ability of adults to adapt to unforeseen changes in occupational requirements.

3. States that have not yet done so should establish adequate systems of conveniently available educational institutions beyond high school—junior colleges, community colleges, or technical institutes.

4. Programs for training and retraining adults, whether employed or unemployed, carried on by the states for many years, have recently begun to receive federal support under the Manpower Development and Training Act. These programs should be developed further, and with more financial support by the states for their expansion.

5. Programs to eliminate adult illiteracy should be launched by citizens in communities throughout the nation.

6. In view of the demonstrated returns to the efforts already made, existing programs for rehabilitating the physically handicapped should be expanded. States should appropriate the amounts required to obtain the federal funds allotted in the federal-state matching program.

7. In federal programs for assisting economically distressed regions, such as Appalachia, more emphasis should be placed on financial support for the construction and equipping of needed educational and rehabilitation facilities.

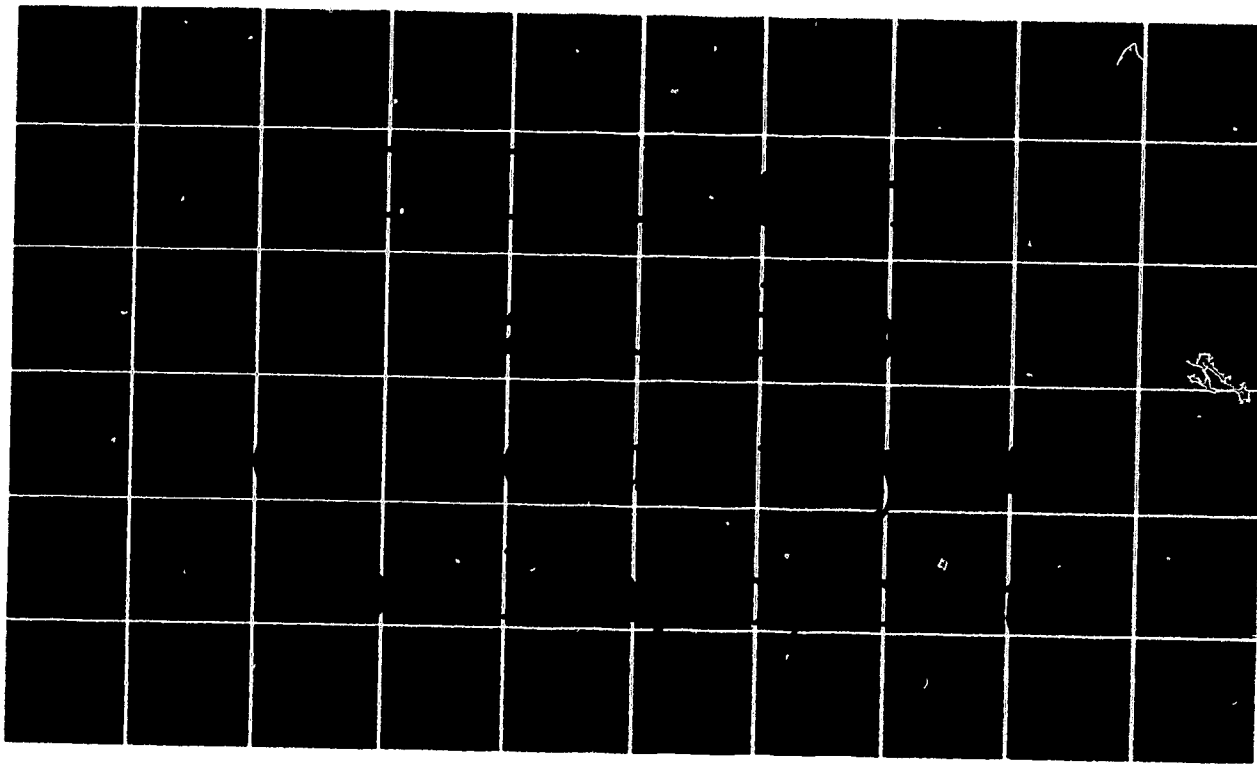
8. More use should be made of the capacities of business for training workers and developing more effective methods of education and training. Businesses should try more systematically to foresee and prepare for changes in their labor requirements.

9. In general, it will be necessary to operate the educational system more efficiently, by better organization of school districts, quicker application of modern techniques, and more research to develop better techniques, in order to hold down the costs of the growing educational program and improve its quality.¹

¹Many of the recommendations of this statement were presented as preliminary conclusions of our study by Marion B. Folsom in testimony before the Subcommittee on Manpower and Employment, Committee on Labor and Public Welfare, United States Senate, on October 1, 1963.

Section II of this statement explains the connection between education on the one hand and employment, productivity, and income on the other, at present and in the process of economic growth.

Section III elaborates the recommendations summarized above.



INADEQUATE EDUCATION AND LOW INCOME

The simple relation between education and income is clear. People with much education, on the average, have higher incomes than people with little education. A much larger proportion of people with little education than of people with much education have low incomes.¹

However, this simple relation by itself does not show to what extent people have low incomes *because* they have little education. People with less education than the average differ from the average of the population in other respects as well. They are more likely to have lower than average innate abilities; to come from families with low incomes, little capital, and little education; to live in low-income areas; and to be non-white. It is worth noting, however, that to some extent the difference in measured intelligence of persons with different educational levels results from differences in environmental conditions, including education, at earlier years.²

¹ See statistical appendix.

² See Benjamin Bloom, *Stability and Change in Human Characteristics*. New York, Wiley, 1964.

Therefore we cannot conclude that people with little education have low incomes only because they have little education, or that these same people would have the average American income if they had the average American education. But it would be equally wrong to conclude that education itself is of zero or negligible significance. While the evidence on this point is sparse, it all points to the importance of education as an independent determinant of income. For example, comparison of the earnings of brothers—that is, men with similar family backgrounds—with different educational attainments shows that men with college education earn much more than their brothers with only high school education, who in turn earn more than brothers with only elementary school education.

Statistical efforts to isolate the effects of color, sex, religion, family background, personality, and mobility show that even after account has been taken of such factors most of the difference between earnings of college, high school, and elementary school graduates remains. Earnings of college graduates have been shown to be much higher than earnings of high school graduates of the same high school class ranking and intelligence test scores.¹

We conclude that if the people who would otherwise have little education had more education, on the average they would also have higher incomes.

EDUCATION AND EMPLOYMENT

People with low education suffer much more unemployment, on the average, than people with higher education.² This fact has a more complicated explanation than does the fact that uneducated people earn low incomes when they are employed. People with little education have, in general, little skill, their productivity is low, and they can only be employed at wages that are correspondingly low. However, this does not explain why so many of them are not employed at all.

Whether a person can be employed or not depends not only on his productivity but also on the wage at which he can be hired.

¹All the foregoing evidence is presented in Garry S. Becker, *Human Capital*, New York, National Bureau of Economic Research, 1964, pp. 82-88, 125-126.

²See statistical appendix.

The demands for pay of a person with high education, skills, and productivity can be so high as to make him unemployable. But it is particularly the persons with low skills and productivity who are in danger of being rendered unemployable by a high wage requirement.

Efforts to reduce the concentration of unemployment among unskilled or otherwise unadapted groups should be concerned with policies affecting their wage rates as well as with policies affecting their productivity. Measures to increase their productivity will not succeed in reducing their unemployment if the minimum wage rates at which they can be hired keep moving ahead of their productivity.

The present *concentration* of unemployment reflects in large measure a failure of the wage structure to adapt to the present structure of worker productivity. One reason for this is the legal minimum wage established by the federal government and by some states.* The legal minimum is significantly below the average prevailing wage, but the productivity of many workers is even farther below the average productivity. If the legal minimum is 50 per cent of the average wage, persons whose productivity is 30 or 40 per cent of the average will be unemployable. Moreover, the legal minimum wage has an indirect effect in sustaining or boosting customary effective wage rates even where it does not legally apply.

Greater flexibility is needed now in permitting exceptions from the legal wage for categories of people among whom unemployment is particularly high, such as the young. In the future, the legal minimum should not be raised in a way that would limit the employability of the unskilled.

The problem is not only that excessive wage rates subject the less skilled to a high rate of unemployment. Excessive wage rates for the unskilled reduce the incentive for employers to train them, by making the wage rate plus the cost of training higher, in many cases, than the wage required to hire a trained worker. They also interfere with the early acquisition of work experience by young people.

This consequence of excessive wages for the unskilled has its counterpart in cases where insufficient wages in certain occupations requiring much education and training discourage the preparation of an adequate supply of people. Teaching and nursing are examples of such occupations.

*See Memorandum by MR. ROBERT R. NATHAN, page 42.

EDUCATION AND THE GAINS FROM GROWTH

Despite the obvious contribution made to American welfare by the process of economic growth, there have been repeated expressions of fear that this process, and especially its component of technological advance, would cause mounting unemployment and misery. The reasoning behind this fear is simply that if five people could produce what ten formerly produced, the other five would be unemployed. As productivity increase went on, it is thought, a larger and larger proportion of the labor force would be unemployed. The fallacy in this argument is its assumption that only a limited amount of production was wanted, so that as we became capable of producing that limited amount with fewer people, fewer people would be employed.

We are not at or near the end of our desires for goods and services. Our demands for goods and services are limited by our incomes, which in turn are limited by our ability to produce. When ten people, and the capital they work with, can produce twice as much as they used to, the ten people and their suppliers of the capital will earn twice as much as they used to (in real terms, combining the effects of changes in money incomes and in prices). They will tend to demand twice as much output—for consumption and investment—and the ten people will be employed in producing it.

This is not just a theoretical proposition. The whole history of the American economy demonstrates it. Growth in output per worker, resulting from technological advance and other factors, has greatly *increased* the demand for labor. It has permitted the employment over the years of a rapidly growing number of workers at rapidly rising real wage rates.

Although growth in output per worker has increased the total demand for labor it has not done so evenly, for all categories of workers. The demand for workers in some industries, occupations, and regions has risen less than the average, and in some cases has declined absolutely, whereas the demand for other workers has risen sharply.

As the character of the demand for labor shifts, the character of the supply of labor must also shift; otherwise there will be an increasing spread of earnings between workers in the categories of occupations and industries where demand is rising relatively and workers

in categories where demand is declining relatively or absolutely. Also, unemployment among workers committed to the declining categories is likely to be high and rising.

Our conventional picture of the problem of technological unemployment is of a mature man who, having acquired a skill and practiced it for many years, suddenly finds his skill obsolete, loses his job, and is unable to find another. This situation exists and it is serious where it occurs. But it is only one form, and probably not the most difficult form, in which the problem appears. The experienced and skilled worker is likely to be capable of acquiring another skill. If he is attached to a large firm, retraining may be available to him. He has acquired certain protections, in private assets, in seniority rights, and in unemployment compensation.

The other form of the problem is that of the person who enters the labor force in the first place unprepared for, and not preparable for, the modern technological world. He never acquires a skill, forms a lasting job connection, or gains steady work experience. His condition does not result from failure to adapt to a change that occurs during his working lifetime. Rather, his preparation and skills have never been adequate to gain better than marginal employment at any time.

In the process of keeping the supply of labor abreast of changes in the demand for labor, education and training have three important contributions to make:

1. *To provide young people, before they enter the labor force, with the education that will make them trainable and employable in occupations where the demand for labor is rising and their productivity will be highest.* In American history this need has been largely met by an increase in the amount and level of basic, general education acquired before entry into the labor force. In 1930, about 58 per cent of the American labor force had eight years of school or less. By 1964 this proportion was down to 25 per cent. The 33 per cent who would otherwise have not gone beyond elementary school earned more because their skills were increased. The 25 per cent who still did not go beyond elementary school also earned more because the proportion with little education had dropped, reducing the number of workers competing for unskilled jobs.

2. *To prepare people for retraining after they have entered the labor force, if the shift in the demand for labor should require that.*

The improvement in the basic education of young people has also contributed to this end.

3. *To provide the specific retraining of workers as changing labor demands require.* This has mainly been the function of on-the-job training.

On the whole the American educational and training process, and the other factors making the American worker adaptable, have kept pace with the changing demand for labor. However, there is still a substantial number of people who have relatively low incomes and high unemployment rates and who would work more and earn more if they were better educated, better prepared for training, and better trained. We have had to run fast in raising the educational level of the least educated just to keep them from falling behind the rise in the general educational level and the decline in the relative demand for unskilled labor. We shall have to run even faster to gain ground.

DOES EDUCATION PAY?

The recommendations of this statement call for increased public expenditure for education. Such recommendations, like other recommendations for increased public expenditure, must confront the questions, "Will the increased expenditure pay? Will the benefits from the expenditure be worth their costs?"

Study of the returns from investment in education has been increasingly intensive in recent years. The measurement problems involved are extraordinarily complex, and the results of the studies done up to now are not conclusive or final. But the accumulating evidence that education does pay is very strong, stronger than can be marshalled behind a large part of all public expenditure.

Several estimates have been made of the "return" from education, comparable to the return on the other kinds of investment.

Although such estimates cannot be precise, and future research may alter them radically, it seems a reasonable conclusion from presently available evidence that the returns from educational expenditures are not only positive but also probably of at least the same order of magnitude as the returns from other investments made in the United States,

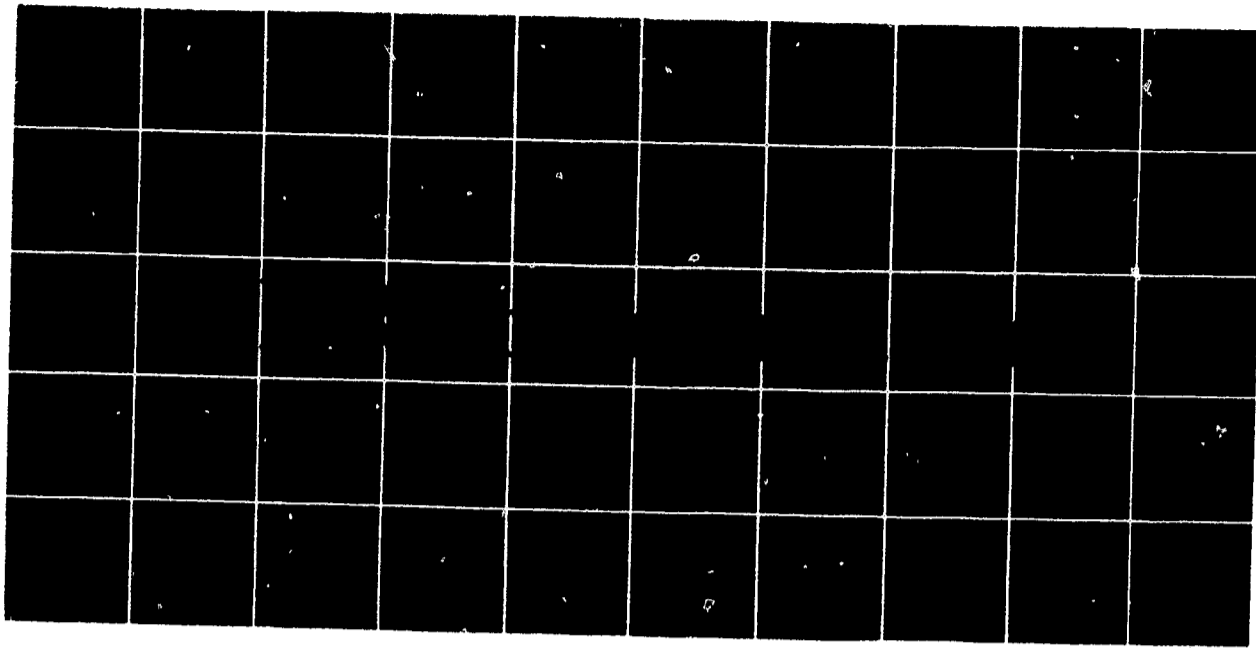
both in individual earnings and in national income. By this elementary standard, education seems to pay.

Increased individual earnings and national income, however, do not provide a sufficient measure of the pay-off from education. As we have already emphasized, the welfare of individuals, the quality of life, depends not only on the size of their incomes but also on what they do with their incomes and other capacities, individually and collectively. We believe—and it is a basic premise of American democratic society—that education improves the quality of decisions and of life, making a contribution that is hardly made by any other kind of investment. This is a strong additional reason for concluding that education pays.*

We are concerned in this statement, as the country is, with improving the lot of those with the lowest incomes and highest exposure to unemployment. It is an additional advantage, an additional pay-off, of education that it can do this. As among alternative ways of raising the national income, heavy weight should be given to policies that will also improve the conditions of the least fortunate. Or, put another way, as among ways of helping the least fortunate it is surely better, in most cases, to help them to improve their earning capacity than simply to transfer income to them from others—better in terms of the burden on others as well as in terms of the dignity of those assisted.

Of course, educational expenditures can be wasteful, like any others, and our recommendation is not to increase whatever expenditures may be labelled “education” but only expenditures in particular directions. Wisdom in making educational decisions will be needed, as well as an intensified effort to make the educational process more efficient. But there is no reason for us to fear that we will be less wise about these matters than in the past, and there are real opportunities ahead of us to improve the educational process, making it even more productive than formerly.

*See Memorandum by MR. PHILIP SPORN, page 43.



We have grouped our *recommendations* as follows:

- *Improving* the educability and education of especially disadvantaged children.
- *Improving* the preparation of young people for the transition from school to work.
- *Expanding and improving* adult education, job training and retraining.
- *Increasing* economy and efficiency in education.

These specific recommendations should not obscure our continuing concern for the elevation of quality at all levels of our educational system and at all stages of the learning process.

A. The Education of Especially Disadvantaged Children

Education is a cumulative process, the result of a combination of activities going on simultaneously and successively in a person's life. Deficiencies in the educational process also tend to cumulate. Children whose home and neighborhood environments provide inferior or negative educational experience also get inferior education in school. The same factors that make the home and neighborhood environment inferior

—notably poverty—also operate upon the school system. Also the effect of the environment on the child—on his physical health and mental attitudes—weakens his ability or motivation to learn at school. Thus, even though in many poor districts of cities school expenditures per child are well above the national average, the educational results tend to be inferior. Similarly, those who receive inferior education in their earlier years are more apt to drop out early and tend also to receive inferior schooling, work experience, and on-the-job training later.

To give more nearly equal total education to children with inferior home and neighborhood environments requires better than average—and more expensive—schooling.

Apparently the most effective point at which to influence the cumulative process of education is in the early years. We say “apparently” because throughout this field evidence is limited and more research is needed. But the weight of existing evidence is clearly in this direction.¹ Development of intelligence and capabilities continues to ages 18, or 20, or later. But the ability to develop, and the subsequent rates of development are largely determined earlier. To raise capacities significantly in later years will be much more difficult and expensive, and the results much less certain, than to raise capacities earlier—say before age eight and especially before age six. What is done earlier will make later efforts more fruitful.

There is as yet no experience with any large scale effort to exploit the full potentialities of education for raising the capacities of children from deprived backgrounds—from urban and rural slums. However, the results of several experiments have been encouraging.

Students of the problem are now generally agreed on the necessary elements of programs for breaking through the obstacles to adequate education of slum children.² It is clear that to carry out such programs requires teachers of exceptional competence, devotion and training, who should receive commensurately higher income.

¹ See Bloom, *op cit.*

² In a report to the Board of Education of the City of Chicago, by the Advisory Panel on Integration of the Public Schools (March 31, 1964) these elements were listed as follows: ungraded primary school, pre-school program, orientation, reception and placement centers, improved guidance and counselling, greatly enriched learning resources, internship for teachers-in-training, employment of non-professional school personnel, use of unpaid volunteers, extended school day, after-school study centers, a year-round school program, team-teaching, variable size classes, continuing education for parents and out-of-school youth, including literacy programs.

Such programs will undoubtedly be expensive. The federal government has just initiated a new program of federal aid to low-income school districts, on which \$1 billion would be spent in fiscal year 1965-66. We support the purpose and general magnitude of this program. We would, however, make one suggestion about it.

We believe that the states should be required to match, in some proportion, the funds provided by the federal government for assistance to low-income school districts. The federal funds will not be confined to states that are poor, and presumably will not be distributed in proportion to the fiscal capacities of the states. High-income states that include a number of poor school districts will receive federal assistance. We believe that most states can afford some matching, especially if the matching required is on a sliding scale depending on some measure of state income. The reason for requiring that the states match federal funds is partly to increase the total funds available. It is also, and more importantly, to assure that the states fully accept their responsibility for developing programs and managing them efficiently. Most existing federal grant-in-aid programs call for state matching.

We have previously recommended that the states not now doing so should establish "foundation" programs giving financial assistance to their school districts to enable them to provide the standard education expected to be provided in all school districts in the state.¹ We repeat this recommendation. The new federal-state aid program should be regarded as supplementary to this, providing additional funds for the special, and expensive, needs of disadvantaged children.

More money is essential, and will help, but more money, especially federal money, will not do the whole job. We have a new problem—not simply to lay more educational opportunity before well prepared and motivated children but to develop ability and motivation to take advantage of educational opportunity.

Our school system is not prepared for this new task, and like any large, old institution it adapts slowly to new tasks, and even resists them. The driving force of parent interest cannot be relied upon. In many areas the larger community is uninformed and uninterested. A great responsibility therefore devolves upon those, in and out of the school systems, including business people, who see the need and the opportunity.

¹*Paying for Better Public Schools. A Statement on National Policy by the Research and Policy Committee. Committee for Economic Development. New York: December, 1959.*

B. *Preparing the Transition From School to Work*

Even though increasing numbers are going on to college, the transition from school to full-time employment still occurs for most Americans around the completion of high school.

In most cases this transition is not a source of great difficulty. The new worker finds a job which he fills satisfactorily and in which he acquires experience and skills that enable him to move on to higher-paying employment, with the same employer or another. But sometimes the difficulties are more serious. The spells of unemployment are longer, the intervening jobs more casual, the experience less valuable, if not actually negative. Failure to utilize well these first few years in the labor force—years which may be the last in which the individual can still develop substantially—may have tragic lifelong consequences.

In many cases the cause of these difficulties is inadequacy of preparation that the schools might have remedied, at least substantially. Many young people leave school for the labor force unable to read, write, or speak effectively, weak in ability to calculate, and without habits of working and learning, alone or in a group.

Although not by itself a sufficient answer to this problem, “vocational” education is an important part of the answer if combined with general educational improvement. Good vocational and technical education in schools, based on good general education, can make a substantial contribution to future careers. Good vocational education would use instruction in specific skills as a way of developing more general and transferable skills—communication, computation, manual dexterity, group organization. It would emphasize occupations that are at least currently in demand, the specific future demands being difficult to foresee. It would be combined where possible with part-time work experience, and it would include effective counselling and placement services.

The vocational education programs of our schools, mainly high schools, have been seriously deficient. The number of students enrolled in federally-aided vocational classes has been large—over 4.5 million in 1963-64. Total expenditures doubled from 1954 to 1964, exceeding \$325 million in the latter year, of which about one-sixth came from

the federal government. Nevertheless many of the students were being taught outdated or declining occupations, by outdated methods on outdated equipment. In 1963-64 the number of students enrolled in agricultural courses—861,000—was larger than ever before, although agricultural employment had been declining for thirty years. Vocational education programs were commonly remote from employers and from the labor market. In parts of the country no vocational education, or only token education, was available.

A major step towards improving the system was taken in the Federal Vocational Act of 1963. The amount of federal aid authorized was substantially increased. More freedom was permitted in the choice of subjects to be taught with emphasis on new technical subjects. Funds were set aside for research in vocational education. Money was provided for the construction of vocational schools to serve areas larger than school districts. The educational authorities of the states were directed to establish contact with business, labor, and the United States Employment Service.

It is too soon to tell how the vocational education system will respond to the opportunities provided by the new federal legislation. Some progress is already evident, notably in the construction of area-wide vocational schools in some states. But the task of modernizing the vocational education system still lies ahead, and is the responsibility now of the states and school districts.

In the improvement of vocational education businesses have a necessary part to play. They are a source of information about current and prospective job requirements and about which aspects of worker preparation are best done in school or on the job. The cooperation of business is indispensable to programs for work experience during the education period and job placement afterwards. In many cases, businesses can help to make up-to-date equipment and experts available to the schools. Business firms have had a wide experience in job-oriented training, and should participate heavily in the development of methods that will be economical and effective. Businesses should perform these functions not only because they have an interest in the supply of labor but also because they have a unique ability to do something important for their communities.

Although completion of high school is still the common point for the transition from school to work, an increasing number of young people are obtaining post-high school education before full-time entry

into the labor force. Already, half of the labor force has more than 12 years of education and for new entrants the proportion is higher. This trend to more education will continue. It results from the higher incomes that can be earned in occupations demanding more education, the rising proportion of the population that is prepared for education beyond high school, and the growing incomes that enable people to afford it. Education beyond high school is increasingly a requirement for the start on a progressive career.

One response to the increasing demand for post-high school education has been the development, in many parts of the country, of new educational institutions offering vocational, technical, or academic courses in varying combinations, usually for a two-year period of study. Since they offer a smaller range of courses than a four-year college, they can operate efficiently with a smaller enrollment. This enables them to serve a smaller community or geographic area than is necessary to support a four-year college. They can thus spare the young student the expense of living away from home and can help meet vocational and cultural needs of adults who cannot move to a residential college.

Education beyond high school should be easily available to all who can benefit from it, or are willing to pay for it. Establishment of a network of publicly financed community colleges or technical institutes within commuting distance of most students would be an effective step toward this goal. These institutions can serve three main purposes:

1. Provide technical-vocational training not suited to high schools, for young people before they embark upon a career.
2. Provide the first years of a general college program for students who may not wish to continue work for a four-year degree, or may wish to continue at some other institution.
3. Provide part-time vocational, cultural, or other education for adults in the community.

Several states have already gone a long way in creating these institutions. Most states need to go much further than they have.

Small amounts of federal financial assistance are available for developing community colleges and other post-high school institutions. By and large this is, and should be, a state and local responsibility. How-

ever, a different situation exists in regions of the country where the federal government undertakes special programs for promoting economic development. *In programs for less developed areas of the United States emphasis should be placed on federal aid for the construction of technical training institutes—as one of the most useful ways of preparing the young people of the area for careers of modern productive employment.* There are estimates, for example, that over 100 of such schools, with a construction cost around \$100 million, would be required to meet the needs of Appalachia.

The problems of standard college and university education are generally beyond the scope of this statement, where we are primarily concerned with those people whose education would be seriously deficient in relation to the American standard. However, one point about college education is so relevant to our present purpose that we must say something about it here. *An important factor in the failure of some young people to take advantage of the educational opportunities they have is lack of motivation, stemming in part from the belief that inability to pay for college will impose a ceiling on their achievements, even if they do well at high school. Assurance that lack of money will not prevent highly qualified young people from going on to college would help to eradicate this depressing belief, and would affect the attitudes of many who will not go to college as well as of those who will.* Expansion of scholarship and loan funds in recent years has been large. Nevertheless, the fact remains that many qualified students do not go to college because of financial reasons.

Provision of loans from government or private sources on terms commensurate with the nature of the investment should, we believe, be the standard way to assure that all qualified students have access to college. This is not to deny a place for some scholarships as rewards and incentives for outstanding students, or to encourage entry into specific fields where the social benefit may be exceptionally great. Also, voluntary contributions by private individuals and corporations to provide scholarships are certainly commendable on moral and social grounds. However, the massive provision of college scholarships out of the general tax revenue raises a different question. Young people who reach college age qualified to enter college have been endowed by heredity and environment with capabilities beyond the average. If they go through college they have every expectation of earning a larger income than the average American or the average American taxpayer. It

does not seem to us fair to require the federal taxpayer to subsidize the acquisition of this above-average earning capacity. Moreover, we believe that the student should be encouraged to regard his college education as an investment in himself which he should try to use to the best advantage.

C. Training and Retraining the Labor Force

Once a person leaves school for the labor force, his subsequent training and retraining will be largely done on the job. This training pays for itself, in the sense that it is paid for out of the excess of the productivity of a trained worker over an untrained one. The training may be financed by the employee, by the employer, or by both in combination. That is, the employee receiving training may accept less pay than he could otherwise earn at the time, in the expectation of being able to earn more later. Alternatively, the employer may pay more, in wages and training costs, than the value of the trainee's current output, in the expectation that the worker will be worth more to him later. The proportions in which the costs are divided will depend largely on the nature of the training.¹

The amount of training done in business seems to be large. Fifty-six per cent of all workers in 1963 had received some training on the job. A survey of establishments in 1962 showed that seven per cent of all employees were enrolled in training programs.

Available information suggests that a very considerable amount of training is done within industry. It is recommended that businesses make available more information about the extent and character of training done. This would aid those planning for the recasting and extension of the training programs for persons already in the labor force.

In the following pages we consider some of the main ways in which training and retraining of the labor force can be improved.

¹ For explanation of these relationships, see Becker, *op. cit.*

ADULT ILLITERACY

Mainly as a result of deficiencies in earlier education there are about eight million adults in the United States who are classified as "functional illiterates." They do not have a sixth-grade mastery of reading and writing, and cannot meet their occupational needs, let alone their responsibilities as parents and citizens. Many of them work, but their ability to learn any but the least skilled occupation is limited, as is their ability to find another job if they lose one. They need basic instruction of a kind employers do not ordinarily provide and that their employers, with whom their connection may be casual, would not find it worthwhile to provide. At the same time they may be unable to pay for their own instruction and indeed may be unaware of its value to them.

Functional illiteracy should be recognized as a disease in a society as wealthy, as well-educated, and as integrated as ours. To eradicate this disease is, in our opinion, a function and responsibility of better educated citizens in communities across the nation. Some funds to assist voluntary community efforts to this end have been provided under the Economic Opportunity Act. Cooperation of local school systems will be necessary, but our school systems are already so overburdened with tasks they alone can perform that they should not be expected to assume the whole initiative and responsibility.

Basically what is required is community leadership to mobilize all the locally-available resources. Newspapers, radio and television stations, churches, and other means of communication can alert potential students and teachers to the need for the program. Persons qualified to teach reading and writing to adults, after receiving some preliminary instruction themselves, can be recruited from the ranks of women not at work, college students, retired men, and employed persons who are willing to devote evenings to the cause. There are more college graduates than illiterates in America. Persons able to train the teachers could be found among the same volunteer groups and in the school system. Classes could be held at places of employment, schools, libraries, churches, community centers, and so on. Funds for the purchase of books and other materials can be raised by local subscription.

Efforts of this kind in a number of communities have shown success. The need is now for a nation-wide effort on a scale sufficient to improve the situation radically in a short time. We believe that this

is feasible. We hope that businessmen will be active as initiators and supporters of such programs in their communities.

PHYSICAL DISABILITY

There are probably over two million adults in the country suffering from physical disabilities, including some kinds of mental retardation, who are consequently unable to support themselves but who could be made self-supporting. About 120,000 disabled people are now being rehabilitated under federal-state programs. This rate of rehabilitation, although substantially larger than a few years ago, is probably not even sufficient to keep the backlog of correctibly disabled from rising.

The Federal-State Vocational Rehabilitation program is important not only in itself but also as an example for other adult training programs. Several aspects of the program deserve notice:

1. The program is job-oriented. It does not simply increase the capabilities of the disabled person. It prepares him for a specific job which is known to exist, which has been found, and which he will be capable of performing after rehabilitation. The figure of 120,000 rehabilitated a year is the number of people actually placed in jobs and holding them through a test period.

2. The program is individual-oriented. It analyzes the disabilities, abilities, and interests of each individual and develops a program for him that is adapted to him.

3. The program supports research on methods of rehabilitation.

4. The program supports the training of specialized medical and counselling personnel needed for rehabilitation.

5. The program has placed great emphasis on education to overcome unrealistic prejudice by employers against hiring the handicapped.

According to estimates of the Vocational Rehabilitation Administration (United States Department of Health, Education and Welfare) persons rehabilitated in 1963 were earning income at the rate of \$47 million a year before rehabilitation and at the rate of \$238 million in the first full year after rehabilitation. Federal-state expenditures for the

program in 1963 were about \$120 million. "Those who entered a gainful employment through the public program in 1963 are estimated to pay, during their working lives, a minimum of \$7 in federal income taxes for every federal dollar expended on their rehabilitation."¹ Expansion of the program could not be expected to yield such high ratios of benefits to costs, because the additional cases handled may be more difficult. Nevertheless, it seems clear that a substantial increase of the program would be worthwhile.

Two first steps are required to expand the program:

1. *States should put up the funds required to match federal allotments.* Federal grants are provided to the states on the condition that they be matched by the states in a proportion which depends upon the per capita income of each state. In 1963 only nine states put up enough funds to receive their full federal allotments. While \$110 million of federal money was available, the actual grants received by matching totaled only \$71 million. The states put up \$45 million. In many states, matching the whole federal allotment would permit construction of urgently needed rehabilitation facilities.

2. *The training of rehabilitation personnel must be stepped up.* At present about 500 rehabilitation counselors are being graduated a year; probably twice as many are needed. The situation is similar for therapists, psychologists and other specialists. To meet this need will require enlarged federal appropriations.

RETRAINING THE UNEMPLOYED

Each year many people obtain necessary retraining in a new employment. Probably in most cases the interval of unemployment between the old job and the new is short, at least when the general demand for labor is high. In 1963, when the total unemployment rate was 5.7 per cent, persons with 15 or more weeks of unemployment were 1.5 per cent of the labor force; in 1957 the corresponding rates were 4.3 per cent and .8 per cent. Of course, not all of the long-term unemployment was due to lack of retraining.

¹Annual Report, United States Department of Health, Education and Welfare, 1964.

Nevertheless, there are an important number of cases where unemployment is unnecessarily long because of difficulty in getting retraining. These difficulties may arise from a variety of sources:

1. The worker may be especially difficult to retrain. The functional illiterates, whom we have already discussed, are a leading case of this.

2. The worker may be geographically distant and isolated from training opportunities. In this case he may not know of the opportunities and may be unable to afford the costs of search. If the worker's previous experience was unrelated to the retraining opportunity, and especially if he has been unemployed for some time, the success of retraining may be uncertain. Except in times of acute labor shortage the employer will not find it worthwhile to assume the costs of search and training for a distant and uncertain prospect.¹

3. In some states, unemployment compensation is not paid to unemployed workers who are undergoing retraining and therefore not available for employment. This deters some workers from embarking on retraining programs while they are eligible for unemployment benefits.

4. In some cases, as we noted earlier, high minimum wages, set by law or otherwise, make training unprofitable, especially where the prospect of success is uncertain.

Under the Area Redevelopment Act of 1961 and the Manpower Development and Training Act of 1962 the federal government launched an effort to stimulate the training of the unemployed. This effort has shown success in its limited experience so far. How successful it can be on a more general basis, dealing with harder cases than it has so far tackled, remains to be demonstrated. Nevertheless we believe that the programs are promising and should be pushed vigorously. Experience under them should be studied for lessons on ways to conduct them more effectively.

We do not regard these governmental programs as having the responsibility for providing the kind of training that business can and does provide. These programs should aim to improve the trainability of work-

¹An earlier statement of the CED Research and Policy Committee, *Distressed Areas in a Growing Economy* (1961), recommended a program of improved and expanded training and retraining in areas of especially high unemployment.

ers, and to demonstrate that trainability to prospective employers, so that employers will be more willing to accept them for on-the-job training. They should seek to guide workers into fields where jobs are likely to exist and help them to make contact with potential employers. Clearly the public training program will be successful only if it works in cooperation with employers and with an effective employment service.

The Manpower Development and Training Act (MDTA) began in 1962 as a wholly federally financed effort — paying the costs of state and local training programs—but on a schedule calling for the states to assume half of the cost after an initial demonstration phase and then two-thirds of the cost. Congress once postponed this shift of financial responsibility because too few states had made provision for it and then reduced the initial matching requirement by the states to 10 per cent of the total cost. *The requirement of substantial matching by the states should be retained*, perhaps with provision adjusting the requirement to the relative fiscal capacity of individual states. Despite increasing economic mobility in the country, the chief benefits of the training programs within each state are reaped by residents of that state. The states have jealously guarded control over their unemployment compensation systems and employment services. They cannot consistently disclaim responsibility for training the unemployed.

Where state laws interfere with payment of unemployment compensation to unemployed persons undergoing training, these laws should be revised. It should be a national objective to make training available to all unemployed people who would benefit from it. There should be no penalty for taking it.

The public training programs should make more use of the capabilities of business for providing on-the-job training. We support the analysis and recommendations to this effect presented in a recent expert study:

“When Congress enacted the Manpower Development and Training Act, it was anticipated that a significant proportion of the funds appropriated for the program would be utilized for on-the-job training.

“The Labor Department has been excessively cautious in allocating resources to on-the-job training lest government funds be used for training which would otherwise be undertaken by employers. Some unions have opposed training programs in gen-

eral and on-the-job training programs in particular on the ground that such programs tend to expand the supply of trained labor in their respective jurisdictions and thus to depress wages and reduce union controls over jobs, particularly in apprenticeable occupations. Other unions, however, have adopted a more positive attitude toward the retraining programs and have recognized that the programs can benefit those of their members whose jobs become obsolescent because of technological change.

“There is a need to devise methods to train a larger number of workers on the job. A particularly promising field exists in service occupations, where small employers predominate. Because of the competition for trained workers and the danger of being ‘raided’ by competitors, the small employers cannot afford to allocate resources for the training of workers. Arrangements can be made to pool the resources of such small employers and provide training through a combination of existing vocational facilities and on-the-job training paid for by employers. Successful development of such a program would provide some of the additional workers needed in service industries such as television and auto repair. Expansion of government-supported on-the-job training are limited to the cost of instruction and the cost of necessary materials used during training. *We recommend a more realistic and effective on-the-job training program which will permit the use of government funds to pay part of the wages of employees so that employers will be encouraged to train additional workers and to offer their facilities for such training.*”¹

WILL THE RETRAINED FIND JOBS?

The question is frequently asked whether unemployed persons who are retrained will find employment. This is a complicated question. However, we believe that the answer is affirmative, in most cases, but not in all. The proportions depend on the character of the training programs and on the other policies simultaneously followed.

Experience under the Manpower Development and Training program is that about 70 per cent of the persons completing training in

¹*Programs to Aid the Unemployed in the 1960's*. By Joseph M. Becker, William Haber, and Sar A. Levitan. The Upjohn Institute, January, 1965.

schools are employed shortly thereafter. The rate is about the same in all regions and is also 70 per cent for training under the Area Redevelopment program. Almost 90 per cent of persons completing on-the-job training under MDTA were employed. Moreover, government costs per person were much lower for on-the-job training than for institutional training.

These figures should not be interpreted to mean that the 70 per cent who were employed would have remained unemployed without the training. Most unemployed people find work sooner or later. Of those people who reach 15 weeks of unemployment, about 50 per cent typically become employed before they reach 26 weeks. Still this crudely suggests that retraining, plus the things that went with it—testing, counselling, job information, change in community attitudes—had an effect.

It is worth noting that a large proportion—90 per cent—of the retrained persons who found work in a short period found it in the occupation for which they were retrained. These were in general better occupations—higher paid and more stable—than those for which they were previously qualified.

The probability that retraining contributed significantly to the employment of those who received it does not necessarily mean that it contributed to a net reduction of unemployment. Did the retrained people get jobs that would have been held by others? We believe that retraining reduces the national unemployment rate. Although there is no systematic information on the number, location, and character of job vacancies in the United States, there is much scattered but convincing evidence of the existence of vacancies. Many of these vacancies exist because there are not qualified people to fill them; retrained workers will fill some of them. In fact, the government retraining programs operate under the injunction that they should train people to fill vacancies.

A major function of retraining is to make it safe to create vacancies more rapidly. Monetary and fiscal policy can raise the demand for labor and *create* job vacancies—not in precisely controllable amount and timing but nevertheless effectively. We are limited in doing this because creating vacancies more rapidly than they can be filled results in labor shortages, inefficiency, and inflation.*

*See Memorandum by MR. ALLAN SPROUL, page 44.

THE EMPLOYMENT SERVICE

Although adequate treatment of this important subject is beyond the scope of this policy statement, we want to emphasize that an effective — which means much improved — public employment service as a supplement to private means for finding jobs and workers, is essential to the success of the training program and to much else. Closer relations are needed between the schools and other training institutions and the employment service. The public employment service should provide information on probable future demands for labor, as a guide to the development of training programs. The service should be available to supply more specific counseling to young people and retrained adults about to begin the search for employment.

In general, the public employment service should be a means for prompt nation-wide transmission of accurate information about available workers and available jobs. As a group, our state employment services are not performing this function adequately now. They are still too much concentrated on local needs. In 1963 shifts of workers between areas accounted for only two per cent of all non-agricultural placements by the state employment services. They do not adequately test the abilities of job seekers or analyze jobs registered with them. They do not use the capacities of modern computers for storing, classifying, and communicating information. Insufficient effort is devoted to training professional personnel of the employment service and to research on the problems of the service.

Reform of the employment service is obviously not easy, since the criticisms of it are of long standing. However, it is necessary that the national momentum which now pushes forward the improvement of education and training should also give impetus to improving the employment service.

TRAINING THE EMPLOYED

Public retraining programs for people who have become unemployed need to be enlarged and improved, as we have said. However, such programs should be recognized as second-best solutions. The need for them, and the extended periods of unemployment they reflect, could be reduced by better foresight and training while people are employed.

If job requirements are known to be shifting within a plant, the business ordinarily has a strong incentive to train workers in the declining occupations to fill jobs in the expanding occupations. The existing workers are known to the management and presumably have qualities the management wants, including knowledge of the company's procedures. Also the existing workers may have seniority and other privileges which make it expensive or difficult to discharge them and hire others.

However, the retraining of existing workers for new jobs with the firm depends upon the shift of job requirements being foreseen in time. If the shift is not foreseen, there may not be time after it occurs to retrain the existing workers; they will have to be let go and others, already qualified, will have to be sought. Systematic advance planning for future personnel requirements, except with respect to the scarcest kinds of talent, is still not general in American industry. Businesses will find it in their interest, and in the interest of their employees, to develop better methods for anticipating changing occupational needs. In many cases, cooperation with the public employment service and with unions can be helpful to this end.

Even where specific occupational shifts cannot be foreseen, it may be possible to predict that there will be changes within broad categories of occupations and that workers will require certain general abilities to adapt to these changes. Depending on the nature of the industry, programs to raise the literacy, mathematical skills, or general scientific understanding of workers may contribute to their future adaptability.

Special problems arise where changes are foreseen that will require the release of certain categories of workers. Increasingly, employers feel that they have a responsibility for assisting in the reemployment of these workers. One of the best ways in which this responsibility can be met is by helping retrain workers before they are released.

Some training that employers could provide which would be beneficial to workers will cost more than any reasonable calculation of benefits to the firm would justify the employer in paying. The value of this training should be recognized as a form of compensation to the worker, to be taken into account when wage rates and other benefits are decided.

Not all retraining and continuing education of employed workers can be or should be provided by the employer. Many businesses are too small to run any kind of training program. There are some kinds of

training which even a large employer may have no ability or interest to provide. One function of the network of technical institutes we have recommended above would be to provide instruction in such cases, at the expense of the worker, or the employer, or both—depending on the circumstances.

D. Economy and Efficiency in Education

Education is one of the largest enterprises in America. Annual expenditures of elementary and secondary schools, colleges and universities are now about \$34 billion. Expenditures on training within private industry and the value of students' time would add many billion dollars to this. Education is also one of the most rapidly growing uses of the national resources.

Two implications of the size and growth of education should be noted here. The national gains from improving the efficiency of education—from getting more educational result for each dollar or teacher-hour or student-hour—can be enormous. Also there is a large market here for anyone who can develop a way to perform the process more efficiently.

Probably no other large American undertaking has been as isolated from, and resistant to, the general advance of production methods as education. There are many reasons for this—extreme decentralization, lack of competition, lack of profit incentive, management by persons who do not have the training or attitudes of managers elsewhere, and preoccupation in recent years with other problems, such as teacher salaries and classroom shortages.

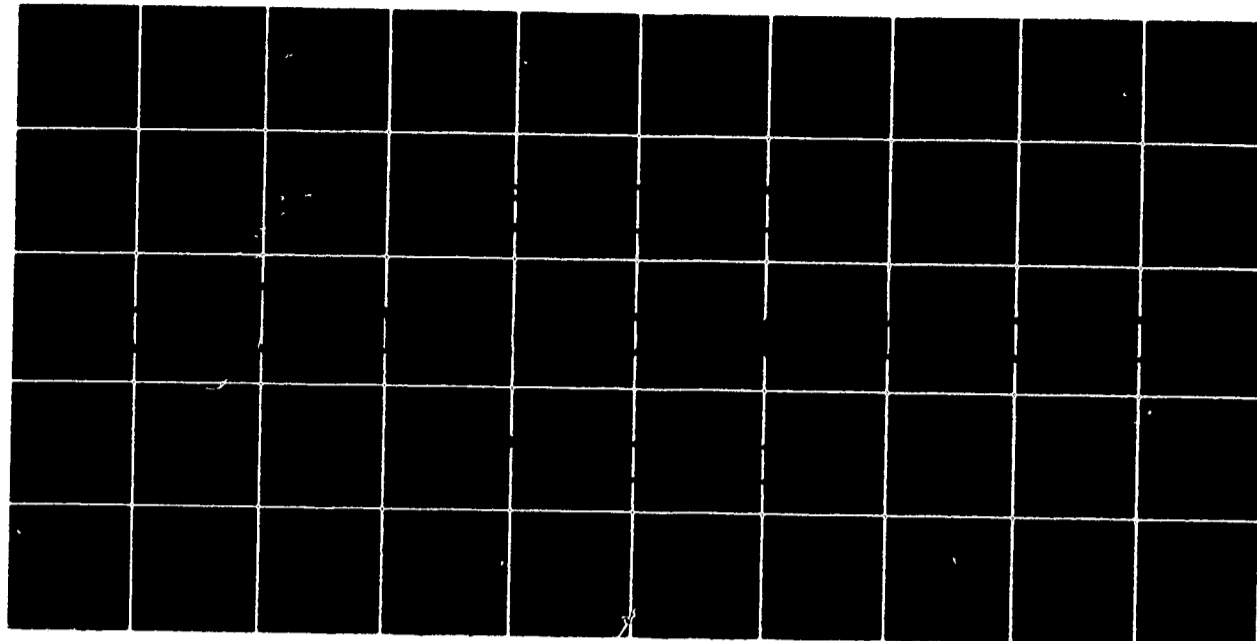
Regrettably, research efforts designed to improve and modernize the methods and techniques in our educational institutions have been starved for funds. Although total national expenditures for education now exceed \$30 billion annually, the amount spent for educational research is comparatively small. Total expenditures—public and private—for research on education in 1964 were estimated at \$72 million, only about one-fifth of one per cent of expenditures on education.

In recent years this situation has been changing, marginally, and largely as a by-product of developments outside the field of education. Thus, there are the beginnings of the use of teaching machines, television, film, tape recorders, new text books, and so on.

As promise for the future, research activities of the United States Office of Education have been enlarged and will grow further. State and local governments, squeezed between demands for more education and resistance to more taxes, will be forced to seek ways of getting more education for less money. Experimenting with new approaches, new media, and alternate tactics will become imperative.

The capabilities of business have an important part to play in lifting the efficiency of education. The research and development abilities within firms in communications, electronics, and publishing are obvious examples. But the need is not only for educational hardware. There is need also for better organization, better recruitment, better development and compensation of personnel, and better analysis of subjects to be learned and ways of learning them. A variety of kinds of businesses have abilities in this area. The field will be new to most, but not newer than the development of space vehicles and other projects to which the general managerial ability of business has made a contribution. The recent awards of contracts to private business for developing and operating youth training programs under the Economic Opportunity Act illustrate one functional approach to the utilization of business for education.

We are not suggesting any exclusive role for business. Neither are we suggesting that the contribution of business should be philanthropic. If we want to bring the special qualities of business to bear, we must treat it in a business-like way. There is every reason why this should be beneficial to the country.



Page 12—By WILLIAM BENTON:

I welcome this policy statement. Progress in education requires the combined effort of governments at all levels, of private groups and of “educational establishments.” Perhaps the most crucial present need is leadership.

The concluding section of this statement points to the need for economy and efficiency in education—a need which will increase as the nation’s efforts expand. I am at a loss to see how we can hope to achieve these goals without better means of shaping and giving direction to our country’s educational policies. Although one quarter of the population of the United States is enrolled in our schools and colleges—although education is our largest business—our factual information about the educational system, and about how best to achieve its goals, is astonishingly inadequate for the purposes of sensible planning and decision making. The new techniques in the field of education—referred to in the concluding section of this statement—such as TV, motion pictures, and programmed self-instruction—have not remotely been given the consideration they deserve. The House committee reporting the recently passed Elementary and Secondary Education Act recognized the importance of such innovations when it expressed a hope that schools would make use of “new techniques of instruction and educational innovation that were becoming increasingly available.” How can we achieve more effective leadership—and communication—in this, as in other areas of educational policy? How can we best work to eliminate what Dr. Conant has referred to as “chaos” in the structure of United States education?

In 1959 I served as chairman of the Education Committee of the Democratic Advisory Council. The members of my committee were Dr. Philip Coombs; Professors Walter Heller and Seymour Harris; and the late Beardsley Ruml. In our report, some of which subsequently found its way into legislation, we proposed the formation of a small Council of Educational Advisors to the President. We conceived it as playing a role similar to that of the Council of Economic Advisers which was established by the Employment Act of 1946. As with the economic council, the educational council would have no legislative or executive power over policy. Its duty and opportunity would be to issue an annual, or semi-annual, report which would keep the White House, the administration, the Congress, state and local government, and the nation better informed about educational problems, and about present and potential educational programs. It would provide a new basis for detecting strengths and weaknesses, for spotting important trends, and for identifying deficiencies in education. It could be of enormous value, if only through the prestige of the White House, and through the reputation of the council's members. It could thus influence proposals for action at federal, state, and community levels—and could provide guidance upon which editors, publicists, and private groups of all kinds could base their efforts.

The Elementary and Secondary Education Act of 1965 provides for three separate advisory councils to report to the Secretary of Health, Education and Welfare and the President on particular programs. These councils can play a valuable role in the areas of their concern. The need remains, however, for some over-all means of surveying and reporting on the broad spectrum of our educational system. Thus, I put forward again our 1959 proposal as an addendum to this statement.

Page 17—By ROBERT R. NATHAN:

This discussion of wage rates in an otherwise commendable paper dealing with the subject of education and low incomes is both excessive and inadequate. It is excessive in that it is largely irrelevant to the specific subject matter. It is a gratuitous slap at the minimum wage concept. It is inadequate in that it fails by a wide margin to treat the impact of legal minimum wages on employment comprehensively or in balanced degree.

What is stated may be valid in neo-classic terms, but in the real world of the mid-twentieth century it does not stand up. Each time the subject

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of minimum wages has been before the Congress, impressive statistical evidence has been assembled and presented by the United States Department of Labor refuting the repeated and unsubstantiated charges that vast unemployment would result from increasing the minimum wage level. There is, to my knowledge, no evidence of positive correlation over time between either the original legislating of minimum wages or subsequent legislated increases in the minima on the one hand and the growth or concentration of unemployment among the uneducated, the unskilled, the youth, the minorities, or any other group on the other hand.

I believe the benefits of minimum wage legislation to millions of workers, directly or indirectly, far outweigh the detriment to a relatively small number of submarginal workers who otherwise might not be now employed. Even in fiscal terms, governmental budgets probably have benefited far more from greater revenues and lower relief expenditures resulting from rising minimum wages than the public burden of any possible small amount of added unemployment. In fact, the level of employment may well be considerably higher and of unemployment considerably lower because of the expanded markets attributable to minimum wage legislation.

In any case, this important subject of legal minimum wages is far too complex and far too important to be treated so superficially in a report where it does not truly belong.

Page 21—By PHILIP SPORN:

I am glad to associate myself with this policy statement. At the same time I am deeply troubled by the emphasis, to the point where it seems to me it becomes a strong over-emphasis, of the economic aspects of education.

It is true that at the beginning of the report a caveat is very carefully inserted to the effect that improvement in productivity and income is not the only or even the most important goal of educational improvement. Nevertheless, this is followed by a half dozen other statements tying together education and economic improvement. This, it seems to me, carries over the view of the professional economist that the education of our youth should be considered an investment. But I strongly differ with that view and with that approach.

Education, it seems to me, is a preparation for life — it has always been so, is more than ever so in the world of today, and will be even more

emphasized in the world of tomorrow. Therefore, education needs to be adopted as a philosophy of life — as a way of life. As such the area of responsibility goes beyond the state: it becomes the duty of parents, the individual and his fellow residents on planet earth, both as individuals and as members of organized society.

It is true that education has the characteristics of having economic value like a good investment. But the basic reason for getting an education goes deeper. It gives a person a more solid basis for self-respect, for making it possible for him to be a better person, family member, and citizen. This is true whether the person is a truck driver, a nuclear engineer, or even a space scientist. It also makes it possible for him to get and keep a better job and it does not apply merely to the underprivileged. Some of the inadequately educated people are to be found among businessmen and professional people like doctors, engineers, scientists, lawyers, and even legislators.

If we can implant this idea of education as a way of life in the consciousness of parents early enough for them to influence their children, and if they in turn can implant this in the consciousness of their children and then if we so set up our society to make it possible for every person to get an education to the fullest extent of his or her abilities (but not necessarily as a free gift) without limitations as to personal or family income, we will have taken a step that will bring us much nearer to the Great Society which is rapidly becoming one of our national objectives.

Page 36—By ALLAN SPROUL:

This statement suffers from the difficulty of combining accuracy with brevity in treating a complex economic relationship. I would like to enter the caveat, therefore, that combining maximum employment with price stability requires a triple effort in terms of fiscal policy, monetary policy and cost-price or incomes policy. The effectiveness of monetary and fiscal policy in raising the demand for labor depends, in part, on recognition by business and labor of the differences between real incomes and profits and money incomes and profits, when the purchasing power of the currency unit is being chipped away by rising costs and prices. There is need for further education for higher employment, greater productivity and increased incomes on this score among some of our most privileged groups of citizens in management and in labor as well as among the general body of citizens.

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HIGHEST GRADE COMPLETED	<i>Earnings at 1960 rates²</i>
	\$229,000
Elementary school: <i>Less than 8 years</i> <i>8 years</i>	143,000 184,000
High School: <i>1 to 3 years</i> <i>4 years</i>	212,000 247,000
College: <i>1 to 3 years</i> <i>4 years</i> <i>5 years or more</i>	293,000 385,000 455,000

¹ Herman P. Miller: *Rich Man, Poor Man*, 1964, p. 148.

² These are the total amounts that a man with the specified education would earn from age 18 to age 64 if he earned at each year of age the average income that a man of that age and education earned in 1960.

YEARS OF SCHOOL COMPLETED	PER CENT OF LABOR FORCE UNEMPLOYED, BY AGE				
	Total—18 yrs. and older	18-24	25-34	35-44	45-over
	4.7	10.4	3.6	3.5	4.3
Elementary: Less than 8 years*	8.1	16.8	9.5	8.4	7.0
8 years	6.5	21.4	8.6	5.4	5.4
High school: 1 to 3 years	5.9	11.3	4.5	5.1	5.1
4 years	3.8	9.0	3.0	2.6	2.6
College: 1 to 3 years	3.6	8.8	2.3	1.5	3.1
4 years or more	1.3	8.0	1.2	0.6	1.1
	5.4	8.6	6.1	5.2	4.0
Elementary: Less than 8 years*	8.9	**	8.1	15.4	6.2
8 years	6.0	14.2	7.6	7.3	4.7

High school: <i>1 to 3 years</i> <i>4 years</i> College: <i>1 to 3 years</i> <i>4 years or more</i>	7.3	17.0	7.4	7.4	3.9
	5.1	7.2	6.4	3.6	3.9
	4.5	6.8	5.8	3.1	3.1
	1.7	2.3	2.5	1.2	1.4
	9.4	15.1	9.8	8.3	7.3
Elementary: <i>8 years or less*</i> High school: <i>1 to 3 years</i> <i>4 years or more</i>	9.6	16.3	12.7	10.3	7.5
	11.3	22.0	11.5	4.6	7.8
	7.6	8.8	6.9	8.5	6.3
	10.8	25.8	11.3	6.8	6.1
Elementary: <i>8 years or less*</i> High school: <i>1 to 3 years</i> <i>4 years or more</i>	8.9	**	12.8	9.2	6.7
	14.4	31.9	13.5	8.4	7.3
	10.2	23.2	9.6	3.6	3.8

*Includes those with no schooling. **Less than 100,000 in category.

Source: U.S. Department of Labor, *Monthly Labor Review*, May, 1965, Table 5, p. 521.

EDUCATION OF HEAD OF FAMILY	<i>Number of all families</i>	<i>Number of low income¹ families</i>	<i>Low income¹ families as per cent of all families</i>	<i>The Group's low income¹ families as a per cent of all low income families</i>
	<i>(millions)</i>	<i>(millions)</i>	<i>(per cent)</i>	<i>(per cent)</i>
Less than 8 years	7.7	3.6	46.7	36
8 years	8.6	2.5	29.0	25
Some high school (9-11 years)	8.6	1.7	19.8	17
High school graduates	12.2	1.5	12.3	15
Some college (over 12 years)	9.3	.7	7.5	7
TOTALS	46.4	10.0	21.6	100

¹ Low income is cash family annual income less than \$3,000.

Source: Bureau of the Census, *Current Population Reports*, Series P-60, No. 39, February, 1963.

EDUCATION OF FAMILY HEAD	<i>Per cent of families with income under \$3,000 in 1962 who also had income under \$3,000 in 1963</i>
Less than 8 years	79
8 years	72
9-11 years	64
12 years	53
13-15 years	54
16 years or more	40

Source: *Economic Report of the President*, January, 1965, Table 19, p. 164.

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