

DOCUMENT RESUME

ED 138 124

HE 008 655

TITLE Student Financial Aid and National Purpose.
 INSTITUTION College Entrance Examination Board, New York, N.Y.
 PUB DATE 62
 NOTE 117p.; Speeches made at a colloquium on financial aid held by the College Scholarship Service; Not available in hard copy due to copyright restrictions

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.
 DESCRIPTORS *Educational Economics; Educational Needs; Educational Responsibility; *Finance Reform; *Financial Support; *Government Role; *Higher Education; Private Financial Support; School Responsibility; Social Responsibility; State Government; *Student Financial Aid; Tuition

ABSTRACT

Presentations include: the origins of student aid in the United States (Frederick Rudolph); measuring the economic effects of education (Burton A. Weisbrod); the social and political arguments for extending the reach of education (Robert J. Navighurst); our worldwide stake in developing talent (Dael Wolfe); what part the states should play in student aid (Arthur S. Marmaduke); private aid to education--its future role (John M. Stalnaker); diversity of sources: key to flexibility in student aid (James E. Allen, Jr.); estimating the cost of an ideal student-aid program (Homer D. Babbidge, Jr.); should all higher education be tuition-free? a debate (William C. Fels, Buell G. Gallagher); our student aid patchwork needs drastic revision (Wilbur J. Bender). (MSE)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

Student financial aid and national purpose



*A colloquium on financial aid held by
the College Scholarship Service
of the College Entrance Examination Board*

Additional copies of this book may be ordered from College Entrance Examination Board, Box 592, Princeton, New Jersey, or Box 27896, Los Angeles 27, California. The cost is \$2.50 per copy.

Copyright 1962 by College Entrance Examination Board
Printed in the United States of America

Contents

<i>Authors</i>	iv
<i>Foreword</i>	v
<i>Introduction</i>	viii
<i>The origins of student aid in the United States</i> Frederick Rudolph	1
<i>Measuring the economic effects of education</i> Burton A. Weisbrod	12
<i>The social and political arguments for extending the reach of education</i> Robert J. Havighurst	28
<i>Our worldwide stake in developing talent</i> Dael Wolfle	35
<i>What part the states should play in student aid</i> Arthur S. Marmaduke	45
<i>Private aid to education — its future role</i> John M. Stalnaker	52
<i>Diversity of sources: key to flexibility in student aid</i> James E. Allen, Jr.	66
<i>Estimating the cost of an ideal student aid program</i> Homer D. Babbidge, Jr.	76
<i>Should all higher education be tuition-free? A debate</i> <i>We need both public and private colleges</i> William C. Fels	82
<i>All colleges should be tuition-free</i> Buell G. Gallagher	85
<i>Our student aid patchwork needs drastic revision</i> Wilbur J. Bender	90

Authors

JAMES E. ALLEN, JR.
Commissioner of Education
New York State

HOMER D. BABBIDGE, JR.
Vice President
American Council on Education

WILBUR J. BENDER
Director
Committee of the Permanent Charity
Fund, Inc.

WILLIAM C. FELS
President
Bennington College

BUELL G. GALLAGHER
President
City College of New York

ROBERT J. HAVIGHURST
Professor of Education
University of Chicago

ARTHUR S. MARMADUKE
Executive Director
California State Scholarship
Commission

FREDERICK RUDOLPH
Professor of History
Williams College

JOHN M. STALNAKER
President
National Merit Scholarship Corporation

BURTON A. WEISBROD
Assistant Professor of Economics
Washington University

DAEL WOLFLE
Executive Officer
Association for the Advancement of
Science

Foreword

The appropriate future pattern for the financing of higher education in the United States continues to be one of the most discussed yet unsettled problems of the day. It is of concern that there is still so much indecision about how we shall pay the bills while we are so decisive about the depth and breadth of the opportunities we will provide.

Many proposals have been put forth by educators, economists, and politicians. In virtually all such proposals, the role of student fees continues to hold a position of importance—in some even a position of prominence. Even the strongest advocates of massive federal and state aid to higher education concede that it would be exceedingly difficult, even if highly desirable, for higher education to survive for very long without the income from student fees. Student fees added to the other costs incidental to gaining a college education already produce for a sizable proportion of our student population problems so great as to frustrate personal ambitions and the accomplishment of larger national goals. Increased costs without commensurate palliatives can be expected to intensify these frustrations.

Varied programs of student financial assistance, then, in a culture which supports educational inclusiveness and has an economic philosophy which favors fees and other costs to the individual, are essential to the accomplishment of national purpose. It was this reasoning which prompted the scheduling of the conference for which this volume is a report. It is indeed timely to explore the role of student aid, describe it as it now exists, and project its role into the future in the boldest forms necessary to accomplish our purposes.

The timeliness of the meeting is perhaps best demonstrated by relating the circumstances prevailing during the period over which the meeting was planned and conducted. The colloquium, a "first" both for the subject and for the College Scholarship Service, was conceived in the fall of 1961 during the waning days of the first session of the 87th Congress—a time when the chances of passing a bill for federal aid to higher education, including aid for scholarships,

seemed indeed slim. The program format was developed and speakers were obtained during the period of indecisiveness which characterized the early days of the second session of the 87th Congress. The meetings were held May 13-16, 1962, in a time of hopeful watching and waiting. This publication now becomes available at a time when the fate of federal scholarships is again obscured because of a series of occurrences which seem to the majority of educators to be irrelevant to the enactment of institutional and student support programs. It was, in fact, these circumstances that made it necessary for one of our speakers, the Honorable Edith Green, Congresswoman from Oregon, chairman of the House Special Subcommittee on Education, and a recognized Congressional champion of increased financial aid to institutions and students, to request that her remarks at the colloquium be considered off the record. Participants who heard her at the meetings came away with great respect for this charming lady, convinced that the cause for increased aid to education could ask for no greater champion.

In attendance at the colloquium were 105 participants—college presidents, deans, financial officers, student aid and admissions directors; representatives from government and private commerce; and the staff of various national organizations, including the College Scholarship Service. It was the unanimous feeling of these participants that an organized national effort by educators, an effort of greater depth and duration than a conference setting could offer, was called for to delineate the scope and role of future student financial aid efforts. The evidence was clear that unless aid expenditures continued to grow at a commensurate rate with rising costs and changing national purposes and goals, frustration would continue to be the reward of planning in advance for national needs. The continued failure of Congress to enact a scholarship program in the face of strong support for it from all quarters, including present and previous Presidents of the United States, makes it essential that a better case be made for such a program or that other sources be found. The potential control of education by federal powers is not an issue in the matter of scholarships. However, the withholding of help when it is clearly needed can be a more insidious form of control than the provision of help if its purposes and rules are in full public view.

Much of the credit for the success of the colloquium goes to its director, Byron S. Hollinshead. Few people in the nation have been more concerned than he about the accessibility of higher education in the United States. His book, *Who Should Go to College*,¹ did much to awaken national concern for the problem

¹(New York: Columbia University Press, 1952).

and stimulated much of the constructive action in the past decade toward solving it. His years-abroad after this effort gave him an even broader perspective of our problems and goals and made him the ideal choice for the directorship of this first College Scholarship Service colloquium. He pursued his task, as this publication testifies, with great wisdom and understanding of the problem.

The colloquium committee, consisting of Gene D. Gisburne, chairman, Homer D. Babbidge, Charles C. Cole, Jr., William C. Fels, Jeanne McConeghy, and John F. Morse, also deserves special credit for its service as a constant source of inspiration and guidance to the colloquium director and the College Scholarship Service staff.

To those who attended the colloquium, the experience was a memorable one. But they represent only a handful of the people who must be concerned about the future accessibility of higher education in the United States. By putting the papers presented at the meetings in this book form, we have recorded the formal utterances of the meeting. We have provided a means for the wide dissemination of the facts and ideas. We have not done justice to the warmth and enthusiasm of the presentations nor the eloquent interchange between speakers and among speakers and participants. It is hoped that the ideas contained herein will serve over the months and years ahead to focus the thinking and discussion of many of our leaders on this important and timely topic.

REXFORD G. MOON, JR.

Director of the College Scholarship Service

Introduction

On a wintry weekend last January, Rexford G. Moon, Jr., Homer D. Babbidge, John F. Morse, and I met for dinner in Washington, D. C., to begin the planning of the first colloquium on student aid. Each of us was imbued with the idea that one of the nation's greatest problems was how to conserve its human talent, and we thought that if we could develop a full analysis of this problem and suggest possible solutions we would be serving an important national purpose.

Furthermore, we thought it would help to develop the ideas of the speakers we might bring together if their proposals could be spread before a perceptive audience whose members had seen drafts, before the meeting, of the papers to be presented. Perhaps beyond our deserts, we were successful in obtaining as speakers the best array of talent in America on the assigned subjects.

As we listened to the speeches that are now presented in this volume, we could begin to assess the plan of our meetings and the value of the presentations. At the moment I am not sure how to evaluate our meetings. I think we did a fine job of analyzing the problems. We also developed some answers which will be useful. But I think I agree with Homer Babbidge's observation that we may still be whittling away on some of these difficulties in 1975.

At any rate, as colloquium director, I am grateful to all the participants—those who helped with the arrangements, those who gave papers, those who asked questions, and those who simply came. I could not have had closer cooperation nor more intelligent participation. Beginning with our first session, we were presented with unusual analyses, well organized in content and style.

Frederick Rudolph's paper gives us historical perspective and sets a brilliant beginning tone. It is a benefit to all of us to know how shallow are the distinctions between "public" and "private" and how much our early colleges owed their very existence to the self-sacrifice of their professors.

When we turned to the economic stake in conserving talent I felt unhappy that economists have not thus far been able to make a stronger case. Certainly

modern cities owe their existence to the skill of our engineering; our agricultural surpluses stem directly from the teaching and research of our agricultural schools and experiment stations; our vast business enterprises could not be organized or manned without the training given by our schools of business; and the nation's health depends upon the variety and high quality of the health sciences taught in our universities. While it may be difficult to put such observations into quantitative terms, we should not hesitate, in my opinion, to claim more than the economists seem willing to chart or graph as the contribution of education. A modern society can only improve itself economically, socially, culturally, and politically by enlarging and improving its support of education.

As Robert J. Havighurst points out, the chief way we have kept our society stable has been by giving young people with "barely visible" talents an opportunity to move up on the social scale. According to him about one-third of the students in the top quarter of ability are not now going to college, and we could almost double the number of those who make test scores that now place them in the top quarter in talent if we made a persistent effort to give an opportunity to all young people, particularly those now submerged by poverty or held back by cultural and racial prejudices.

As we consider our national obligations to assist students in these troubled days, we recognize that we have a problem within a problem. This other problem is to think of students from other countries in the same way we think of our own. Although foreign students number only about 50,000 of our 4,000,000, their importance is out of all proportion to their numbers. In many cases they are the possible future leaders of their countries. In all cases they represent possible areas of understanding for the United States. Furthermore, they can teach valuable things to our own students by helping to remove suspicions and prejudices by demonstrating the oneness of human aspirations. Dael Wolfe's brilliant paper on the stake we have in conserving talent from countries other than our own deserves a wide reading.

As we think of the need to expand our student aid and to see that such aid would have maximum effect, our attention turns to a consideration of those agencies which can help. To put all these agencies under the labels of federal, state, and private may be too broad a classification but there seems to be no other convenient one.

Traditionally we have been taught to fear the federal government even though we comprise it. And it certainly is true that the vastness of our country means that we cannot and should not think of operating such programs as student aid solely from Washington. Nonetheless, it has become clear that

most people now believe that federal funds going to education should be increased, even though these same people may differ on the practical problems of how the money is to be handled and who is to set the rules for its expenditure.

The federal government can act through state governments, as Arthur Marmaduke points out. It can act in direct relation to the colleges as exemplified by the GI Bills, or it can decentralize its operations by using regional agencies. All would agree that the states are probably the best agencies to handle federal scholarships if they have the population, the administrative staffs, and the willingness to make awards by national rules.

As Frederick Rudolph indicates in his discussion, and as John M. Stalnaker demonstrates by figures in his, the colleges themselves have always been the biggest distributors of student aid. In a society which has administrative arrangements as diverse as ours we gain in strength by tapping all possible sources of assistance, all possible agencies of influence. These private operations together far outweigh in amount and influence all other sources of student assistance. It seems desirable to keep it that way.

We are all greatly impressed by the wide variety of assistance available in New York State and the intelligent way in which it is organized and administered. New York and California may be thought of as states which have developed many methods of student aid—all of them useful for other states to study. Commissioner James E. Allen's preference for the states' taking the lead in administering federal funds, as well as developing programs to sustain private colleges, is a wholly understandable position when one considers the size, wealth, and efficiency of the New York State government. Whether other states can emulate the various aspects of the New York administrative organization and structure is, however, another question.

In the realm of financing, no one could expect Homer Babbidge to be able to provide all the figures one might wish in projecting an ideal program in higher education. As he remarks, there are too many unknown variables. Nonetheless, his paper is of great interest because it contains many of the figures we need if projections are to have validity. It would be particularly useful to determine what percentage of gross national product should be devoted to higher education. If we double the present percentage not only could we keep up with increases in production and population, but we could give ourselves a substantial margin beyond the proportionate amount we are now spending; and we could then not only improve the quality of education in general but also bring into higher education some percentage of those young people whose talents Dr. Havighurst terms "barely visible" or "invisible."

While there are those who think all efforts to make projections beyond next

year are a fairly unpleasant way to waste time, most of us think of projections such as those Dr. Babbidge presents as extremely useful and the only possible way we can prepare ourselves for what may lie ahead.

In all the discussions during the three days of the colloquium, the problem of deciding whether it is better to subsidize higher education by aiding students or by aiding institutions figured prominently. The proportion of revenue that must come from tuition is greater for most private institutions than it is for public institutions, but the object of both kinds of institution should be to extend educational opportunity as widely as possible. Further, there can be no doubt that both need more money for general support as well as for scholarships. On the questions relating to the arguments for increased tuition with more scholarships versus lower tuition charges, we did not have so sharp a division of opinion as might have been expected, although there were many differences about timing (tomorrow versus a millennium) and sharp differences about the use of loan funds. If there was one area of agreement, it was that no young person should be deprived of education because of lack of funds; or, to put it another way, every person should be enabled to develop his talents fully. William C. Fels and Buell G. Gallagher, in their discussions, have little agreement on means but almost complete agreement on ends.

Wilbur J. Bender elucidates plainly some of the philosophical problems relating to student aid. I do not expect to recount those, but I should like to summarize "the sense of our meetings" (to use the Quaker phrase) by repeating Mr. Bender's admirable propositions. I believe the colloquium showed that we all agree to a platform something like his:

We want a national student aid program developed comprehensively.

We believe that such a program should be developed largely by educators.

The aim of such a program should be the removal of all economic barriers to higher education.

To achieve this goal will require substantial amounts of national and state funds.

Society should give a very high priority to the support of student aid from both public and private funds.

Such a high priority is justified in a society which must depend for its welfare upon the excellence of its education.

I realize that this summary does not do justice to the many facets of the colloquium discussions nor to the high quality of the presentations. During the few days of the colloquium the participants fused some of their ideas and widened their vision on others. Some of these ideas, these widened visions, will have an influence on our educational institutions and thus on the larger

society of which our institutions are a part. We hoped that the effect of our deliberations might produce actions which would be for the benefit of all our young people. If such an effect has been even partially achieved, the colloquium will have justified the high hopes of its sponsors.

BYRON S. HOLLINSHEAD
Director of the Colloquium

Consultant, Office of the President, University of Florida
Gainesville, Florida
June 1962

The origins of student aid in the United States

by FREDERICK RUDOLPH

Very few young men and women have paid their way through an American college or university. Many have been allowed to think that they have, but the truth of the matter is that for a very long time and for very good reasons higher education in the United States has been a major philanthropic endeavor. The phenomenon of scores of academic presidents running around the country on begging missions has sometimes obscured the fundamental nature of the American college, which is not so much an object of charity as a dispenser of charity, not so much the recipient of philanthropy as the transmitter of philanthropy, not so much the receiver of aid as the giver of aid. And in all this getting and giving the immediate beneficiaries have been generations of college students, many of whom have been only dimly aware of the extent to which a tradition of generosity and service has underwritten a major part of the cost of their college education. The first endowment fund in an American college was the £100 for scholarships that Lady Anne Mowlson sent across the Atlantic in the early days of Harvard. The American college has been giving itself away ever since.

The American tradition of student aid appears to be culminating, in this second half of the twentieth century, in a vast effort to guarantee higher education for every American able to profit from the collegiate or university experience. The federal government in this century has used student aid to fight a depression and to prevent a depression, to thank the veterans of two wars, and to shore up the national defenses. Some state governments are translating student aid into networks of colleges; municipal institutions dispense with tuition charges; local communities, high schools, and service clubs distribute aid funds of their own. Alumni groups, foundations, and business concerns multiply their exertions in behalf of the American college student.

So durable has been this tradition of student aid that it has flourished in peace and benefited from war; prospered in aristocratic times and in democratic

times; and served the major social purposes of the country. Student aid has expended the resources of local, state, and federal governments; it has distributed the modest subscriptions of the friends and neighbors of a country college and the vast fortunes of the great philanthropic foundations; it has both saved the colleges and threatened them with bankruptcy; it has spent professors when it could not spend endowment; it has supported some of the favorite objects of American sentiment—poor boys and football players; and it has underwritten the whole process of university growth and scholarly purpose. In other words, student aid has been central to the history of the American college and university.

Many an old man, successful and wealthy, has acknowledged his indebtedness to one form of student aid or another by allowing that he might never have gone to college without the friendly assistance of a college president's discretionary fund, an alumni society's regional scholarship, or the kindness of a lenient college treasurer. The colleges and universities, however, have been more reluctant to make a comparable acknowledgment. Yet, student aid has been as important to the colleges as to the young men and women whose careers it has shaped. It has also shaped the careers of the colleges and universities themselves.

College aims were confused

In the first era of student aid—roughly, from the founding of Harvard College until the Civil War—the American college was searching for some understanding and definition of itself. The difficulties of this search were revealed in the policies, if they may be called that, on student aid. Inheriting the aristocratic purposes and customs of the English residential college, the American college found itself from the very beginning in the difficult, if not embarrassing, position of having to serve a developing democratic society. The expectations turned toward the colleges were increasingly democratic, and they provided the colleges with some of their earliest experiences with government support, with recognizable overt student aid, and with an important experience in hidden aid.

The extent to which student aid, government support, and collegiate purpose are inextricably meshed cannot be fully understood unless one is prepared to abandon the whole clumsy, confusing, and perhaps even dishonest concept that is contained in the phrase "private college." In 1802 President Joseph McKeen of Bowdoin College expressed the public purpose of the American college in this way:

"It ought always to be remembered that literary institutions are founded and endowed for the common good, and not for the private advantage of those

who resort to them for education. It is not that they may be able to pass through life in an easy or reputable manner, but that their mental powers may be cultivated and improved for the benefit of society. If it be true, no man should live for himself alone, we may safely assert that every man who has been aided by a public institution to acquire an education and to qualify himself for usefulness, is under peculiar obligations to exert his talents for the public good.

What is particularly striking about President McKeen's comments on collegiate purpose is his recognition of the public nature of his own college, a recognition that was widely shared by state legislatures which chartered and supported the colleges and by local taxing authorities. Both these agencies of government translated this recognition into effective financial assistance at a time when private philanthropy was unequal to the needs of higher education. The extent of governmental support to the colleges in the decades before the Civil War has been obscured by some quite misleading folklore about the so-called private college and by inadequate historical investigation, but the evidence is sufficient to permit the suggestion that government support was often of crucial importance in the life of the American college and that this support rested on a belief that the state and the local community were obliged—from considerations of their own health and future—to help reduce the costs of higher education for the young men to whom they would one day turn for leadership.

Two other considerations underwrote student aid in the pre-Civil War college. One was the extent to which the colleges sought to escape from aristocratic tradition and enter into some closer connection with the people. Another was the necessity of finding some means of inducing students to attend institutions that were being founded in excessive numbers and that were offering an unappealing classical course of study. The colleges never really solved these problems until after the Civil War, when a combination of land-grant colleges, state universities, and the elective principle freed higher education in the United States from the grip of aristocratic tradition, but before the Civil War some valiant efforts were made to bring the costs of higher education within the realm of possibility for young men of slight and modest means.

One of these efforts was the manual-labor movement of the 1830's, which theoretically made going to college self-financing, gave students experience in practical skills, and even paid some attention to their physical condition. The notion that young men could pay their own way through college by working at some useful trade was introduced in dozens of colleges, and much to almost

¹ Louis C. Hatch, *The History of Bowdoin College* (Portland, Me.: Loring, Short, and Harmon, 1927), p. 19.

everyone's satisfaction it was generally killed off by the Panic of 1837. The farms operated by the colleges usually lost money; the students malingered; the mechanical shops were underequipped; at Marietta College and Ohio University the students made so many wooden barrels that they glutted the market. No more successful in meeting the rising tide of democracy were the old eastern colleges that were troubled by high board costs. Yale in 1827 put into operation a dining hall especially for poor students; Princeton followed suit in 1831 and Brown in 1832. The implication of inferiority contained in these second-class accommodations made them unattractive to prospective students. Equally distasteful was the term "charity funds" that described the meager endowments available for students unable to pay their way.²

In a dynamic democratic society there was need of some more palatable and effective way of persuading poor boys to go to college and of supporting them once they got there. This way was found in the whole pattern of underpayment and nonpayment of professors, who recognized in their own sacrifices, in the accumulating unpaid student bills, in the custom of tuition remission, and in countless other similar devices the means of keeping low the cost of a college education. Student aid, therefore, rested squarely on the professors. They and state and local governments were the major sources of student aid in the decades before the Civil War when individual wealth in the United States was insufficient to support higher education.

Private wealth could not cope with the excessive number of colleges that were spawned by an era of ambitious and competitive denominationalism, an era that introduced first a note of dismay and finally of outright refusal into the tradition of state support. The absence of any widespread public desire for a classical education further weakened the financial structure of the colleges until they were driven into a most bizarre experience with student aid. In the years between 1835 and 1860, during the height of the era of college founding, many institutions sent their agents out on the road to sell what were called perpetual scholarships. For a set price—generally in the neighborhood of \$500—a person might buy a so-called perpetual scholarship, entitling the owner to free tuition for one person in perpetuity. There are a number of ways of looking at this phenomenon: it was a characteristically American get-rich-quick scheme, and it was clearly evidence that the country had too many colleges and too few students. But from a consideration of its significance for the history of student aid, the perpetual scholarship scheme emphasizes the early recognition of stu-

² For the record of student aid I have relied heavily on the appropriate sections of my *The American College and University: A History* (New York: Alfred A. Knopf, Inc., 1962).

dent aid as a device for recruiting students and strengthening weak and moribund institutions of higher learning. There was something quite artificial about the perpetual scholarship scheme—it did not really come to grips with the problems that were plaguing the colleges—but it did add the dimension of recruitment to those various other purposes, such as public service and equality of opportunity, that student aid had heretofore sustained.

Some organized philanthropy, of course, did exist. The American Education Society, founded as an arm of Congregationalist endeavor in 1815, supported promising ministerial candidates in a number of colleges. Between 1845 and 1854 the number of beneficiaries at Amherst ranged between 17 and 31 per cent of the student body. The journal of one young man who was killed in the Civil War read: "If I should die in the United States service, one hundred dollars of my back pay must be sent to Prof. E. O. Hovey of Wabash College, Crawfordsville, Indiana, to be paid by him to the American Education Society for value received by me from said Society."³

Self-help — an old tradition

As early as 1797 the Harvard College Phi Beta Kappa chapter established a fund for the assistance of indigent members. At Brown early in the nineteenth century a society was formed for the purpose of lending textbooks to poor students. For more than 200 years one member of the Harvard freshman class—known as "the President's freshman"—could defray some of his college costs by being the president's errand boy. Ringing the college bell has been a form of student aid at Williams since its founding. At Denison in the late 1830's janitorial service helped one boy toward his degree. At Dickinson, in the 1850's, two students turned their dormitory room into a suit-pressing establishment, and in the next room another student operated a shoe repair shop. Comparable opportunities unquestionably existed everywhere; in combination with the contribution of faculty and government in keeping costs low, they helped to make the American college a threshold of economic and social opportunity.

But American higher education was not yet called upon to perform such a role in any major way. Hard work, perhaps apprenticeship in some trade, tilling the land—these were still the ingredients of early nineteenth century success in the United States. The proposal that the City of New York should found a free college was met in 1817 with a combination of aristocratic resistance and fear: "Unerring indications of the spread of that Agrarianism which preceded the de-

³ James I. Osborne and Theodore G. Gronert, *Wabash College: the First Hundred Years, 1832-1932* (Crawfordsville, Ind.: R. E. Banta, 1932), pp. 126-7.

cline and fall of the Roman republic. . . . The determination . . . of the pauper class . . . to levy upon the active, industrious (and, if you please, affluent) portion of the community, the expense of furnishing to the sons of the former, a college education. . . ." Here was no recognition of higher education as a birth-right, no acknowledgment of that organic sense of society that supported higher education as an obligation to the past, the present, and the future. The American college lacked any vital connection with vast areas of American life, and until it made such a connection its tradition of student aid would rest on a curious compound of aristocratic generosity that smacked of charity, a weakening obligation of government and college to serve each other and society, and an unacknowledged subsidy from generations of college professors whose acquiescence in low salaries helped to keep many young men in college and many colleges from bankruptcy.

"Popular" colleges emerge

After the Civil War, however, student aid entered upon a new era. All the many reforms that had been trying desperately and unsuccessfully to take hold now seemed, all at once, to be irresistible. The movement for technological and scientific education, which had been under way before the war, created new and more popular institutions like the Massachusetts Institute of Technology. Between 1861 and 1865 the development of Vassar College dramatically revealed the long neglect of the higher education of women. The Morrill Act of 1862 put federal largess at the disposal of every state government, and thereby helped to develop in the land-grant colleges a whole new network of institutions with a popular and practical orientation. The state universities, so long neglected, showed promise of increasing popularity and usefulness. At Baltimore the Johns Hopkins University showed the way toward university purpose and scholarship. At Harvard, Charles William Eliot used the elective principle as an instrument for moving an old college in new directions. The result of all these reforms was to free the American college irretrievably from the past and to bring it forthrightly into vital relationship to the life of the people. By making the colleges popular, these developments placed a new burden on the tradition of student aid: the increasing desirability of a college education argued forcefully for the maintenance of equality of access to that education.

The land-grant colleges and the state universities, not without trial and error and heartache, lent dignity to a whole array of vocations that had not

⁴ S. Willis Rudy, *The College of the City of New York: A History, 1847-1947* (New York: City College Press, 1949), pp. 19-20.

heretofore been welcomed on the American campus. In turning such vocations as engineering, farming, and business into professions, these government-supported institutions greatly enlarged the work of the American college and university, as well as the responsibility of such institutions to be readily available to young men and women eager to seize the opportunity that such education provided. The new kind of education—in contrast with the old diet of ancient languages, moral philosophy, and mathematics—was readily translatable into careers of the sort that meant economic and social mobility and of the sort that a dynamic industrial society provided in abundance. The response of state legislatures was greatly to enlarge the commitment of state universities and land-grant colleges to scholarships and other comparable devices for increasing educational opportunity.

The first significant gestures in this direction after the Civil War were made by state legislatures providing free tuition for Civil War veterans at state universities, but soon the kind of aid and support that had once been scattered among the many so-called private colleges was increasingly concentrated in the agricultural and mechanical colleges and state universities. By the end of the nineteenth century a firm relationship had been established between state legislatures and clearly defined state institutions of higher learning. Every student who attended one of these institutions was indeed a beneficiary of the commonwealth, and in a sense the whole tradition of mutual responsibility and service of which President McKean of Boydoin had spoken in 1802 was now firmly lodged in that complex of relationships that made legislatures and colleges and universities partners in underwriting today's educational opportunity and tomorrow's political, social, economic, and cultural leadership and responsibility.

In the meantime those institutions that had never enjoyed aid from the state or that no longer could rely on state support—in other words, those institutions such as Harvard and Yale and countless denominational colleges that had made the voyage from public support to private independence—were equally prepared to maintain the tradition of student aid. In his inaugural address of 1869 at Harvard President Eliot remarked that “no good student need ever stay away from Cambridge or leave college simply because he is poor.”⁵ This ideal remained the goal of probably every American college and university, private or public, and it often came close to being real because in the decades after the Civil War American institutions of higher learning were able to draw on the resources of the country's first great crop of millionaires. The meager “charity

⁵ Richard Hofstadter and Wilson Smith, *American Higher Education: A Documentary History* (Chicago: University of Chicago Press, 1961), vol. II, p. 613.

funds" of the antebellum years became sizable endowments for scholarships, often the gift of onetime poor boys who had achieved success and saw in scholarship funds a support of the American dream.

The very wealth that accelerated the growth of scholarship funds, however, created on the campuses conditions of economic and social disparity that in themselves demanded new approaches to student aid. Wealthy students tended to raise the standards of living beyond the reach of young men and women of humble origin, and a variety of devices, none of them altogether successful, was seized upon to enable poor boys to pursue their studies without undue economic distress. Dartmouth required scholarship students to pledge that they would not drink, smoke, dance, or play pool. At Emory so-called "helping halls," where students might live and eat with economy, were developed in the 1880's. Princeton, undertaking a program of dormitory expansion, built one especially for poor boys. Yale in 1900 established a "Bureau of Self-Help" in order to centralize job opportunities for poor but ambitious boys. To these characteristic efforts to overcome the often forbidding costs of college was added the phenomenon of loan funds, a particularly attractive form of student aid to a generation wedded not only to the myth of the self-made man but to some equally pervasive myths that came under the label of social Darwinism. Student loans seemed less likely to sap character than did scholarships. In the estimation of New York's Governor Lucius Robinson in 1877, loans taught obligation, while scholarships and other forms of free higher education might fill the masses with discontent, unsettle their purposes, and destroy their initiative.⁶

These various approaches to student aid—scholarships, loans, self-help dormitories, student employment agencies—were a vital aspect of American higher education by 1900. Their growth in the late nineteenth century and since has been in response to the widespread recognition that the poor boy who becomes a self-made man should arrange to have some of that self-making take place within the walls of a college or university. Even Commodore Vanderbilt admitted to a sense of uneasiness over his lack of education in the presence of college-trained men. "Folks may say that I don't care about education," he protested, "but it ain't true."⁷ And when he and other self-made titans such as Carnegie, Rockefeller, Drew, Cornell, and Stanford committed their fortunes to the support of higher education, they were making some of the clearest statements of the day on the extent to which a complex industrial society had grown beyond the rugged creative pioneers of the self-made mould and would hence-

⁶ S. Willis Rudy, *op. cit.*, p. 119.

⁷ Irvin G. Wyllie, *The Self-Made Man in America* (New Brunswick, N. J.: Rutgers University Press, 1954), p. 105.

forth rely increasingly on the highly trained, personable organization man for whom the college and university replaced the old school of hard knocks.

The old school had required no endowment, no apparatus of student aid. The new school was expensive to operate, however, and in a democratic society it could not be allowed to become an instrument of privilege and wealth. For in a democracy accessibility of opportunity is a constant test of the society's health, of its capacity to renew its leadership, and of its ability to discover and nurture its talents. The whole fabric of student aid has developed in response to the challenges that inhere in being a democracy. A closely controlled aristocratic society that knows from what small group of wealthy families its leaders will come has no need for imaginative programs of student aid. A tightly managed despotic society that controls thought and frustrates talent may well need a system of student aid, but it is clear that it would not know what to do with one. A democratic society, however, is completely at the mercy of the people—their wisdom and the wisdom of their leaders can be no better than that which opportunity has permitted. Student aid in the United States has been a subsidy for wisdom, an investment in democracy.

Mania for athletics intrudes

Not always, certainly. The decision of the trustees of Johns Hopkins to launch their university with a broad program of fellowships for doctoral study was in the best tradition of student aid. But the perversion of collegiate and university purposes by the mania for intercollegiate athletics that developed in the late nineteenth-century also left its mark on the tradition of student aid. The athletic scholarship and all those open and hidden forms of assistance useful in the care and feeding of athletes were hardly consistent with the concern for opportunity, service, and serious academic purpose that characterized student aid at its best. It is true that athletic scholarships often enabled young men to climb the American status ladder, but this was an incidental result of a form of student aid that primarily intended to purchase for a particular institution the means of victory, fame, entertainment, and gate receipts. Under the aegis of intercollegiate athletics student aid became a form of employment. And if, as is unquestionably true, athletic scholarships eventually enabled a whole generation of young men in the coal fields of Pennsylvania to turn their backs on the mines that had employed their fathers, it is also true that athletic scholarships intruded a new dimension of confusion and dishonesty into the life of the American college and university.

Two fundamental developments have enlarged the scope of student aid in the years since World War II—the combination of economic and social factors

that dictates the extension upward of the years spent in school by our young people and the continuing accommodation of the colleges and universities to democratic purposes. One reason that we provide the degree of educational opportunity that we do is that our level of technology and productivity requires a smaller proportion of the available manpower than it once did. Another reason is that we have found the means of paying for such opportunity. An increasing proportion of individual income is devoted to taxes; an increasing—although still insufficient—share of those taxes is devoted to the support of higher education. Sixty per cent of the young people in college in 1960 were attending public institutions, the cost for which was significantly underwritten by tax money. The so-called private colleges, enlarging their commitment to student aid, have looked for support from higher tuition charges for those who can afford it; from business firms that have recognized their dependence on a flow of trained and able college graduates, and from a federal income tax policy that encourages contributions to colleges and universities by alumni and friends.

Many sources pay the bill

A university student in 1962 would have a difficult time determining who is paying for his education, but before he is finished he might well have to acknowledge an indebtedness to the local homeowners whose taxes reflect the tax exemption given to much university property; the private business that supports his scientific laboratory; the federal government that supports him as a research assistant; the state government that has either endowed the institution or appropriated funds in its behalf; the fellow student whose ability to pay is reflected in higher tuition charges; generations of philanthropists whose benefactions flow through every phase of university life; the alumni society that contributes to his scholarship; the underpaid professor whose claims on university resources remain lower than those of a needy student; the great private foundation that has made a major contribution to the university's library resources; and perhaps also his own mother and father who have been asked to pay a small part of what it costs to educate a young man these days.

The diversity of sources of student aid constitutes both one of the delightful wonders and one of the frightening horrors of the prospects for higher education in the United States today. Diversity is fun. It is creative. It supports the safeguards and rewards of competition. Diversity is dynamic. Diversity is full of unanticipated pleasure. But it is also unsystematic, unreliable, and wasteful. It can send an institution into the confusing experience of working at cross purposes with itself. It can lead to false expectations. It can fail to deliver. It can make a battleground of an institution that needs all the private, public, and

business support it can get. Higher education in the United States has reached the point at which some pressing questions cannot safely be ignored. Can we continue to permit the accidents of birthplace and race and the uneven economic resources of our states to determine educational opportunity? Can the so-called private colleges be expected to maintain their vital contribution to the life of higher education in the United States without the help of a massive federal scholarship program? Should the claim of student aid on university resources and alumni and legislative sentiment be allowed to reduce in importance the crying need for dramatic improvement in teacher salary scales? Are sufficient resources available for doctoral candidates in the arts and sciences? What is the meaning of College Week in Bermuda and Fort Lauderdale and Balboa Beach for the burden that some parents and students might be expected to bear? How high can costs be pushed? How well do Americans understand the extent to which every college student is a recipient of some aid? Can public and private, denominational and nondenominational institutions cooperate in seeking answers to these and other questions? Higher education in the United States has always been untidy; it will probably never be an orderly house; surely, however, it has now reached a point at which it can take a responsible inventory of its resources for student aid, make some effort to understand their historical and philosophical foundations and tendencies, and undertake a new and bold adventure in subsidies for wisdom, investments in democracy.

Measuring the economic effects of education

by BURTON A. WEISBROD

A nation's output of goods and services is limited by the quantities and qualities of its resources and by the state of technological knowledge. Traditionally, resources have been said to consist of land, labor, and capital. Of these resources, land has been generally considered to be given by nature; and the population and labor supply have been considered to be determined by forces also exogenous to the economic system. Thus, society's supply of land and labor is largely beyond its control.

But society can control its capital supply. Capital, by definition, consists of machinery, equipment, and other resources produced by man. It is producible and thus can be increased in amount and variety and can make possible rising living standards, despite growing pressure of population on the fixed supply of land.

The state of technological knowledge has been considered to be determined largely outside the economic system, except to the extent that resources were directed toward research and development. Knowledge is significant largely to the extent that it becomes embodied in resources—in the form of man-made capital.

Thus, it is essentially true that if the living standard of a society is to increase, something must happen to the quantity or quality of the stock of that society's capital. But students of the economic development of the United

Author's note: The research reported in this paper was supported in part through the Co-operative Research Program of the Office of Education, U.S. Department of Health, Education, and Welfare. Much of the paper is based on an earlier one which was prepared for a conference of the National Bureau of Economic Research. That paper, which treats the subject of economic benefits more extensively than was possible here, will appear with the other conference papers in a supplement to the Journal of Political Economy in October 1962. I am grateful for permission to publish the present paper.

26

States have consistently concluded that increases in the quantity or quality of our stock of capital equipment cannot account for the growth of our per capita output. What else has changed?

Investment in "human capital"

If the logic of the foregoing argument is correct, it follows that measurements of changes in United States capital stock must be incorrect, for such changes are essentially the only sources of increased productivity. Actually, a growing number of economists have come to believe that capital—that is, man-made producers' goods—may be in intangible form as well as in the tangible forms of factories and machines. Intangible capital may be embodied in a person—in the labor resource. Thus, we should consider a hybrid class of productive resources; a combination of labor and capital, it might be called "human capital." Studies of the sources of the country's economic growth which have measured only changes in the stock of physical capital (plant and equipment) have been incomplete; they have neglected the growing investment in human capital.

Human capital represents resources which man has utilized to augment his productivity. Expenditures on health create human capital. A healthier worker is absent less and is more productive while on the job. The great improvements in health which have taken place in this country have brought about a better labor force, a labor force which has been improved in quality by expenditures on human capital. In research currently in progress, a first step is being taken toward estimating the value of the stock of human capital in the form of better health.

There are still other forms of investment in human capital, but the form on which I wish to concentrate here is schooling. To the extent that schooling has any effect on worker productivity, the education process is a process of investment in human capital. One may place a very high value on education as a consumer good—as an important part of "the full life." My attention to the investment value of education should not be interpreted as a minimization of its cultural value. However, while some people have attached great significance to the "cultural" value of education as a consumer good, our public policy toward higher education has apparently emphasized more pragmatic aspects of education. In an excellent recent monograph, Alice M. Rivlin traces the history of federal legislation affecting higher education.¹ She finds that in case after

¹ *The Role of the Federal Government in Financing Higher Education* (Washington, D.C.: The Brookings Institution, 1961).

case, beginning as long ago as 1785, federal legislation ostensibly designed to aid higher education actually had less lofty objectives, such as aid to farmers (land grants for establishing agricultural universities) and reduction of unemployment (college-classroom construction in the 1930's). Citizens, or at least legislators, seem to have demanded consistently some evidence that the support of higher education is a profitable investment.

Dr. Rivlin believes that the National Defense Education Act may have signaled the beginning of a new era in which higher education in general will receive public attention and support. Yet efforts by economists to determine the financial returns from education in general, and the contribution of education to economic growth, may be interpreted as attempts to discover whether this new attitude toward higher education is justified on narrow financial grounds. The verdict is not yet available.

But the growth of expenditures on education continues. Public education expenditures rose past \$19 billion in 1960, from \$7.3 billion a decade earlier.² Since 1900, total expenditures on education in the United States have increased four times as rapidly as total expenditures on physical plant and equipment; in 1900, education expenditures were only 9 per cent of investment in plant and equipment, but by 1956 they were 34 per cent.³

America has a national stake in the fullest educational development of its resources (talent). The education of those who are able to benefit from it bestows rewards which the entire society reaps. Some of the rewards, perhaps most of them, accrue to the student during the remainder of his lifetime, but some of the rewards also accrue to others. Thus, we all have a stake in the educational development of our youth.

An able student who fails to pursue an education will typically feel the effects through reduced earnings throughout his life. Of course a student may prefer lower earnings to continuing in school. However, a teen-age student may be a poor judge of his future interests, and even if he prefers not to continue in school, the rest of society may prefer that he does continue, since they will have to support him if his income is inadequate or if he is unemployed. Since there is considerable evidence that technological unemployment as well as cyclical layoffs primarily affect the least-educated, least-trained workers, the rest of society has a stake in maintaining workers' employability.

Of course additional schooling is of value only to those who have the requi-

² U.S. Dept. of Health, Education, and Welfare, *Health, Education and Welfare Trends, 1961* (Washington, D.C.: U.S. Govt. Printing Office, 1961), p. 53.

³ T. W. Schultz, "Capital Formation by Education," *Journal of Political Economy*, Dec. 1960, p. 583.

site ability and attitude toward learning. Although there may be little that society can do about a student's ability, it can shape his attitude toward schooling. Where parents do not recognize the significance of education, guidance counselors can play an especially vital role.

A proper attitude and the necessary ability are not sufficient to insure that education will be obtained; financial ability is also required. The cost of obtaining education rations its use to low-income families, even though the schools, from elementary through university, may be "free." Much of the real cost of schooling is the income foregone by the student. In a poor family, the pressure upon the youngster to augment family income may be enormous.

To some extent, the financial obstacles to education can be overcome by borrowing. But there is little question that the reluctance of some people to go into debt limits access to education. And one should not forget the real obstacles to obtaining a loan for educational purposes through the private market. The capital market conventionally has been willing to provide loans for the purchase of physical assets which, if necessary, could be taken over by the lender. Loans for education and for other forms of investment in human capital have the special characteristic that the asset is embodied in a person; therefore, the asset cannot be attached by an unsatisfied lender. This fact limits the availability of private loans for financing education, so that the ability of a student to benefit from further education is not the only condition which determines whether or not he receives it.

Since we are interested in efficient use of our society's limited resources, we must consider the social benefits from some action (as well as the social costs). But the private lender will consider only those benefits which he may be able to realize. Thus, education and other forms of investments in human capital which are inadequately handled by the private sector of the economy have become part of the public sector.

Measuring "social return"

In the private sector of the economy, benefits from goods and services are normally reflected in consumer demand. But in the public sector, where education and other services are not sold to consumers, consumer demand must be determined. Thus arises the need for benefit-cost analysis. We wish to estimate the rate of social return (in all forms) on the expenditure, for comparison with returns obtainable on alternative uses of resources.

Within the benefit-cost framework, let us look at the ways in which a society benefits from the formal education of its youth. There is no doubt that some forms of returns from education will defy measurement, at least for the

present; but this is not necessarily a serious problem. We wish to know whether some expansion of educational effort would provide larger returns than are available elsewhere in the economy; therefore, if quantifying only a few forms of benefits from education discloses a return of, for example, 25 per cent over cost, we need go no further, for investments paying such a rate of return are uncommon.

I am viewing education as an industry—a user of resources and a producer of outputs. Our economy has limited resources and cannot produce all the goods and services we would like to have. Efforts should be continued to identify and measure the values of the industry's outputs (as well as the costs of all the resources used by the education industry). It is not enough to say that education is a good thing which deserves support; better health is also a "good thing," as are better housing, improved diets, more parks, and wider highways. But since resources are limited we must make choices. If these choices are made without recognition of the alternative benefits available, we are not likely to choose wisely.

When I speak of "benefits" of education I mean any of three types of effects: anything that increases production possibilities, such as increased labor productivity; anything that reduces costs and thereby makes resources available for more productive uses, such as increased employment opportunities which reduce costs of law enforcement by cutting crime rates; and anything that increases welfare possibilities directly, such as development of public-spiritedness or social consciousness of one's neighbor. Anything that merely alters prices without affecting total opportunities for the group will not be deemed a benefit (or loss). For example, if expanded education reduces the number of household servants, so that the wage rates of those remaining rise, this rise would not constitute either a benefit or loss from education, but rather a financial transfer from employers to employees, the net effect of which is ambiguous. Of course, the increased productivity of those with the additional education is a social benefit.

Earnings: an incomplete index

Most economic analysis of the benefits or returns from education has focused on the contribution of education to earning capacity (and thereby to production capacity). While this has been valuable, it is only part of the picture and perhaps not even a large part. We must keep in mind the fact that because of market imperfections, the receipt of additional earnings does not necessarily measure adequately any additional productivity. Moreover, earnings are an incomplete measure of the productivity of education to the extent that education

affects production outside the market. Emphasis on the additional earnings attributable to education disregards the effect of education on people other than the student: education benefits the student's future children, who will receive informal education at home; education benefits employers seeking a trained labor force; and it benefits society by developing the basis for an informed electorate and a flexible labor supply.⁴

Let us first examine those social benefits of education which are realized directly by the student in increased earnings resulting from increased productivity and in other ways.

One form of benefit to the student is the "financial return" accompanying additional education. A second form is the "financial option return"—that is, the value of the opportunity to obtain still further education. Third are the non-monetary "opportunity options," involving the broadened individual employment choices which education permits; fourth are the opportunities provided by education for "hedging" against technological change. And fifth are the non-market returns from education.

First, let us consider the direct financial return from education. Census Bureau data on earnings and educational attainment show an unmistakable positive correlation—people who have more education receive more earnings. A number of investigators have estimated returns to investment in education by imputing these observed earnings differentials to education.⁵ But we must be careful not to attribute too much to formal education. There are many factors other than formal education which affect earnings, and many of these are positively correlated with level of education. People who have more education are likely to be brighter and more ambitious and are likely to come from wealthier families which have better business and social connections. And since greater family wealth may also mean better health care and diets and therefore longer life expectancy, people who have more education will tend to receive greater lifetime incomes, quite apart from the effects of education itself.⁶

⁴ A. M. Rivlin, "Research in the Economics of Higher Education: Progress and Problems," in S. J. Mushkin (editor), *Economics of Higher Education* (Washington, D.C.: U.S. Dept. of Health, Education, and Welfare, Office of Education, 1962).

⁵ G. S. Becker, "Underinvestment in College Education?" *American Economic Review, Papers and Proceedings*, May 1960, pp. 346-354; H. S. Houthakker, "Education and Income," *Review of Economics and Statistics*, Feb. 1959, pp. 24-28; H. P. Miller, "Annual and Lifetime Income in Relation to Education," *American Economic Review*, Dec. 1960, pp. 962-986; E. F. Renshaw, "Estimating the Returns to Education," *Review of Economics and Statistics*, Aug. 1960, pp. 318-324.

⁶ D. S. Bridgman, "Problems in Estimating the Monetary Value of College Education," *The Review of Economics and Statistics, Supplement*, Aug. 1960, p. 181.

At least one study has attempted to adjust for some of the other variables correlated with education. In this study, students were classified by level of high school class rank, intelligence test scores, and father's occupation.⁷ It was found that subsequent earnings of students who were comparable in all three respects increased according to the amount of post-high school education they had obtained. Apparently at least some of the additional earnings of the more educated population result from education.

How well education pays off

Next I turn to what I have called the "financial option return" from education. Let us assume that we have computed the additional lifetime earnings, properly discounted, which, on the average, accompany additional education, and that we have compared these additional earnings with the additional costs of the education. Such estimates have been made by others, and the results indicate roughly the following: expenditure on elementary education pays about a 35 per cent monetary return;⁸ costs of high school education pay about 14 per cent, and costs of college, about 9 per cent.⁹ (High school and college costs include the estimated earnings which students would have obtained had they not been in school.) These returns are incomplete and include none of the effects of education except added earnings. But it is my contention that these figures of 35, 14, and 9 per cent returns on elementary, high school, and college education are understatements of the financial value of education. The value of the additional education may be thought of as having two components: additional earnings resulting from completion of a given level of education and the value of the "option" to obtain still further education. It is the latter upon which I wish to elaborate here.

⁷ D. Wolfe, "Economics and Educational Values," *The Review of Economics and Statistics, Supplement*, Aug. 1960, pp. 178-179. See also D. Wolfe, *America's Resources of Specialized Talent* (New York: Harper & Bros., 1954); D. Wolfe and J. G. Smith, "The Occupational Value of Education for Superior High School Graduates," *Journal of Higher Education*, 1956, pp. 201-213.

⁸ T. W. Schultz, "Education and Economic Growth," in National Society for the Study of Education, *Social Forces Influencing American Education* (Chicago: The Society, 1961), p. 81.

⁹ Estimates by G. S. Becker, as reported in T. W. Schultz, "Education and Economic Growth," *op. cit.*, p. 78. H. H. Villard has seriously disagreed with the estimate for college; see his discussion in G. S. Becker, "Underinvestment in College Education?" *op. cit.*, pp. 375-378. See also W. L. Hansen, "Rate of Return on Human versus Non-human Investment," draft paper, Dept. of Economics, University of California at Los Angeles, October 1960.

Consider the case of parents (not necessarily in the United States, although I shall use United States data) trying to decide whether their child should complete high school. A positive decision involves not only the likelihood of obtaining the additional earnings typically realized by a high school graduate but also involves the value of the opportunity to pursue a college education. The value of the option to obtain additional education will tend to be greatest for people who have the least education. For the highest level of formal education, the value of the option to obtain more education is clearly zero, except insofar as the schooling provides the option or opportunity to pursue independent work.

The value of this option to pursue additional education depends on the probability of its being exercised and its value if exercised. Without further information, the probability of additional education may be estimated by the proportion of students who complete a particular level of education and go on to a higher level. The expected value of the option, if exercised, is any excess of the return available from that increment of education over the return obtainable on the best comparable alternative investment, where the latter may be assumed to equal, for example, 5 per cent.

According to the estimates to which I have already referred, the return to the individual on total high school costs for white urban males was approximately 14 per cent, and the return on college costs for those who graduated was estimated at 9 per cent. At the present time, approximately 41 per cent of male high school graduates begin college and 19 per cent graduate from college;¹⁰ assuming a 5 per cent alternative rate of return, the expected percentage return on investment in high school education has increased from 14 per cent, as previously computed, to 17 per cent. The increase results from the value of the option to go on to college—an option available to the student who graduates from high school but not to the student who does not. Since college education pays a 9 per cent return over cost, while only 5 per cent returns are, by assumption, available on alternative investments, the option to go to college has monetary value.

In this example I assumed that a decision to complete high school would be realized with certainty. Other assumptions could easily fit into the framework, and various probabilities of going on to college could be assumed for different groups of children.

¹⁰ Computed from 1959 data in U.S. Bureau of the Census, Current Population Reports. Population Characteristics, Projections of Educational Attainment in the United States, 1960-1980, Series P-20, No. 91, 1959 (Washington, D. C.: U.S. Govt. Printing Office, 1959).

If the option value of education has been neglected by parents as it has been neglected by economists, there would be a tendency toward underinvestment in education. If time horizons are short so that a high school student and his parents sometimes fail to consider that a few years later the child may wish he could be going on to college, there will be a systematic downward bias to the valuation of education by individuals. Students who drop out of high school may regret greatly their shortsightedness.

For grade school education, recognition of the value of the option to obtain additional education increases the expected return even more substantially. Instead of the previous estimate of 35 per cent,¹¹ the social return over elementary education costs in the United States soars to more than 51 per cent. The option to go on to high school and even to college turns out to be quite valuable indeed. It could be argued in this case that whether the return is 35 per cent or 51 per cent¹² is relatively immaterial for policy purposes; both are considerably greater than available alternatives. However, given our limited confidence in the previously computed rates of return, it is comforting to see the estimates moved further from the decision-making margin. Of course, in addition to these returns, assuming that they are attributable solely to education, are the nonmarket returns to education, including the direct consumption value of learning and the opportunity to lead "the full life." Although the non-monetary returns from elementary education may well be mammoth, it is comforting to find that elementary education constitutes a wise investment in terms of monetary rewards alone.

I have used the words "option" and "opportunity" a number of times. Indeed, it seems that in many respects the value of education is a function of the additional options, opportunities, or choices which become available to a person who has additional education—options involving the type of work he will perform, the degree of job security he will obtain, and the opportunities to obtain additional education and to lead a different and fuller life.

Education provides options in still another respect: the increased ability to adjust to changing job opportunities. With a rapid pace of technological change,

¹¹ Discounting is disregarded again here. The 35 per cent estimate is from T. W. Schultz, "Education and Economic Growth," *op. cit.*, p. 81. Relative costs were estimated from the same source (p. 79), except that his elementary school cost figure was doubled, since it applied to only four years of school.

¹² Discounting the values of the high school and college options back to the beginning of grade school, at a 5 per cent discount rate, reduces the 52 per cent return to 46 per cent. The return would almost certainly be larger if people obtaining only some high school education were also considered.

adaptability (which may be a noteworthy output of education) becomes important. Education may be viewed as a type of private (and social) hedge against technological displacement of skills. New technology often requires new skills and knowledge, and people who have more education will be in a position to adjust more easily. Furthermore, if additional education is called for—at the college level, for example—those who have not graduated from high school will be unable to reap the returns from additional education which the new technology has made possible. In other words, if technological change is raising the returns from higher education, people who have the prerequisite education can take advantage of the new opportunities. In a world full of uncertainty, the ability to adjust is of great importance.

The discussion so far has focused on the returns from education which are realized by the individual in terms of his employment conditions. But some of the value of education accrues to the individual in other forms. The fruits of literacy—an output of elementary education—include the value of its non-market use. For example, if a man prepares his own income tax return he performs a service made possible by his literacy. Were this service provided through the market, it would be priced and included in national income.

I have made a rough estimate of the market value of this nonmarket service, in the following manner: assume that roughly 50 million of the 60 million personal income tax returns filed per year are prepared by the taxpayer himself. At a value of \$5 per return, the annual market value of the tax return services performed by taxpayers for themselves is \$250 million. Compared with the estimated total costs of elementary school education of \$7.8 billion in a recent year,¹³ the return is 3.2 per cent. I want to emphasize that this is only one, obviously minor, form of return from literacy. But it is an addition to previously estimated returns from elementary education.

Education's benefits multiply

Having investigated returns from education which are realized by the student, let us consider next those social benefits which are external to the student—that is, benefits which are obtained by others. External beneficiaries of a student's education may be thought of as falling into three broad groups, though the same people may be in more than one group: residence-related beneficiaries—those who benefit by virtue of some relationship between their place of residence and that of the subject; employment-related beneficiaries—those who benefit by virtue of some employment relationship with the subject; and

¹³ T. W. Schultz, "Education and Economic Growth," *op. cit.*, Table 5, p. 64.

society in general.

One external beneficiary of education is the student's current family. As an incidental by-product of the provision of education services, elementary schools and, to a small extent, high schools provide valuable child-care services. They make it possible for mothers who would otherwise be supervising their youngsters to do other things. For those mothers who choose to work, we have an estimator of the productivity of the child-care services—the mother's earnings. This rests on the assumption that the mothers would not work were it not for the fact that their children were in school. If mothers would make other child-care arrangements in the absence of schools, then a better measure of value than earnings obtained would be the cost of making some alternative custodial relationship.

In March 1956 there were 3.5 million working mothers in the United States who had children six to 11 years old.¹⁴ Assuming that as few as one million of these mothers would not work except for the schools, and assuming \$2,000 as the earnings of each mother during the school year, the value of the child-care services provided by elementary schools may be estimated at roughly \$2 billion per year.¹⁵ With total resource costs of public and private elementary schools in 1956 estimated at \$7.8 billion,¹⁶ we reach the startling conclusion that elementary school support provided a return of 25 per cent of cost in the form of child-care services alone¹⁷—services which are clearly incidental to the education function. If we added the value of these services to mothers who do not choose to work, the rate of return would be even larger. Child-care services may be a by-product of education, but they are of substantial value. Various writers have emphasized students' foregone earnings as a cost of education and have debated the magnitude of the cost, but they have not considered the fact that some mothers' earnings are made possible by the fact that children forego

¹⁴ U.S. Dept. of Commerce, Bureau of the Census, *Marital and Family Status of Workers: 1956*, Series P-50, No. 73, April 1957 (Washington, D.C.: U.S. Govt. Printing Office, 1957), Table 3, p. 11.

¹⁵ For those mothers who would be willing to hire baby sitters, for perhaps \$1,000 per year, the value of the school child-care services is this alternative cost of \$1,000, instead of \$2,000. Of the 3.5 million working mothers who had children six to 11 years old, approximately 1.5 million also had children 12 to 17 years old. Possibly some of the older children could care for the younger ones; but even considering the remaining two million, the assumption that half would not work except for the care provided by schools seems plausible and even conservative.

¹⁶ W. Schultz, "Economic Growth," *op. cit.*, p. 85.

¹⁷ If working mothers employ housekeepers as substitutes, the wages paid should be deducted from the gross returns.

earnings to remain in school.

When the student reaches adulthood, his children will benefit from his education by virtue of the informal education they receive at home. Much education and learning takes place at home, and the child's attitude toward school is also shaped there. Therefore, one of the benefits from education involves the influence of educated parents on their children. Better educated parents are more likely to raise children who recognize the value of education, in terms of job opportunities as well as in terms of cultural opportunities.

Why it pays to educate women

This hypothesis that education provides benefits to the children of the people who are educated is supported by some recent unpublished data on the factors influencing the educational attainments of children. Not surprisingly, the researchers found that the higher the level of education of the father, the higher the level of educational attainment of the children, even after adjustment had been made for a number of other variables. But they discovered more: the level of education of the mother was even more important than that of the father in influencing the children's attainments. If the mother had more education than the father, the children obtained more schooling than would have been expected, while if the father had more than the mother, the children obtained less schooling than would otherwise have been expected. Since the mother normally spends more time with children than does the father, these findings are consistent with my hypothesis about the value of informal education at home.

These findings also suggest that the value of educating women is not zero even if they never enter the labor force to utilize the skills developed in school. It is a mistake to say that education has value only when additional market earnings result directly. Education of women is an investment in the future informal education of their children.

If we think of the distinction between investment and consumption as involving whether or not benefits accrue in the "present" (consumption) or in the "future" (investment), then education has an investment component in the form of these intergenerational benefits.¹⁸ If we generalize the conception of investment to include not only intertemporal benefits, but also interpersonal benefits, then the child-care role of schools represents an investment in the productivity of mothers. Similarly, other interpersonal benefits examined be-

¹⁸ Tax implications of the existence of intertemporal education returns have been discussed by R. Goode, "Educational Expenditures and the Income Tax," in S. J. Mushkin (editor), *Economics of Higher Education*, *op. cit.*

low will constitute investment aspects of educational expenditures.

Education affects those who pay (directly or indirectly) for the consequences of the lack of education. For example, insofar as lack of education leads to employment difficulties and crime, law enforcement costs will tend to be high. Thus, education may provide benefits by reducing the need for incurring these "avoidance costs," to the advantage of taxpayers.

Education also benefits taxpayers in other communities. The migration of poorly educated people who have behavior patterns and educational attainments differing from those prevailing in the new areas may necessitate additional effort and expense to permit the new children to adjust to the new school conditions.¹⁹ Thus, people in areas of in-migration have a stake in the education of children in the areas of out-migration. People who are or may be in the same fiscal unit with an individual have a financial stake in his education.

The education of one worker may have favorable external effects on the productivity of other workers. Where production involves the cooperative effort of workers, flexibility and adaptability of one worker redounds to the advantage of others. Productivity of each member of the group influences the productivity of each other member. The relevance of this interdependence for the present context rests on the assumption that education develops the properties of flexibility and adaptability. Further analysis is required to determine the extent to which the assumption is valid, and if it is, to estimate its significance.

Of course, employers also have a financial interest in the education and training of their employees. An employer's job would be much more difficult and expensive if he had to work with an illiterate and untrained labor force, or had to educate and train his own workers.

Some benefits hard to assess

Some of the benefits from education are enjoyed by individuals and groups that are reasonably identifiable, as we have seen. But some of the benefits are distributed broadly either through space or time, so that the nature of individual beneficiaries is obscure. These might be termed "general social benefits."

For example: literacy is of value not only to the individual possessing it, and to employers, but also to others. Without widespread literacy, the

¹⁹ See, for example, C. F. Schmid, V. A. Miller, and B. Abu-Laban, "Impact of Recent Negro Migration on Seattle Schools," *International Population Conference Papers* (Vienna: Union International Pour l'etude Scientifique de la Population, 1959), pp. 674-683.

significance of books, newspapers, and similar information media would dwindle; and it seems fair to say that the communication of information is of vital importance to the maintenance of competition and, indeed, to the existence of a market economy, as well as to the maintenance of political democracy.

I have already distinguished between the output of education in terms of the student's training and the output of the system or means by which the training was accomplished (an example of the latter is custodial or child-care services). The same distinction may be made with respect to higher education: the training of students is not the only output of colleges and universities; a joint product is the research activity of the faculties. Were it not for the higher education system the volume of basic research would surely be smaller, and society would suffer.

A society bent on economic growth—on raising living standards and erasing poverty—is a society committed to change. But change requires adjustments of workers to new jobs and new skill requirements, and these adjustments are often very difficult. The difficulties are acknowledged by our social concern over "structural unemployment," "depressed areas," and "automation." The more severe the problems of adjustment to technological changes, the greater will be the opposition to change. We recognize this opposition as "featherbedding" (in the case of labor), or as pressure for public aid to the affected segment of the economy (in the case of farmers).

Education can contribute mightily to economic growth by meeting the needs for flexibility and adaptability of workers, in order to facilitate their adjustments to changing, but unforeseen, circumstances. This would imply greater emphasis on the teaching of basic techniques and theory, and on the postponement of a student's specialization until late in the educational process.

I have attempted to answer the questions, "What are the benefits from education?" or "What is the nation's economic stake in education?" In addition, I have considered some of the limited possibilities for quantifying certain of the benefits. We have found that some of the benefits of education are realized at the time education is being received (that is, in the short run), while others are realized after formal education has been completed (in the long run). Benefits to mothers, in terms of the child-care role of schools, are realized while education is being obtained. Any benefits associated with subsequent employment of the student, as well as benefits to the student's future children are realized later.

We have also found that benefits from education occur not only through time, but also through space. The benefits of education may not accrue to people in the area, or school district, which financed the child's education. Some of

the benefits depend upon the individual's place of residence, which may change. Location of many residence-related benefits as well as employment-related benefits will be determined partly by population migration. Thus, the process of migration is a process of spatial shifting of some of the benefits of education.

Who should pay?

Some interesting questions arise once we recognize that there are external benefits of education—benefits to people other than students—and that these external benefits are not all in broad, amorphous form. To some extent these benefits accrue to particular and rather well-defined groups. We have found that the education system produces more than education. At the college level it produces basic research, and at the elementary level it also produces child-care services. With respect to the latter, the benefit principle of taxation—the principle that those who benefit from public expenditures should pay—suggests that families might pay for the costs of their own children's care insofar as these costs are separable from instructional costs.²⁰ In general, a desire to use this taxation principle would imply attempts to identify various groups of education beneficiaries and to assess taxes in recognition of the distribution of benefits.

It seems to me that there is a legitimate question concerning the justice of requiring broad public support for education in those cases in which the benefits are narrow and private, except as an income redistribution device. Let me illustrate with reference to the issue of split or double-shift classes. To the extent that there is no educational sacrifice involved in having children attend double-shift classes, the real motive for their abolition appears to be to make life more comfortable for mothers; all their children will be in school at the same time. A question of equity arises: should nonparents be expected to share the costs of providing child-care services for parents?

A similar question may be raised about whether college students should be expected to share the costs of scholarly research. The answer to either question may not be an unequivocal "no," but the question deserves further consideration. Except for lack of information, or a disavowal of benefit-principle taxation, there is little rationale for failure of our education tax system to recognize the existence of particular groups of beneficiaries and the multi-product nature of the educational system.

The analytic approach to benefit identification which I have employed here

²⁰ I do not mean to suggest that the benefit principle, in contrast to the ability-to-pay or some other principle, should necessarily prevail.

is but one of many alternatives. It does appear to have the advantage of focusing on the time and space dimensions of education benefits, and these have implications both for efficiency in the allocation of resources between education and other ends, and for equity in the financing of education.

It is clear that even with much additional effort we shall be unable to measure all the relevant benefits of education. At the same time, the following four points, which summarize the views expressed in this paper are worth noting: identification of benefits is the logical step before measurement, and, therefore, recognizing the forms of benefits represents some progress; determination of what it is we are trying to measure will make it easier to develop useful quantification methods; some reasonable measurements of some education benefits are possible; even partial measurement may disclose benefits sufficiently sizable to indicate a profitable investment, so that consideration of the nonmeasured benefits would only strengthen the case.

In any event, and however difficult the measurement task is, it remains true that education expenditure decisions will be made on the basis of whatever information is available. Greater knowledge of the returns from education is needed. Still, our present information indicates that education provides benefits which are substantial in value (relative to the costs) and are realized by many people in addition to those who receive the education. The nation has a real economic stake in educating its youth.

The social and political arguments for extending the reach of education

by ROBERT J. HAVIGHURST

At present the United States gives higher education to more of its youth than does any other country. But many people—not educators alone—believe that the welfare of our society demands that we send even more of our boys and girls to college.

Since Dael Wolfe's *Human Resources; the Needs and the Supply*¹ reported the situation as of about 1950, there have been major changes. An increasing proportion of youth with visible talent has gone to college, whether we define visible talent as mental ability in the top 10 per cent, the top quarter, or the top half of the population. There has also been a substantial increase in the proportion of young people graduating from high school, as is shown in Figure 1.

In the early 1960's there may be a tendency for the college-going proportion to level off. It is too soon to say whether the percentage increases of the 1950's will continue. At any rate, the coming increase of numbers in the college-age group, because of increases in the birth rate during the 1940's and thereafter, will show itself in a 40 per cent increase of 18-year-olds between 1964 and 1965 and may swamp the colleges with applicants and force more selective admissions policies on them, thus causing a reduction in the proportion of youth entering college and a possible waste of talent.

Studies of college-going youth made since 1955 in several parts of the country show a substantial similarity: the mental ability of youth entering college has been stable since 1950. Reporting on college freshmen in the state of Minnesota in *Who Goes to College?*² Ralph F. Berdie and others said that essentially they found that in spite of a tremendous increase in the absolute and relative numbers of students attending college, the mean ability scores of these students

¹(Pittsburgh: University of Pittsburgh Press, 1951).

²(Minneapolis: University of Minnesota Press, 1962).

have remained remarkably constant. John G. Darley summarized the data from a national sample of 167 colleges and found that the average scholastic aptitude of college entrants did not change significantly between 1952 and 1959.³

Several studies conclude that of the top quarter of high school seniors (judged by mental ability or school marks), about 70 per cent enter college and another 8 per cent go to some other postsecondary institution such as a school of nursing or a business college. Among those in the third quarter of mental ability, between the 50th and 75th percentiles, about 50 per cent enter college and about 4 per cent enter another postsecondary institution. These figures refer to high school seniors, after almost a third of the age group had dropped out of high school. When the college entrance figures are related to the entire age group, the results are substantially those taken from a recent study which reports on the entire age group going through the public schools of a medium-sized city.⁴ In this city, 60 per cent of the top quartile in ability went to college or another postsecondary institution in September following the June of their high school graduation. This 60 per cent will grow to perhaps 70 per cent when some of this group will enter college after a lapse in their formal education of three or four years.

Why talent is wasted

In spite of the increase in above-average ability youth going to college, there continue to be substantial numbers who do not go to college, although they have the mental ability to do so. They are a major source of wasted talent. Several generalizations may be made about college-going:

Boys are more likely to go to college than are girls, but the number of girls who go to college is increasing more rapidly than is the number of boys. The ratio of men to women among 1960 college entrants was 58 to 42.

College-going depends to a considerable extent on propinquity. Several studies have shown that the presence of a college or junior college in a local community increases substantially the proportion of college entrants in that community.

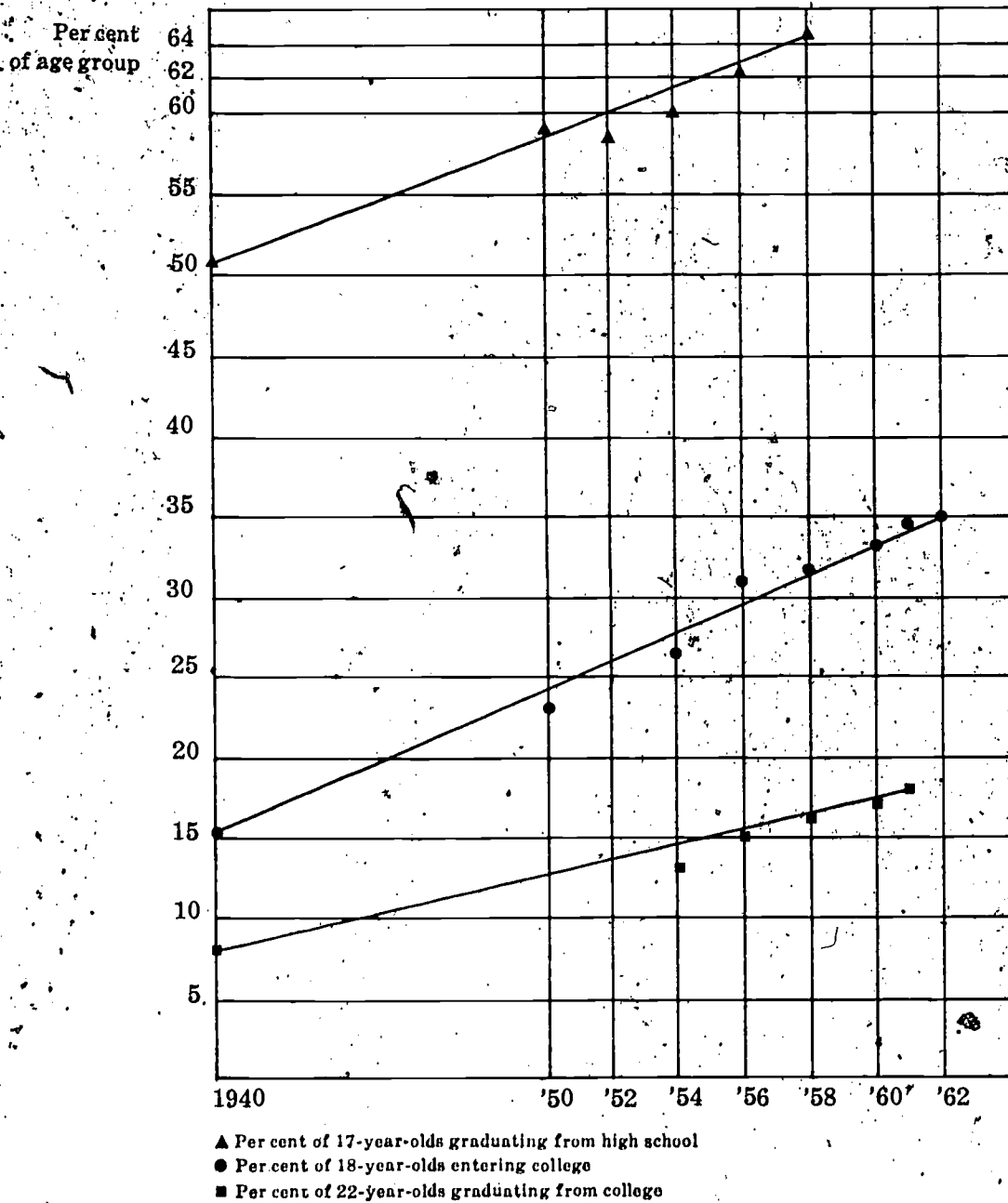
There is wide variation among the states in the proportion of youth entering college. California and Utah lead with the highest proportion of students; South Carolina and Mississippi have the lowest proportion.

The principal reasons given by young people above average in intelligence

³ *Distribution of Scholastic Ability in Higher Education* (Berkeley: University of California Center for the Study of Higher Education, 1962).

⁴ Robert J. Havighurst et al., *Growing Up in River City* (New York: John Wiley & Sons, 1962).

Figure 1: Educational Achievement in the United States



for not attending college are lack of money and lack of motivation. No doubt these reasons are interrelated. There are relatively few high school graduates with high motivation for college who fail to go to college because they lack money. Those able young people who do not now go to college cannot be reached with a scholarship program which does not have a companion motivational program; similarly, a motivational program without a companion financial aid program will not be of much help to this group.

Benefits of a college education

The arguments for sending more boys and girls to college are based on the presumed values to be gained by society and by the individual. The values to the individual are apparent: increased potential income and personal self-fulfillment. It is pretty well established that investment in a college education pays very well in the form of increased lifetime earnings under present labor force conditions. And it can be taken on faith that a college education gives more depth and breadth to a person's life and makes life more interesting to him, although it may not make him happier. The gain to society, or the social values of sending more able boys and girls to college can be described in economic, political, and social terms. The economic gain, or gain in gross national product, will not be discussed in this paper, except to say that it is not out of harmony with political and social gains. The political and social gains seem to be two—an informed citizenry and societal stability through social mobility.

The world is so complex today that a viable democratic society must have among its citizens a large proportion who understand the major domestic and international affairs on which political decisions must be made. College education and adult education must provide means both for helping people to think rationally about civic matters and for keeping them informed.

A democratic society in this age must provide ways for the restless, striving, and ambitious young people of poor families to improve their socioeconomic position. The college is the principal avenue of social mobility today. No longer does the high school have much mobility value, since the proportion of youth completing high school is 65 per cent, and high school diplomas are required for many working-class jobs. A substantial degree of individual social mobility is needed to maintain political stability in a modern society. Just how much is needed, we do not know, but certainly not less than 10 per cent net upward mobility each generation, and possibly more.

There are three groups of youth with college ability who do not now go to college. The first, made up of boys and girls in the top quarter of mental ability, are a visible target group for recruiting efforts. About 80 per cent of this group,

or 7 to 8 per cent of the entire age group, do not now go to college. In this group, most of the youngsters who do not go on to college are from lower-middle-class or working-class homes. Many of them lack motivation for college as well as financial resources. Clearly a concerted effort will have to be made by guidance counselors and teachers to interest these boys and girls in college, and financial aid will have to be found for them. An effective program might add 5 per cent of the age group to the present numbers of college entrants.

Motivating hidden talent

Boys and girls who have IQ's between 100 and 110 are a socially important group who have good learning ability and often have other talents as well—in music or fine arts, for instance. In the large cities this group contains many minority youth—Negro, Puerto Rican, and Mexican boys and girls—whose IQ scores probably underestimate their true learning ability. Of this group of boys and girls whose abilities are “barely visible,” a good many drop out of high school without graduating. Most of these young people come from the lower-middle and working classes and do not see college as a desirable or even a possible goal. Several attempts are currently being made to discover and motivate this group for college.

One such project is being carried on by the Kansas City Public Schools with the aid of a local foundation grant of half a million dollars for use over the next four years. High school teachers nominate youth who have good ability and little prospect of going to college without encouragement. The nominees consist mainly of young people whose IQ scores are between 100 and 120; many have a special talent and interest in commercial art or music. The search for such boys and girls is being pushed down into the eighth grade, and a program of motivational counseling for students and parents is now under way, to show them the advantages and possibilities of a college education.

Another example of work with an underprivileged group is the Demonstration Guidance Project of Public School 43 (Manhattanville Junior High School) and George Washington Senior High School in New York City. Here the ablest half of the sixth grade students in several elementary schools of a slum district were put in special classes at the junior high school level and given an intellectually stimulating program. They were also given considerable counseling, as were their parents. The average IQ and the reading ability of the group rose appreciably, and a considerable number entered college from a neighborhood in which high school graduation and college entrance were uncommon.

If pushed vigorously, the above-described programs may add between 5 and 10 per cent of the age group to the college entrants.

To draw up a full account of talent loss, it is necessary to consider the boys and girls who have superior innate ability but suffer from such severe deprivation in their early years that they never show enough learning ability to get into either of the above-average groups already described. Several social psychologists who have studied young children and their families are convinced that a sizable number of children are crippled mentally by intellectual and emotional deprivation in inadequate homes. They urge a systematic study of the cognitive development of children between the ages of three and five years, with the aim of finding ways of supplementing inadequate homes with intellectual stimulation in nursery school and kindergarten. The study will be designed to increase the children's learning ability and to give them a readiness for reading, so that they will enter the first grade on more nearly even terms with the children from more adequate homes.

This type of program implies a belief that intelligence tests do not measure the innate ability of many children. It also implies that the child's mind is much more capable of growth under skillful teaching than has been supposed by most educators. A leading psychologist has said (off the record) that an IQ of 100 merely tells us what present stimuli are doing to children.

Some indication of what we might expect in the production of superior minds if we made a better environment for children who now grow up in culturally deprived homes can be gained from a simple assumption that the present upper-middle-class home on the average gives the best intellectual stimulation that a child gets in our society (even though it may not be the best conceivable stimulation). Then if we assume that there is no innate difference in mental ability among the various social classes, we infer that the proportion of "superior" children produced in upper-middle-class homes is the same proportion that would be produced in all homes if they had upper-middle-class characteristics.

To see what this would mean in actual numbers, let us consider the results of a recent study to determine how many "superior" high school students were produced in the eight high schools of a city of a half million population.⁶ The high school that was almost completely upper and upper middle class in composition placed 19 per cent of its seniors among the 7 per cent of the entire senior group who were identified as "superior," while the three schools that were almost completely lower class in composition placed 1.5 per cent of their seniors in the "superior" group. If all schools had the same record as the "best"

⁶ Robert J. Havighurst, "Social and School Conditions Productive of Intellectually Superior Children," *Teachers College Record*, vol. 62 (1961), pp. 524-531.

school, the number of "superior" seniors would have been multiplied for this city by a factor of 2.7.

From another study we find the "efficiency" of the various social classes in producing youth in the top quarter of IQ.⁶ If all the social classes were as efficient as the upper class and the upper middle class, the number of boys and girls in the "top quarter" by present standards would be raised from 25 to 46 per cent of the age group.

From these statistics, it would appear that a radical program for conserving talent probably should start at the age of three or four years. We might improve the mental ability of the next generation so much that we would have to revise the norms for intelligence tests, and we would have to conclude that a considerably larger proportion of youth have college-level ability than we find in the present population.

This analysis of the kinds of boys and girls who do not go to college seems to have fairly direct implications for a student aid program. The great majority of these groups of able boys and girls lack both money and motivation for college education. They need to see themselves as "college material," and when they do, they will need financial aid.

The process of learning to think of themselves as potential college students with what this implies for their future careers and their sense of values is likely to take more than the final year of high school. Some of these boys and girls do not finish high school under present conditions. Under an effective student aid program they should be identified in grades 8, 9, or 10, and work with them and their parents should start as early as possible.

Since the talents of this group are not so visible through scholastic aptitude tests and outstanding school performance as are the talents of those who now qualify for financial aid, the methods of discovering and awarding aid to this group will have to be more flexible and more qualitative than the methods now generally used. Less attention should be paid to a particular conventional test which may have high validity for those who have IQ's in the top 10 per cent. More attention should be paid to tests of learning ability, as far as they are available, to tests of musical and artistic ability, to nominations by teachers, and to interview procedures.

⁶ Robert J. Havighurst et al., *Growing Up in River City*, *op. cit.*

Our worldwide stake in developing talent

by DAEL WOLFLE

The problems that concern this conference, and the topics discussed here are as familiar to the educational authorities of a number of other countries as they are to us. Details and statistics differ, but the basic issues of education and the conservation of talent are much the same. The arguments presented by Burton A. Weisbrod¹ are being used to support educational proposals in Brazil. In discussing the socioeconomic barriers to education, one sometimes quotes Robert J. Havighurst of Chicago and sometimes Jean Floud of London. Scholarship provisions are of concern in many lands; the most generous and encompassing system of student loans I know is that of Norway. UNESCO and the International Association of Universities are supporting a worldwide study of the factors that determine who has access to a university. In short, other nations are as concerned with the conservation of human talent as we are.

Other nations are also concerned with how well we handle the problems of the conservation of talent in this country, for other nations also have a stake in American education. Perhaps the most immediate reason is the fact that those other nations now have 53,000 students enrolled in our colleges and universities. These students come from all parts of the world to study all sorts of subjects. But in large measure they come to learn to do work that will be of direct and practical usefulness at home. They come seeking degrees in engineering, medicine, public health, agriculture, industrial management, and other professions. Much of our educational system has been developed with such practical ends in mind. We too, not long ago, were a pioneer country. Other countries, particularly the newly developing ones, hope that the education that helped us to become what we are will help them to follow a similar road to success.

For reasons given in recent articles by Philip H. Coombs² and Melvin J. Fox³, we must expect the number of foreign students to increase. In the judg-

¹ See pp. 12-27.

² Philip H. Coombs, "Educating Foreign Students," *College Board Review*, No. 46, p. 3.

³ Melvin J. Fox, "Foreign Students in American Colleges," *ibid.*, p. 9.

ment of many people, we should actively encourage a larger number of foreign students to come to our universities for their advanced and specialized education.

Foreign students bring problems

We welcome students from other countries, but any increase in college enrollment puts an added strain on the educational system; and the additional burden is greater for a group of foreign students than it would be for the same number of American students. Because the students are foreign, some of them have language problems. There may also be problems of financial support, problems arising from cultural differences, and confusion or uncertainty in advising them where they can find the education that will be of most value to them and how they can most profitably spend summer or other vacation periods. These points are considered in the two articles mentioned above.

One of the problems that is posed in both articles merits special attention: the difficulty of providing a foreign student with the kind of education that will best prepare him for the work that he will do after he goes home. Our foreign students come from vastly different backgrounds, from industrial Sweden and from emerging Nigeria, from Southeast Asia and from sophisticated Paris. The courses and curriculums that we have developed to prepare students to work in New Jersey or North Dakota or New Mexico may have to be substantially changed to be of greatest value to other students who start with quite different backgrounds and will work in Burma or Ghana or Greece.

W. Arthur Lewis, principal of the University College of the West Indies in Kingston, Jamaica, discussed this topic with specific reference to the underdeveloped countries at a symposium on science and engineering education that marked the centennial of the Massachusetts Institute of Technology. Lewis said: "Because technicians are not as well trained and not as reliable as in the rich countries, professionals have to spend more time supervising them; the professionals must be able to show their technicians just what to do. The professional, therefore, needs the technician's training as well as his own. This also means relatively more time for practical work. Since professionals are scarce and therefore work in greater isolation from one another, each must have more of an all-round competence. For example, an engineer sent to look after public works in an isolated rural area should be able to turn his hand to civil, mechanical, and electrical tasks; hence he must be given relatively more 'know-how' of the various sides of his profession."⁴

⁴"Education for Scientific Professions in the Poor Countries," *Daedalus*, Vol. 91, No. 2, p. 310.

There is no general solution to the problem of adapting an American curriculum to the needs of a foreign student. For example, there will usually be less need for curricular adaptations if the student is preparing to be an electrical engineer than if he plans to work in agriculture or public health.⁶ If he comes from Manchester, we may have to make no change at all, but if he comes from Africa, considerable change may be necessary. The differences may in fact be so great that both the American student and his classmate from an underdeveloped and culturally very different country may be cheated if we try to teach them the same courses in the same classes. Perhaps special institutions—for example, a college for African students—may be desirable. One cannot make this suggestion, however, without immediately beginning to worry about the political repercussions and the sociological implications of such an arrangement. I bring up the possibility, therefore, not as a specific recommendation, but as an indication of the complexity of the problem.

Our insight in improving curriculums, our competence as teachers, and our educational resources are of importance to many countries. They hope that we will have room for their students, a faculty of adequate size and competence, and courses of instruction that will make a student's experience here of maximum value when he returns to his home country to work.

A closely allied interest is the hope of many countries that we will educate a larger group of American students for work abroad. Through Fulbright and similar arrangements, through the Peace Corps, through a variety of commercial channels, and by other means, we already send a sizable number of Americans to work in other parts of the world. But many Americans and many of our friends in other countries believe that it would be mutually advantageous if we were to export a larger amount of American talent.

If we educate a substantially larger number of Americans for overseas duty, we will impose an additional set of problems on American higher education. In the short run, and in the simplest sense, an increase in the number of students will require increases in faculty and facilities. But there are also special educational problems: to give these students the language facility they will need; to give them an understanding of the social, political, cultural, and economic aspects of the countries in which they will work. There is also the problem of giving them the kind of professional education that will be most useful when they go abroad. This task is essentially similar to that of educating foreign students who come here. It makes little difference whether the engineer that W.

⁶ W. Arthur Lewis, *ibid.* See also Robert S. Morison, "The University and Technical Assistance," *Daedalus*, Vol. 91, No. 2, p. 319.

Arthur Lewis was talking about is an American or a native of another country. If he is to work most effectively under the conditions that Mr. Lewis had in mind, he will need the kind of education that Mr. Lewis recommended.

In emphasizing the practical usefulness of the education we offer to foreign students or provide for American students who will go abroad, I have not intended to imply that vocational and professional courses are the whole of education. I know, however, that I may have given that impression, for in commenting on a draft of this paper, Byron S. Hollinshead wrote to me:

"I think you might say some additional things about curricula. American institutions need more courses in non-Western literature and philosophy, and foreigners need to study American institutions more fully. If they just study engineering, agriculture, and public health here, they miss the principal reasons for our strength. It's very easy for foreign students to go home thinking American techniques are good, but that American thinkers and philosophers are almost nonexistent. I remember talking about this with A. N. Whitehead one time and hearing him say that much of the best social, political, and philosophical thought of the past 200 years had been that uttered by Americans, but that our intellectuals were apt to deprecate it and quote European models. Certainly many of the foreign students who come here go home without any slightest acquaintance with the thought or writings of political figures like Paine, Franklin, Jefferson, Madison, Lincoln, Wilson, and the Roosevelts, or American writers like Melville, Poe, Whitman, and O'Neill. Indeed, many American students have a very hazy knowledge of their own intellectual heritage."

There is a further problem in preparing American students for satisfactory careers abroad, the problem of an assignment of sufficient duration to be of maximum value to the host country. The British civil servant sometimes spent 20 years or more of his life in colonial service and became friend, expert, and almost citizen of the country to which he was assigned.

Five years in Nairobi

We will find it exceedingly difficult to do as well in this respect as have the British; our traditions and the career expectations of our young people are so very different. But we should be able to do better than we are now doing. It is easy to get an American to go to London or Paris. It is comparatively easy to get him to go to much less glamorous places for a few weeks or a few months. But how about persuading him to spend five years in Ankara or Nairobi or Antofagasta or Katmandu? Such assignments are hard to fit into American career patterns. From the standpoint of furthering his career, an adventurous young college graduate might better spend those five years on the moon.

and if he can't have that assignment, almost always he would do better for himself by taking a job in St. Louis, Seattle or Syracuse.

How we adjust matters of salary, seniority, retirement provisions, and career planning to encourage foreign assignments is one aspect of the general problem of how we utilize our human resources, an aspect in which other countries, particularly the newly developing ones, have a very special interest.

I have used the education of foreign students and the education of American students for work abroad as examples of the immediate interest that other countries have in American education and conservation of talent. I should like now to turn to the broader issue of educational policy and school organization. For the interest here is not solely in how we can help other countries but is, rather, of a broader international character in which all of us have opportunities to profit. Our educational policies and practices are increasingly of interest to other countries, and theirs increasingly of interest to us.

In June 1961, at a conference on "Ability and Educational Opportunity" held in Sweden by the international Organization for Economic Cooperation and Development, the Minister of Education of Yugoslavia made this statement: "In Yugoslavia all obstacles of a social nature preventing individuals from attaining success in any respect and in any field, including the attainment of highest education, have been abolished."⁶

This statement is not true. The minister knew that it is not true of Yugoslavia, and the rest of us knew that it is not true of any nation in the world. And yet the statement is significant, for what the minister meant was that all legal barriers had been removed, and that, given ability and interest, any young person, regardless of his social class or economic level, had open access to whatever form of education would best develop his talents.

This is the kind of description we like to give of our own social structure and educational system; indeed it states a policy of which we have long been proud. But we are not the only Jeffersonians on educational matters. The constitution of Italy assures its citizens that "the capable and meritorious, even though they be without the means, have the right to enter the highest levels of instruction." Similar declarations of principle have been written into the constitutions or education laws of many countries. A recently received report on education in Egypt includes a statement that I paraphrase only to smooth out the English translation: "There exists no shade of segregation based on race, color, or nationality. . . . There is no segregation based on religious belief. . . ."

⁶ A. H. Halsey and others, *Ability and Educational Opportunity* (Paris: Organization for Economic Cooperation and Development, 1961), p. 17.

Admission into the various institutes and schools does not admit any segregation between males and females . . . tuition fees are no longer a serious obstacle hindering those interested in studies even if they are poor, since primary and secondary education have been rendered free of charge . . . and university fees have been so reduced as to . . . come within the capacity of the majority of the poor classes."⁷

Even if these statements are discounted as representing political and social aspirations rather than fully achieved realities, we must pay heed, for they express a strong social tide that is advancing rapidly, not only over the Western countries, but also—and with great significance—over nearly all the rest of the world. The contrast with only a few years ago is sharp. Faculty members at the American University in Beirut remember well their first woman student from Egypt. She came clothed in traditional Egyptian dress, complete with veils, and was accompanied to all classes by her watchful and protecting husband. Now Egypt claims that there are no longer any educational barriers of sex, color, religion, or economic status. We cannot yet honestly make this claim.

Colleges should be open to all

There are two mutually reinforcing reasons for the widespread adoption of the policy of opening the doors of education to all students of ability, regardless of social or economic differences. One is the humanitarian recognition of human rights. The other is recognition that the policy makes good economic sense—that it is, in fact, an essential policy for a country that wishes to forge ahead in the modern technological world.⁸

But stating a national policy does not automatically achieve the goals of that policy. The Minister of Education of Yugoslavia could say that all social barriers had been removed in his country and mean exactly that in a legal and political sense. But he knew, and so did the rest of us, that there are formidable difficulties of scientific understanding of human ability, of the breakdown of old traditions, and of practical school arrangements that must be overcome before we achieve a truly substantive equality of opportunity in Yugoslavia or anywhere else.

Many countries are working with vigor and imagination to overcome these obstacles. Swedish investigators are doing some of the most imaginative work I

⁷ Elsaid Mostafa Elsaid, *The United Arab Republic* (Unpublished report, International Study of University Admissions, UNESCO and International Assoc. of Universities, 1962).

⁸ *Some Economic Aspects of Educational Development in Europe* (Paris: International Universities Bureau, 1961).

know on the problem of how different kinds of school organization influence a child's intellectual development. This Swedish work has produced the interesting finding that children of superior ability who come from upper and middle-class homes show no more intellectual growth at ages 11 and 12 if they are put into the traditional academically oriented schools with other bright children than they do if left in classes that include the whole range of 11 and 12-year-old ability and interest.⁹ Bright children from lower-class homes, however, are stimulated by such ability classification and show more intellectual growth if they are segregated with their mental peers than if left in heterogeneous classes. These findings contradict the expectations of many school authorities. If they are confirmed, they will have important implications for school practice.

To take another example, in 1954 my colleagues and I published a book entitled *America's Resources of Specialized Talent*¹⁰ in which we attempted to determine how many young American students there were who had the intellectual potential to become scientists, teachers, engineers, or members of other professions but for one reason or another dropped out of school before acquiring the education necessary to enter these professions. If one were starting now to make such an assessment, he would find a more sophisticated and illuminating example of how to go about the task in studies that have been made in Holland and Sweden than in any of the similar work done in this country.

The French educational system is one that we think of as marked by rigid and ruthless screening out of all pupils who fail to gain high marks in a traditional and academically oriented curriculum. To a large extent this picture has been justified. But France is laboring to change the picture. France has now adopted a number of major educational reforms, including an interesting new scheme that will bring every child, usually at ages 11 and 12, into a two-year observation period in which school marks, ability examinations, counselor's reports, the child's interests, and his family's wishes will provide a basis for recommending the nature and extent of education to follow. The guidance given during and at the end of this two-year period of intensive observation will result in a recommendation for each child that he enter a particular kind of school or follow a particular kind of program. The child and his parents can accept this advice or not, as they decide. But the systematic observation of each child will offer a much better opportunity than French children have had in the past to develop their own individual potentialities and will provide France with a much better opportunity than it has had in the past to develop the talents of

⁹ Torsten Husen, "Educational Structure and the Development of Ability," in A. H. Halsey and others, *op. cit.*, p. 113.

¹⁰ (New York: Harper & Bros.).

its youth. Guidance will not stop at the end of this period of observation; it will continue and will provide later opportunities to switch from one plan or program to another if it seems that the first decision was not the right one. In adopting these school reforms, France has consciously accepted the formidable burden of developing the rapidly expanded school facilities made necessary by the new educational philosophy.

It is not only in the general social policy of open access to education that other countries are moving closer to the United States, but also in a variety of other ways: in some fields of educational research, in the ways in which questions of intellectual resources are studied, and in the arrangements for fostering intellectual development regardless of social and economic background.

Throughout much of the rest of the world there is great educational ferment and substantial movement of many school policies in some of the directions along which American schools have gone. The differences between French and American schools, or the schools of Ghana and those of the United States, will not disappear. The countries are different; their customs and traditions are different; and their schools should be different. But many of the differences are getting smaller. Technology and its demands have much in common in Europe and America. Socioeconomic barriers to education differ in degree, but not in kind, as one moves from one country to another. Educational aspirations and good educational methods do not depend very heavily upon the language one uses. Consequently many of the characteristics and problems of our democratic educational system are being taken overseas as other countries democratize their educational systems.

We should not be surprised by this trend. Other countries are following a road that we have traveled. Industrialization, urbanization, rising levels of personal income, and automation have much the same consequences whether one speaks Italian, or German, or Norwegian, or English. As economic and social trends converge, so, too do educational problems. Europe has many educational problems that increasingly resemble those of this country. While matters are now very different in the less developed countries, this may not always be true; if these countries succeed in their high hopes of speeding along the industrialization road, their educational problems will also become more like ours.

The interest that other countries have in the conservation of talent is a varied and multifaceted one. They want us to provide advanced and professional education for some of their students. They want us to send teachers, technicians, advisers, managers, and other professionals who can help them to achieve the high goals they are setting for themselves.

But they want more than these forms of individual personal assistance. Our

strength, our economic development, and our democratic systems describe the future they hope will be their own. They know that massive improvements in education will be essential if these hopes are ever to be approximated. And so they look to us for leadership in educational philosophy, organization, methods, and innovations. It is not at all strange that English is sometimes the language of instruction, or that the land-grant college is being copied in countries in which the older educational system was developed along nineteenth-century European lines.

Our stake in world education

The interest of other countries in our educational philosophy and methods will continue, and so will the direct aid we give through the training of students and the export of talent. They will continue because other nations will insist, but also because we too will benefit. We have three strong reasons for continuing, and for increasing the educational assistance we give to other parts of the world.

The first reason is that we have been the beneficiaries of massive and prolonged educational assistance from Europe. Europe has been our most generous and competent teacher. We have adopted a number of aspects of European educational systems, and we have sent many thousands of our students to Europe for advanced and specialized training. Even now, as Philip H. Coombs reminds us, "there are more American students studying in European universities than there are European students on our campuses."¹¹ Our nation has been enormously enriched by a steady stream of immigrants who were educated overseas and then came to this country to live and work. On the educational balance sheet, we owe Europe more than Europe owes us.

The second reason is that the tensions that now divide the world require us to do all that we can to help the friendly and also the free and uncommitted nations to achieve a higher level of economic and intellectual and moral strength.

In military and economic and political affairs, we have learned that we cannot live in isolation, that each nation has a direct stake in the affairs of its neighbors. Education and the uses of human talent have become so intimately bound up with these practical matters that in education also each nation has a stake in the policies and achievements of its neighbors.

Finally, we will continue to give educational aid because the better the educational systems of other countries become, the greater will be the profit to our own educational wisdom and practice. We have learned much from other

¹¹ *Op. cit.*

countries, and they have learned from us. Industrialization and rising economic levels throughout the world are requiring all of us to give greater attention to the conservation of human talent. As these problems continue to converge, we can learn a good deal from other countries by studying the means they use to meet problems that will increasingly resemble our own.

What part the states should play in student aid

by ARTHUR S. MARMADUKE

In an era of disclaimers and the Fifth Amendment, it seems appropriate for a person employed by a governmental agency to preface a discussion of state student assistance with a few disclaimers of his own. By exercising academic freedom when I speak, I too am likely to incriminate myself. However, I must enter a disclaimer and absolve the members of the State Scholarship Commission and the Governor of California (and, indeed, any of the gubernatorial candidates) of responsibility for, or agreement with, anything I may say. Perhaps my position might be expressed by paraphrasing communications media and saying that the opinions expressed herein are my own, and any resemblance to the official positions of the state of California and the officers thereof is hoped for but may be coincidental.

My function is to discuss state student assistance programs as they relate to student aid and national purpose. It is also my function to discuss them in relation to the federal scholarships as an alternative to federal aid for scholarship purposes, and I would think also to discuss them as an instrument for administering federal scholarships.

Although I feel qualified to discuss the California State Scholarship Program, I am hesitant about discussing state programs in general. I wish to acknowledge my indebtedness to my predecessor in California, James W. Moore, now the chief of the federal student loan section, who gathered material concerning state programs. I have borrowed heavily from information which he assembled.

The participation of states in student financial aid appears to be a recent development. Actually, the earliest student assistance efforts were organized by some states before World War I. To the state of Connecticut goes recognition for the first state scholarship program, established in 1909 as a teacher education scholarship program. In 1913 the New York Regents Scholarship Program

was established as the first general scholarship endeavor by a state. Pennsylvania, immediately after World War I, established a program in which a number of awards were assigned to each senatorial district and the senator was given the privilege of selecting the award winners. Thus, in a short period of time, state scholarships were established for three separate reasons: the Connecticut program was directed toward a recruitment of manpower; the New York program was a general student aid enterprise in which the students selected could use the award at the college of their choice; Pennsylvania's program must be classified as student aid with a definite political orientation.

State programs grow

Between 1920 and 1955 approximately half of the states established student aid programs of some kind. Most were for the purpose of assisting veterans, veterans' children, wives, or orphans, thus establishing a fourth category of state student assistance programs which may be called "gratitude scholarships." During the 35-year period there were other state programs which, for the most part, followed the pattern established by Connecticut of recruiting manpower for special fields; principally for teachers and nurses.

A development parallel in time was the student loan program financed by state sources. The state of Florida created scholarship funds for the preparation of teachers. It may be thought of as a manpower recruitment program, but the loan in fact was "taught off" on a year-by-year basis. I wonder if this was the intellectual predecessor of the "forgiveness clause" of the federal student loan program for teachers. The Florida program involves, and I presume it has involved for some time, the element of competition which distinguishes it somewhat from a general loan program.

The programs established up to 1955 were administered by the state department of education, the department of veterans' affairs, or one of the state universities or colleges. The period after World War II was quiescent, and there was little pressure on colleges or governmental agencies for financial assistance because of the oversupply of college students fully financed by the GI Bill.

A new and, I choose to believe, a unique development in the states' role in assisting students financially was the creation in 1955 of the California State Scholarship Commission. The California program is often considered primarily a creation for institutional aid, or a fifth category of state scholarship programs. Inspiration for the program came from independent colleges which had expanded for the World War II veterans. Because of the passing of the veteran as a college student and the low birth rate of the thirties, many independent colleges had unused facilities, and there was great pressure on college scholarship

budgets because of the absence of the GI Bill.

In fact, the California program was thought of as a multiple-purpose scholarship plan. It was passed by the legislature to serve three purposes: to save the state money by diverting students from public to private colleges; to aid colleges, principally private colleges; and to aid students. The California program is something like a three-stage rocket with the money-saving feature as the first stage, providing the power and the initial thrust. The first booster, which was the *raison d'être* for the California program, has fallen away, and the money-saving feature is scarcely a factor in its operation. The institutional aid concept, or the second stage of the rocket, is still a very strong source of power. But in actual operation, the California program is a general student aid program, and I believe that in time it will be thought of more and more as such.

A new organizational pattern for state student assistance programs was established in California when the legislature assigned administration to an independent state commission, the first time that a specific agency had been created within a state for the single purpose of selecting students for scholarship awards. The legislation provided for a nine-man commission appointed by the Governor. Three members are representatives of independent colleges; three are representatives of public colleges, specifically the University of California, the state colleges, and the junior colleges; and three are representatives of the general public (one must be a member of a board of education which contains a secondary school district).

In California, the first awards, totaling 640, were made for the academic year commencing in 1956, and 640 additional awards were authorized each year until 1959-60 when the program reached the maximum authorization of 2,560. During the first year of the program's existence the scholarships were in the amount of \$600 at independent colleges and in the amount of fees charged at public colleges, usually \$150 at one of the campuses of the University of California. It was, and is, a tuition scholarship, and no award is available for subsistence, books, and so forth.

In the 1960 special session of the legislature called to consider the master plan for higher education, there was voted an increase in the number of authorized state scholarships, adding 640 a year until 1964-65, at which time the authorized awards will reach a total of 5,120. The same legislation increased the size of the stipend, changing the award from a flat \$600 to amounts ranging from \$300 to \$900 in \$100 intervals, but in no case in excess of tuition and fees. The master plan for higher education recommended a subsistence scholarship and a graduate fellowship program, neither of which has been passed to this date by the legislature.

The California program is interesting in that the law calls for the assessment of financial need of the parents of the student and the use in part of a standardized scholastic aptitude test as a device for selecting state scholars in a competitive application program. To the best of my knowledge, this is the first statute in which need assessment has been embodied in the selection of scholarship recipients.

In 1957 a program similar in scope and objective was created in Illinois, and the administration was assigned to an independent state scholarship commission. A year later, a new state program was established in New Jersey with a scholarship commission established in the department of education. In 1960, Rhode Island created a system of general scholarship assistance. More recently, Ohio established a short-lived and ill-conceived scholarship program which met its demise after only one year's operation. Last year, Oregon added to previously existing specialized scholarship enterprises a general scholarship program, similar in many ways to California's plan.

In addition to the general scholarship programs, state loan funds or state-guaranteed loans have developed rapidly in the last five years. New York again provided leadership in this field, and now there are 12 states cooperating with the commercial banks by guaranteeing loans to students. The state of North Dakota recently has announced a direct loan program allowing each student to borrow \$2,000 at the rate of \$500 a year over four undergraduate years.

To the state of New York must go extraordinary plaudits for its imaginative leadership in developing the most extensive program of student assistance of any state. With the new Regents Scholarship and Scholar Incentive programs, the state of New York will make direct financial assistance of about \$30,000,000 to college students. This amount will increase with the expansion of the program and is almost twice the sum contemplated in the first year of the Administration's federal scholarship program. The total expenditure figures for the other states are not available, but it seems certain that New York is doing more than all the other states combined.

In 1965-66 when the New York programs reach the maximum prescribed by the present statute, the total scholarship payments will be about \$63,000,000, or almost half as much as proposed in the Administration's scholarship bill. Of the \$63,000,000, about \$27,500,000 will be paid to 70,000 holders of Regents scholarships and fellowships, and \$35,500,000 to about 160,000 college students who receive the Scholar Incentive Award.

It is still apparent that a great deal of talent is lost; that is to say, academically able students do not go to college. While the reasons for this situation are manifold, lack of funds to pay for college costs is unquestionably fundamental

to the talent loss throughout the nation. It is also apparent that college costs are going to increase; indeed, it is almost a certainty that the instructional costs borne by the colleges and the tuition and fees charged to students will increase rapidly, and much more rapidly than personal income. Families that have been able to pay their own way may not be able to do so in the 1960's and 1970's. It is also obvious that we are about to experience a great wave of students who wish to attend college, and that our complex and technical society demands educated citizens and trained manpower to an extent never known before.

Costs will rise faster than aid

Logic and some simple arithmetical extensions show that with a doubling enrollment in the next decade, with the rapidly increasing total cost per student, and concomitantly rapidly increasing tuition and fees, the colleges and universities which have lacked funds in the 1950's will not have sufficient funds in the 1960's and 1970's to provide scholarships to those students who are unable to pay their own costs. In 1955-56, \$65,000,000 in scholarships was awarded by colleges to about 14 per cent of the full-time undergraduate enrollment. By 1959-60, the amount of money had increased to \$98,000,000 in college-awarded scholarships, but the number of full-time students assisted had declined to 11 per cent. In other words, with a 50 per cent increase in college scholarship funds, there was a decline of 3 per cent in the total number of students receiving scholarship aid from college sources. Clearly then, other sources must be developed.

Colleges and universities, if given a choice, would prefer the development of private sources for student assistance. While voluntary support of higher education in terms of general assistance and student assistance has increased in the past few years and is expanding in all sectors, it must be concluded that efforts to increase support from voluntary private sources, however successful, will not match the needs which will begin in the mid-1960's.

State governments have been turned to for assistance and increasingly will be asked for financial support for students and institutions. On the basis of correspondence this year, it appears that there are efforts under way in 10 states to establish scholarship programs.

We can draw certain conclusions about state scholarship programs:

They have been organized for virtually all the reasons for which any scholarship program is established.

States in which the large programs are operating have been successful in achieving their stated purposes.

States can operate responsible student aid programs free from political control and influence. (In my judgment, the outstanding characteristic of the State

Scholarship Commission in California is its singularly high degree of integrity; the members of the commission represent various political and institutional points of view and loyalty but have never debated a question on the basis of partisan political persuasion or institutional loyalty. Their dedication to the students is refreshing and reassuring.)

State scholarship programs of any size and impact are in the stronger industrial states which have the least need for the "talent searching" scholarship program and where per capita incomes are relatively high.

State scholarship programs do not exist in the states with low per capita income where presumably the need is greatest. There is no apparent effort to develop state programs in the lowest income states.

There is no reason to consider state scholarship programs and other scholarship programs separately. Cooperative efforts are required.

The state scholarship commissions are now very much in consideration as the agency for the administration of federal scholarships.

It is not the function of this paper to discuss whether there should be federal scholarships and, if so, whether they should be administered by the state or the colleges.¹

Without discussing the kind of administration needed, I would like to suggest a new idea for federal scholarships administered through the states. This idea is new only in the sense that it has not been, to my knowledge, considered as a basis for federal scholarships. It is really a dusty old idea, used as a basis for federal grants to states for vocational rehabilitation and Hill-Burton hospital construction.

I am led to this proposal by a number of premises:

Education is at all levels becoming a shared responsibility with increasing federal and state participation, and the federal and state governments have a convergence of interest in developing talented citizens and encouraging individual excellence.

It is entirely reasonable for the federal and state governments to share financial responsibility for the student assistance funds necessary to develop talent, encourage excellence, and undergird college scholarship funds.

Equalization of educational opportunity is an even more dynamic ideal today than previously.

¹ See Advisory Committee on National Student Financial Aid Programs of the College Scholarship Service, *Federal Student Aid Programs, and Two Federal Scholarship Bills: Their Possible Impact* (New York: College Entrance Examination Board, 1961); and John F. Morse, "A Wholesome Loaf with Some Sticky Frosting," *Financial Aid News*, May 1961, and "A Scholarship Proposal," *ibid.*, Nov. 1961.

Federal assistance is needed most in states without state programs, where there is little apparent interest or promise of their development.

A principal weakness in the federal scholarship proposal in the Congress is allocation of funds on a population basis without regard to the financial capacity of states or their students and families. Consequently, states that have existing programs or fiscal capacity to develop them will receive relatively as much as the poorer states with more needy students. Some wealthy states might even receive more than needed.

Allocating federal scholarships

I would suggest, therefore, that federal scholarship funds be allocated to the states on a matching basis and with an equalization plan to place more money in the poorer states. There would be a minimum allocation on the basis of a population figure, such as the number of high school graduates, with each federal dollar to be matched by a state dollar. This base federal allocation would be increased by an equalization factor calculated on per capita income in each state with a maximum grant of three federal dollars for each state dollar. Thus, such states as California, New York, Illinois, and Pennsylvania would receive the minimum matching grant, and such states as West Virginia and Mississippi would receive the maximum federal matching grant. Such a plan has precedent in federal law and as a consequence has some prior approval in principle.

This principle of federal grants to states is known sometimes as the "Robin Hood Plan" and may not be met with unrestrained enthusiasm by the wealthier states. However, in my judgment, it does offer the basis for an improved allocation plan which would place more money in the poorer geographical areas where fewer students go to college, thus giving impetus to the ideal of equalizing educational opportunity. A state's financial participation in the plan should provide it with a greater sense of responsibility and interest. I would offer it as a means to extend state scholarships with variable assistance according to population and income from the federal government.

Private aid to education – its future role

by JOHN M. STALNAKER

Ideally, the purpose of a student aid program is to lower the economic barriers to higher education so that those youth equipped by temperament and brains to benefit from a higher education will not be denied the opportunity to do so. "No task before our nation," says President Kennedy, "is more important than expanding and improving the educational opportunities of all our people. The concept that every American deserves the opportunity to attain the highest level of education of which he is capable is . . . a traditional ideal of democracy."¹ The goal is to develop our resources of talent to the productive level. We believe that in this way the individual will be enriched and ennobled and that the entire nation will profit from his productive efforts. "Education," to quote President Kennedy again, "is at the same time the most profitable investment society can make and the richest reward it can confer."²

Before discussing the present and potential role of private funds in providing student aid, we may benefit from an examination of some of the features of higher education today. Without an awareness of these features, we shall be less likely to arrive at realistic conclusions and workable recommendations.

For example, we should appreciate that higher education in this country is a privilege. It is not mandatory, as is elementary and, in general, some secondary education. Higher education is open only to those who have the inclination and the ability to pay the costs, which include both the wages they might be earning if they were working instead of attending college, and the actual cash outlay required for tuition and fees. And, even though the number of local junior colleges is increasing, most students attend college away from home and thus have substantial living expenses, too.

Although higher education is a privilege, it is widely available to those who seek it. Where else in the world are colleges and universities more numerous or

¹ The President's Message to Congress, February 6, 1962.

² *Ibid.*

more varied, both in their standards and in their curriculum offerings? We have about 2,000 institutions of higher education. Every state has higher education facilities. Every major city has a college or university, and our larger metropolitan centers have several. More than half of the students graduating from high school go to college. About a third of our college-age population is in college.

Many of our colleges and universities enjoy substantial public support. Every state supports one or more institutions which provide education at a low tuition. State expenditures for higher education vary widely, however. The range is from the progressive state of California, which supports an extensive system of higher education, to certain other wealthy states—particularly those where excellent and, in the main, expensive private colleges and universities are located—which provide very modest support for public institutions.

The cost to the student varies widely from college to college. In some of our colleges, today, it costs the student more than \$3,000 a year to attend, and even then, compared with his classmates, he has to live conservatively. At other colleges, board, room, tuition and fees, and incidental expenses together amount to less than \$1,000 annually. Tuition and fees alone range from less than \$100 to more than \$1,700 a year.

In general, as might be expected, the more expensive liberal arts colleges attract students from homes where the income is well above average. The median family income of students attending the very selective liberal arts colleges is probably more than \$20,000 a year, an income earned by less than 5 per cent of our families. The median income of all families is less than \$6,000, and about three quarters of our families have incomes less than \$8,000. For such families, college costs of \$2,500 to \$3,500 are prohibitive.

Colleges offer varied fare

Our colleges offer an amazing variety of programs. Even if we discount the bizarre extremes, we should not neglect to note the varied fare offered by our colleges. Nor should we neglect to note the preponderance of vocationally oriented programs. The largest number of bachelor's degrees awarded this past year went to students majoring in education and the next largest to those majoring in business and commerce. More students are awarded degrees in accounting than in chemistry, more in forestry than in geography, and so on.

The vocational fields attract the largest numbers to college. Although the virtues of the liberal arts are frequently extolled at gatherings of educators, most students continue to enroll in courses which have a direct, and usually a narrow, vocational aim. The training they receive may not always be as adver-

tised. The undergraduate business school courses, for example, have recently been subjected to devastating criticism.

We have no generally recognized educational standards for our colleges other than the very loose requirements specified and sometimes enforced by the voluntary regional accrediting agencies. As far as I know, no serious attention is paid by these accrediting groups to the quality of the students graduating from the institution. The significant measure of any college is the skill and knowledge of its graduates. Anything else—the number of books in the library, the quality of the faculty, the size of the endowment, the departmental organization, the athletic record, the personnel services—is secondary.

Colleges differ widely in quality

The range of quality among our institutions is astonishing. Some years ago, James B. Conant observed that, "If any objective study were ever made of the standards now prevailing for the awarding of a bachelor's degree by four-year institutions, it would be evident that no standards (other than tuition paid and years of exposure) are in fact in existence."³ Probably the average freshmen entering some of our colleges today know more in every measurable way than the average graduates of other colleges. Most people assume that all college degrees are equivalent, but the fact is that these degrees do not indicate the same type or quality of education. When we speak of a college education, we are not referring to a standard content or level of quality.

It has been said that anyone with a modest amount of persistence, whatever his intellectual ability, can obtain a degree at some college in this country. Students enrolled in our institutions of higher education range from the nearly feeble-minded to the brilliant. The higher socioeconomic classes tend to send their children to college regardless of the intellectual ability of the child. In the lower economic levels, only the more able and determined tend to go to college.

Students know that colleges differ. Able students, in particular, have definite ideas about the college they prefer to attend if they can. The preferences expressed by the 33,000 students who scored highest on the National Merit Scholarship Qualifying Test given in March 1961 provide strong evidence that the interest of these students is concentrated in a very few colleges. This select group of students (there were some from every state in the nation) named the college of their choice at the time they were tested. Twenty-six colleges attracted the vote of 50 per cent of the boys. The two most popular colleges, Harvard and Massachusetts Institute of Technology, each attracted the vote of

³ *The Citadel of Learning* (New Haven: Yale University Press, 1956), p. 75.

7 per cent of the males in the entire group. The 10 colleges which were most popular with the total group drew one-third of the boys. A mere 50 colleges drew about two-thirds of the votes.

If we are to be realistic, we should also consider why students go to college. It has been said, and seriously, that it is not what you learn in college but the friends you make that really matters. The nonintellectual side of college life is the main attraction at some of our colleges for many college students. Perhaps the intellectual aspects of higher education do not play the dominant role we assume they do when we talk of aid to able students. Many students go to college because it is the thing to do, because their parents want them to do so, because they want to get away from home, because they don't want to go to work, because they want to be in a selective environment while maturing, because the parties and social life appeal to them, or because they hope to find a suitable mate.

The nonintellectual aspects of college—the social and athletic activities—cannot be ignored. With only rare exceptions, even our most highly respected and widely known colleges aggressively seek athletes. No other single qualification can compare with athletic prowess in assuring a needy student adequate financial support. The main point is that intellectual fare is not the only thing that the colleges of this country offer. The dishes which should at best be side dishes are the ones which many students feed on exclusively—and many colleges specialize in them.

We shall avoid some pitfalls if we relate the amount of scholarship help available to the cost of attending a specific institution. Most scholarship money today is controlled by a relatively small number of colleges. These colleges in general have the highest fees. A student who requires a \$500 scholarship to attend an institution where the costs total \$1,200 may require a scholarship four or five times as large to attend an institution where the costs are more than \$3,000. Most privately controlled scholarship money is used to attract the college-bound student from one college to another—usually a more expensive one.

One of the trickiest problems in the student aid field is the tie-in of student aid, especially from sources outside the college, with financial support of the institution, and the widespread tendency to confuse student support with institutional support. Colleges must of course be concerned with how they are to continue to exist in the face of rising costs. Many private colleges are struggling for their lives and seek financial help wherever they can find it.

In a market in which the number of students seeking admission is increasing, the most readily available source of additional funds is the students and

their families. The college increases its tuition and fees but lessens the blow by announcing at the same time that it is also increasing its scholarship aid. However, the scholarship help seldom maintains, much less increases, the level of help previously available when it is expressed as a percentage of student costs, even though the amount of money given for scholarships is increased. The bitter truth is that with every tuition increase, colleges are becoming less available to the financially handicapped student who is well above average academically but is not in the top 10 per cent. Relative to college costs, scholarship help is declining.

The colleges must receive the financial support they require. There can be no question about that. But the problem of supporting them is quite different from the problem of giving able students the opportunity to obtain a college education, and the sharp increases in tuition costs common today are not encouraging to those able students from families of average incomes.

It is now common to find educational supplements accompanying scholarships supported by outside sources. The supplement is a useful means of calling public attention to the fact that even a high tuition does not cover the cost of the education being provided. But this device has led some college officials to view sponsored scholarships as a means of supporting the institution as well as the needy students. Let us not deceive ourselves. A tax on the heads of the needy but able students will not contribute much to solving the problems of financing higher education. The pricing policies of the colleges in setting their tuition charges are matters quite separate from student aid, although each college's policy partly determines the amount of aid a student might need to attend that college. The function of scholarship support, as it is being considered here, is to help able but needy students obtain a good education, not to finance the college, however essential such financing may be.

Will more aid boost tuitions?

The greater the extent to which students can obtain support from non-college sources to permit them to attend the colleges of their choice, the more probable it is that tuitions will be increased. Why not, if outside sources are meeting much of the cost? If this logic deserves consideration, and I believe it does, then one of the effects of a massive federal scholarship program might be to encourage and justify increases in tuition and other charges to the point at which the great majority of families who have incomes under \$7,500 will find it even more difficult to finance the higher education of their children. It would indeed be a travesty if the public would support a massive public scholarship program because of sympathy for the underprivileged—the able but penniless

student — only to cause higher education to become less available to the children from most of our families.

If we are to help the able or talented student we must determine what we mean by ability and talent. Just what are we aiming for? Who is it we are trying to help? Do we mean by "talent" the ability to learn quickly, to obey the teacher, to complete the assignments on time, and to bring joy to the teacher by making his task easier? Or are we seeking students who will be creative and productive when there is no teacher specifying assignments and due dates? What of the students who raise embarrassing questions, who pursue many out-of-class activities, who read for fun, not for grades? Are we seeking the conforming, compulsive students who obey the teachers without question, or the independent, creative students who will do something socially productive in their postcollege days?

It is misleading to suggest that we have two types only, or that the good grade-getters are invariably uncreative and dependent, while nonconformists are necessarily creative. The extremes are used to emphasize the problem. The truth is that there are many kinds of talent. There is no single, universal type. Our goal, however, should be clear; it is not to please the teacher, but rather to find, encourage, and support those students who will be productive in a socially useful way after college.

Two types of agencies can help to solve the problems of student financial aid: the federal government and the state governments. Created by and responsive to the people, these two governments have the power, within constitutional limits, to do whatever they find desirable and acceptable to the citizens who, whether they realize it or not, pay the bill through tax dollars. And let there be a clear understanding about one matter: no other source of financial aid can approximate the resources of government.

In his report for 1960, Henry Heald, president of the Ford Foundation, pointed out: "Human needs are today served by government to an extent never imagined at the dawn of the American republic. Regardless of varying political philosophies, there is nearly universal agreement on the new role of government in certain functions of human welfare. This unanimity stems not from a preference for public over private efforts but from the nature of modern society. Only government can marshal the resources needed to cope with certain complex and costly functions of society."⁴

Education is one such complex and costly function of the emerging society. Perhaps only the government can handle the problem of student aid as it should

⁴ *Ford Foundation Annual Report* (New York: the Foundation, 1960).

be handled. Perhaps student aid will prove to be the device by which federal funds can be used to help private colleges. Nonetheless, at this time we are considering only student aid, not financing colleges.

I firmly believe that the doors of higher education must be open to all able students, regardless of their ability to pay. If private sources cannot provide adequate assistance, the government will have to help. The problem, however, is this: can a program be devised that will effectively help only those able students who are financially unable to attend any college?

Most of the scholarship aid for undergraduate students at this time is provided by the private sectors of our society. The colleges themselves, drawing on their endowment funds, special scholarship funds, and to some extent general operating funds, provide most of the undergraduate scholarship money. In addition, corporations, labor unions, foundations, clubs, civic groups, and individuals offer a substantial amount of scholarship money, though it is only a minor proportion of the scholarship help available. Such agencies have various reasons for helping a student—it may be brains, brawn, personal charm, or some other characteristic. In the case of college funds, the money is sometimes expended to attract the type of student believed to be an asset to the institution or the sponsor of the scholarship.

Not only do the colleges control most of the undergraduate scholarship funds today, but some of them—a minority—want to control all the financial aid given their students. These institutions resent the intrusion of other public or private sources which offer to help able and needy students. "In America," says one statement illustrating this point of view, "it is the college's choice, and a highly coveted one, to minister to all the needs of the students, whether these be educational, social, or financial." The statement goes on to point out that it is "a source of administrative stress . . . when groups outside the college wish to participate."⁶

But there is not enough financial aid for talented students, especially those from the lower socioeconomic groups. It is the legitimate concern of both the public and the private sectors of our nation to help meet this need. Fortunately, most colleges welcome outside help for these students, if the experience of the National Merit Scholarship Program is any index.

Independent scholarship sponsors can learn, however, from the grievances specified by those colleges which want to control the financial aid given to their students. One paper listed 14 questionable practices by independent scholarship

⁶ Announcement of College Scholarship Service Annual Meeting, New York, 1959.

sponsors, several of which were key points.⁶ Because the colleges, as the paper expressed it, can be "greedy mendicants," perhaps we should not be surprised to find that most of the rules laid down for others are violated by the colleges themselves. For example, sponsors were criticized for putting a restriction on a student's choice of college. They sometimes do, though that has been rare with sponsors in the National Merit Scholarship Program. However, this restriction is a characteristic of virtually all college-controlled scholarships. For example, imagine Princeton giving a generous scholarship to a student who decided he preferred to go to Harvard because he believed that the intellectual and social climate there would be more beneficial for him.

A realistic look at scholarships

Even though the private sectors supply most of the scholarship help, these dollars are few compared with the amount of money invested in education by the students and their families. Today, total student expenditures for higher education are on the order of \$5 billion annually, whereas total scholarship help from all sources is less than \$200 million, or less than 5 per cent of the student expenditures.

At some colleges, as many as 40 or 50 per cent of the students may have some scholarship help, but usually the amount of scholarship money involved is a small fraction of the total amount all students spend who attend such an institution. At most colleges few of the students receive any scholarship help. The average scholarship today is less than \$300, while the cost of a year in college averages \$1,500 at a public college and \$2,500 at a private college—and the cost is increasing rapidly.

Most of the financial support for college students—probably more than 40 per cent—comes directly from their families. When the college says it wants to minister to the financial needs of its students, it expects the parents to be the silent partner. The second major source is the student's savings and earnings. Scholarship money has been of a substantially lower magnitude.

The students who are being offered scholarships today usually have characteristics which place them in the top 5 per cent or an even smaller fraction of the applicant population. At present, the student who ranks in the top 3 or 4 per cent both of his graduating high school class and on tests can expect scholarship help from some college if he needs it. Colleges seek such students. They need them, since the quality of students entering the college is the major factor

⁶ Wilbur J. Bender, "A Critical Role for the Colleges," *College Board Review*, No. 39, p. 17.

in determining the quality of its graduates. Bright, academically oriented students who have a record of high grades and high test scores will be likely to master academic subject matter readily. They will be liked by teachers because they will learn even under adverse conditions, including poor teaching by inexperienced graduate students. They will probably continue in professional and graduate schools. A large proportion will become scholars, scientists, teachers, and successful businessmen.

Virtually all selective colleges strive to attract such students. Consequently, they are the ones who receive scholarship offers. Additional scholarship offerings will not attract more of them to college. They go to college now. They are school-oriented. Their satisfactions come from the classroom. And the colleges fall all over themselves to entice this group into their folds.

But when we move from this select group to the top quarter or top third of our graduating high school students, we must shift gears because the angle of descent is steep.

Cost of a federal program

President Kennedy speaks of 100,000 students ranking in the top third of their graduating classes who do not go to college principally because of lack of funds. Even if we are very severe in estimating their need, we must figure an average scholarship of perhaps \$700 if we are to help them attend some institution. And even then the student and his family will have to supply an average of \$800 a year, if the student is to attend a public college, and \$1,800 if he is to attend a private one. Such a federal program, in full operation, would cost \$280 million a year for student stipends, assuming (quite falsely) that there would be no attrition, no increase in college costs, and that all 100,000 would desire a college education strongly enough to go to college. This cost is well within the range of possibility in a country where money is always available for causes which are attractive to the public, and this cause is a worthy one. The money would be well spent. It would have drastic effects upon higher education as it is now offered and financed. It would, among other things, open the doors of higher education to the poor.

Even a much smaller federal program, such as that proposed by the United States Senate, would have some major impacts, not all of which can be foreseen. It would, in my opinion, be superior to the federal scholarships program proposed by the colleges through the American Council on Education. The major problem which every large scholarship program faces is how to direct its support only to students who would not otherwise be able to go to college. Of the top 35,000 or 50,000 students in the country now graduating from high school,

probably 90 per cent go to college. If 50,000 federal scholarships are to be provided, as has been proposed by the Senate, the question is, how can this money be restricted to those who really need it, those to whom it will make a critical difference? One feasible suggestion is that there be a strict means test and that federal support be limited to students who come from homes where the family income is, say, below the median of the nation—below \$5,600 or \$6,000. Even though such a program is dubbed a "pauper's program," it could have far-reaching influences. For example, most of the recipients would not be qualified for admission to our most selective colleges; those who were qualified could not attend them without substantial aid from other sources. The academic and intellectual level would not be so high as generally rules in the scholarship market today. Such a program would select a group comparable in some ways to those who were enabled to attend college via the GI Bill.

If a major federal program materializes, what will become of the private scholarship programs? Will they shrivel up and die? Will they fold their tents and silently steal away, taking their money with them?

Not at all. They have a major role to play, if not in the dimension of aid they offer, then in the influence they exert. The impact of a scholarship program and the dollar value of the program do not have a 1 to 1 relationship.

Although any substantial federal program will give those scholarship sponsors who want to stop their contributions an excuse for doing so and will thereby diminish the volume of private money, it will not eliminate private sources. Colleges, the major source of private scholarship funds, need some means of attracting the students they want, whether they are looking for intellectually able students, nonlocal students, or athletes who bring them reflected glory. One of the most effective lures is scholarship money. Colleges are competitive, very much so, and we all benefit from competition. Because of it, standards are raised, and the pursuit of excellence is furthered. Colleges, I predict, will continue to offer scholarships even if the money has to come from general operating funds.

The reputation of a college depends upon the quality and nature of the students it selects. Therefore, I expect to see colleges of prestige and wealth do whatever is necessary to attract the type of student they desire. State institutions will develop attractive honors programs and will campaign to attract very able students to such programs. They will use scholarship funds also.

In speaking of the role of the private sector in the face of government expansion into new areas, Henry Heald has said: "Far from implying a forfeit of private responsibilities, government expansion poses special challenges to individual initiative and ingenuity. While not entirely precluded from boldness and

imagination, responsible government in a democratic society cannot habitually experiment and venture beyond public sentiment.

"Thus it is ever more the responsibility of individuals and institutions outside government to serve as the crucible in which new approaches are identified, and promising ideas tested."⁷

The private sectors have a key role to play in the field of financial aid, and this role will become more important if government scholarship programs grow, as they probably will. The strength and importance of the private sectors, including the private colleges, lie in the diversity of their methods and their interests, in their freedom to change, to adapt, to be flexible, to build on current results of research, to be imaginative and bold, to venture beyond public acceptance, to blaze new trails. The private sectors are not subject to the controls, the delays, the cautions which government programs must endure.

College financial aid officers, whose principal concern must be the development of the institution that employs them, will readily agree with me that none of us has a monopoly either on wisdom in the financial aid field or on the ideal solution to the problem of meeting the educational needs of all our citizens. Many diverse groups have a legitimate concern with these problems and a right to be heard. Their help is needed.

Diversity of acceptable practices in the scholarship field should be the goal. Colleges would do well to ponder the possible deleterious effects of banding together to create a uniform code of scholarship practices. The necessarily arbitrary formula for computing financial need, or the development of a set of restrictions for sponsored scholarships which some group may from time to time feel called upon to issue, should not be elevated to the level of sacred law and thus removed from the arena of debate. I do not mean to suggest that practices detrimental to able students or to education should not be vigorously and quickly stamped out. The goal, however, is not to promote any college or group of colleges, or to make the life of the conscientious, overworked financial aid officer easier. The goal is to develop more human talent by encouraging and helping able students develop their abilities through education.

Scholarships should not, of course, be used to influence what a college teaches or to force it to alter its educational program in any way. Nor should outside sponsors expect more than routine progress reports from the colleges. The colleges, for their part, will, I hope, be tolerant of sponsors who are trying to do something of social value. Colleges should encourage an increase in the number of such sponsors, for in numbers there is safety, and in diversity, value.

⁷ *Ford Foundation Annual Report*, op. cit.

There is no reason why all scholarship programs should be the same. Unrestricted scholarships are particularly desirable and for a large government program almost a necessity. Yet we should not seek to outlay the money of a sponsor who wants to help a student whose interest is chemistry, or engineering, or some other special field just because his money is not unrestricted. I submit that no one gains by rejecting such a gift and someone certainly loses. We are fond of pointing out that able students are not confined to one field, do not come from one geographic section, do not fit into one personality mold. We should act accordingly. If a sponsor prefers one superior student over another, so be it. We have no arithmetic which shows that his selection is in error.

In the National Merit Scholarship Program, we have found that the prevailing method of determining financial need, the CSS method, is unrealistically tough on low-income families, about right for the middle-income group, and somewhat liberal with the high-income group. (I understand that revisions are now in process.) It seems unreasonable to give less to the student who, through his own labors, has saved something for his college education than to the student who has spent his money or earned none. We saw no justification for exempting the cost of sending a child to a private boarding school when free public schools were available. Accordingly, we developed our own method of calculating need, making full use of the pioneering work done by the College Scholarship Service, and with the generous help of that agency.

Ways of figuring need can vary

There is no reason why all colleges and all scholarship agencies should agree on every detail in calculating need or enter into what might be called a price-fixing agreement. Fair-trade laws may run into as many difficulties in the scholarship field as they have in other fields, and I am not sure who benefits by them. There is room for legitimate differences of opinion, even for competition, and there is no impelling reason for all groups to agree. The interaction of groups holding different views can result in improved procedures and ideas. Even conflict has been known to hasten the emergence of fresh and original ideas.

Diversity of practices in the scholarship field can provide a natural laboratory for testing new ideas. It is the private sectors which can—and should—foster and support this development.

As for the National Merit Scholarship Program, it is based on a foundation which we believe to be educationally sound. The program is designed to produce or reinforce various influences that benefit able students and educational institutions. We invite sponsors to join us in supporting any of the finalists in the competition, all of whom we believe fully qualified for scholarship help. The

sponsor may select from the pool of qualified finalists in his own way. He has his preferences, his reasons, his interests, and it is his money. We have given all Merit finalists our seal of approval. Help for any of them is solicited and welcomed. Merit sponsors show a great diversity of interests, which we judge to be a favorable sign. We specify the nature and amount of the financial support, and the conditions of the scholarship. We are careful not to interfere with the educational program of any college.

As we survey the scholarship programs being offered throughout the country, several observations come to mind:

New and more complex methods of selecting scholarship recipients may result in the recognition of a greater diversity of types of ability. At present most of the groups making the selections use the same methods and thus converge on the same group of students. There are many types of abilities, and no single method of identification will detect all types. Talent, to repeat, is not a unitary trait.

In many instances, especially in government programs, decisions are based on a single test score. Without wishing to take the time to discuss the shortsighted and ill-founded charges which have recently been hurled at testing, we believe selections should be based on the results of several tests, not just one, even though this means more testing. If different types of tests are used, the gain may be greater. Instead of trying to equate all tests, we should maximize the differences.

More careful experimentation in evaluating non-test data and information about the activities of scholarship applicants outside the schoolroom may prove of value. These data may have special significance in identifying certain types of talent not now recognized.

What scholarships should do

Any scholarship program worth the time and attention of the applicants should be designed to have a favorable influence on the many participants who do not win, and on the younger groups looking forward to future competitions. Therefore, an effective scholarship program should be a beacon for able students, a beacon discernible to them in their earlier years in school, a beacon that lights up the possibilities of the future. Such a program should at the same time give promise of a financially secure journey through college to those who have demonstrated their skills and attainments by coming through the competitive waters. Finally, scholarship programs should encourage intellectual achievement by all students.

Additional organized and independent research is needed to study critically

the current methods for selecting scholarship recipients, the influences which scholarship programs exert, and the ways in which various types of colleges affect the several kinds of students. The goal of finding ways to identify and encourage a great variety of potential talent deserves increased attention.

Even today the able student has too few defenders and too little encouragement. He is not honored publicly unless he is at the very top. Talent can be stifled as well as nurtured. The National Merit Scholarship Program is trying to identify, honor, and encourage able students without regard to college choice, socioeconomic status, academic field of interest, vocational plans, or personal beliefs and attitudes. In addition we attempt to attract financial support for the able students and to dispense it in a manner beneficial to all concerned.

The private sectors have a major role to play in helping to finance the education of talented but needy youth. Even though they are destined to offer a smaller proportion of the available scholarship dollars in the future, their influence can continue to be great. Government-supported programs tend to freeze existing procedures, to become entrenched, to resist change. From the private sectors should come a flow of ideas, experimental results, new procedures, and research data to keep all of us worried about what we are doing, and to make us strive to improve. The private sectors will continue to be influential if we encourage diversity, not uniformity; competition, not monopoly control; development, not stagnation; research, not propaganda; individuality, not group domination. If we are awake and alert and unafraid, the private sectors will continue to contribute. Indeed, they can and should lead the way.

Diversity of sources: key to flexibility in student aid

by JAMES E. ALLEN, JR.

The financial aid function, as we know it today, is a relatively new one. Scholarships are old. Loan programs are old. But the concept of the financial aid package, and the financial aid officer who co-ordinates and directs all types of financial aid as an integrated whole, is relatively new. The College Scholarship Service, itself, is less than 10 years old.

In financial assistance, we are still in a formative stage. We are formulating basic philosophies, defining problems, and experimenting with techniques. It is not necessary to elaborate the basic truths that underlie the need for effective programs of financial assistance to college students. The whole concept of a democratic society rests on a people educated to the utmost of their abilities and motivated to operate at that level. Education is the indispensable element in advancing both private benefit and the public welfare. The price of educational excellence must be regarded as an investment rather than a cost.

Today a new economic theory is emerging. The classic trinity of productive factors—land, labor, and materials—once considered solely responsible for national and industrial development has been supplanted in primacy by talent, by our intellectual and creative resources. We now realize that what we know is more important than what we own.

In addition, practical fulfillment of equality of opportunity is the moral imperative of our times. This means that full equality of opportunity to better oneself by education must be afforded to all citizens, so that each individual may make of himself all that his talents and interests will permit.

The growth in human aspiration has been phenomenal. A college education is now considered no less the birthright of an American citizen than a high school education was not very long ago, and an elementary school education before that.

Equality of opportunity is no longer limited to the intellectual elite. When

we speak of the encouragement and development of excellence, we no longer refer merely to a talented few. In a democratic society, a whole range of ability is necessary. The pursuit of excellence, today, means realization and fulfillment of all human potentialities, wherever we may find them.

Place against this unprecedented demand the climbing costs of a college education, and you have the outline of the basic problem. Education everywhere should be readily available to all those who can profit from it. The time may yet come when society will demand that all educational opportunities be entirely free. The question of tuition now, however, cannot be decided merely on a philosophical basis. Even in our affluent society, with its economy of abundance, many of our higher education institutions must depend upon tuition fees for a substantial part of their financial support.

Not whether, but how

There are accelerated demands for vast increases in educational facilities; there are many demands on available tax resources for a variety of public services. However, we dare not permit the opportunity for a higher education to become limited to the wealthy, and we are in serious danger that this may come to pass. We cannot tolerate a financial barrier to human aspiration. Since the high cost of a higher education is, and will be for many years to come, an inescapable fact of life, the problem is not whether to provide financial assistance, but simply how to provide it. In one way or another, all those who are able to profit from higher education must have that opportunity.

How can a state like New York, or any other state, best join forces with the federal government, and with the private colleges, in a combined effort? While the state and federal governments and the colleges share common concerns in this area, a clearly recognized delineation of function, based on the peculiar responsibilities and resources of each, would seem to be essential if waste and duplication are to be avoided.

As far as the states are concerned, it seems clear that their responsibility for student financial assistance is carried out in three major ways—public colleges, scholarship aid, and loans.

The accommodation of the increased number of students desiring higher education is the joint responsibility of private and public institutions. Such cooperation is demonstrably in the public interest and constitutes, therefore, a public duty.

The private colleges in this country are well aware of their obligations for accommodating increased numbers of the youth requiring higher education and are moving to fulfill these obligations. But future needs go far beyond those

which can be met by the private institutions. There is a vast area of responsibility which must be met by the expansion of public support. Public facilities must be increased in order to accommodate all those who should be served.

The development of increased public facilities must be accompanied by the strengthening of the private institutions. Our system of education in the United States is characterized by a wholesome diversity. The variety of sponsorship and support reflects the pluralism of our country. In a real sense, this variety is a safeguard against any encroachment on the intellectual freedom which must be accorded our institutions of higher learning. We have a commitment to foster such diversity.

Hence, unless opportunities for higher education in a state are confined to public institutions, the state must also provide student aid for attendance at private institutions. Two major purposes are involved: to allow the student freedom to choose, from among all the educational opportunities available, the particular college that offers the best educational opportunity for him; and to help support and strengthen the private colleges. The quality of a college cannot long exceed the quality of its student body. A college will not long maintain a climate of scholarship and inquiry if it has a scarcity of inquiring young minds. We must therefore seek to assure, without penalizing the student himself, that the private colleges do not suffer a famine of talent by virtue of the draining off of top scholarship candidates in other directions.

Limitations of state programs

It must be realized, however, that when a large state scholarship program is established at the state level, there are certain inescapable restrictions and limitations. A state program must be scrupulously objective in its criteria and simple and direct in its procedures. As a measure of financial ability, the state must use some generally applicable index, such as income or income tax. As a measure of need, the cost of tuition is about as far as we can go. As a measure of scholastic ability, the requirement of objectivity virtually dictates test scores as the only practicable index. (These limitations of state operation suggest the sphere in which other groups, such as colleges and private foundations, might well operate.)

The financial aid program of a state can be given greater flexibility and range if supplemented by a system of student loans. One special advantage of a loan program is that it permits aid to the scholarship student whose needs are not fully met under a scholarship formula. Another is that it provides assistance to the student of more limited ability who does not qualify for scholarship funds. When loans are available only through the colleges, the demand exceeds

their limited resources. A loan program under state auspices can provide greater loan resources and assure equitable distribution of loan opportunities. Under the type of program in which the credit of the state is used to guarantee bank loans, a vast resource of bank money becomes available to the student, giving him unrestricted choice of college and program.

The loan versus scholarship issue is not a fruitful one, in my opinion. The practical realities point to the need for the availability of both, in different combinations, to serve best the needs of the student in the most practicable and equitable manner possible.

The type of state program that I have been describing is very much like the program we have in New York State. We are proud of the progress we have made in the support of higher education, especially with respect to student aid. We have a long way to go and we have many difficult problems to solve, but in broad outline the New York State program demonstrates how far an alert citizenry is willing to go when it recognizes the need.

We have in New York State both a unique concept and a long tradition in education. Since 1784, the educational enterprises in the state have been united in what is called the University of the State of New York, the oldest continuous state educational administrative agency in America. The university is an overarching structure encompassing all elementary and secondary schools and institutions of higher learning, public and private, museums, libraries, and professional licensing boards. At the head is the Board of Regents, whose members are elected by the legislature but are thereafter so relatively free of control by either the Governor or the legislature that they have been called the fourth branch of state government. The Commissioner of Education is appointed by the Board of Regents and serves as their executive officer.

The development of a master plan for higher education in New York State is one of the important functions of the Board of Regents. In this connection, the prevailing philosophy has been "unity, with diversity." We have had a long tradition of fine private colleges, which now number more than 125. At the same time, we are rapidly expanding our state university system, at the two-year, four-year, and graduate levels. An outstanding part of our higher education system is the newly established City University, which consists of the four distinguished public colleges of the City of New York.

Only 40 per cent of our enrollment is now in public colleges, but in the years ahead we anticipate that these institutions will enroll a majority of the state students. To a considerable extent, therefore, financial assistance for a college education will be provided in New York State through publicly supported low tuition colleges.

However, we have also had a general scholarship program since 1913. In part, these awards were established as an incentive to scholarship, in part as financial aid, and in part to offer low-cost opportunity at a private college comparable to the opportunity enjoyed at a public college. This program, known as the Regents Scholarship Program, has grown to the point where we now offer 17,400 scholarships a year to about 10 per cent of our high school graduates. When the present program is in full operation, in 1965, there will be a total of nearly 70,000 scholarships in effect each year at an annual cost of about \$30 million. The present range of awards is \$250 to \$700 a year, based on family income; the average award is about \$400. While the award is limited by the cost of tuition and fees, students at tuition-free colleges (for example, the City University of New York) may receive \$350 a year.

One of the objections to such a state program of scholarships has been the fear that all the scholarship holders would congregate at a few high-prestige institutions. That seems to have been the experience of the National Merit Scholarship Program. However, when the number of awards is large, all the students could not go to the same few colleges, even if they so wished. Furthermore, when the amount of the award is limited, the student choosing a high-tuition college must pay part of the tuition, and the student choosing a distant college must pay board and transportation. These factors contribute toward a considerable variety of selection. We find, for example, that the public colleges in New York State attract 40 per cent of all college students and 36 per cent of the scholarship recipients. This would seem to be a reasonable balance.

In 1961, the legislature created a new "scholar incentive program." Under this program, every New York State student in full-time attendance who maintains satisfactory academic records receives up to \$300 a year for undergraduate study and up to \$800 a year for graduate study, on the basis of financial need. We estimate that by 1965 about 160,000 students a year will be eligible for this assistance, at a total annual cost of \$35 million. The combined cost of the scholarship and scholar incentive programs, then, will be \$65 million a year. Under this program, no New York State student attending college full-time in the state will be without financial assistance, either in the form of a tuition subsidy at a public college or a direct grant at a private college. The student of ability with limited financial resources at a private college could receive state funds up to \$1,000 a year in combined scholarship and scholar incentive assistance.

For the student who needs additional help, the legislature created in 1957 the New York State Higher Education Assistance Corporation, which guarantees bank loans to students. The corporation is chartered by the legislature and governed by a board appointed by the legislative leaders and the Governor. It is

related to the state education department and to the state university through the Commissioner of Education and the president of the state university, both of whom are ex-officio members, and through mutual cooperative arrangements.

Under our loan program, the qualified student borrows from a bank on a promissory note. The corporation pays all interest while the student is in college, and any interest above 3 per cent thereafter. Loans may not exceed \$1,500 in any one year and no more than \$7,500 in total. The colleges play a key role in certifying the student and his need. The corporation receives state funds in order to guarantee the loans made by banking institutions. This reserve is 10 per cent of whatever is outstanding. Since 1958, the corporation has made more than 35,000 loans worth more than \$23 million, and its business is expanding rapidly.

Aid officers advise state

A special feature of the New York State student aid program, in recognition of the interrelated nature of financial assistance problems, and the need for close coordination and working relationships between the state and the colleges, is the establishment of a Regents Advisory Council on Financial Assistance to College Students. This council brings together the administrative officers of the state who have the responsibility for the loan and scholarship programs and the persons in the public and private colleges who have direct responsibility as student aid officers, admissions officers, registrars, and bursars. It is the responsibility of this council to maintain a continuing evaluation of the state's financial assistance program and to recommend improvements directly to the Commissioner of Education and the Board of Regents.

While New York State's financial aid program is comprehensive and substantial, it does not yet meet the full requirements. The maximum amount of the combined award needs to be increased to meet the current level of tuition costs. It should be \$1,500 a year, rather than \$1,000. Our median tuition in New York State is about \$1,300 a year. The number of scholarship awards needs to be increased in accord with the growth in high school enrollments. We need to consider extension of financial assistance to students attending out-of-state colleges or attending college part time. Consideration must be given to procedures for compensating the colleges for the not insignificant administrative burden placed on them by the financial aid program. Nevertheless, despite these as yet unmet needs, very substantial progress has been made in New York State toward fulfilling the obligation a state has for encouraging higher education and for enlarging educational opportunity.

What, then, should be the college's responsibility in a comprehensive stu-

dent aid plan? The function of the college, public or private, should be to supplement the efforts of the state and to apply procedures not appropriate for the state. The same is true of private scholarship programs, such as the National Merit Scholarships or the Woodrow Wilson Fellowships.

Specifically, the college or foundation is in a position to recognize criteria of academic promise other than tests and is in a position to aid the student who would be overlooked by the neat objective criteria that a state is required to use. It can award a scholarship to the student who has demonstrated unusual gifts of creativity, to the student who has a single but commanding talent, to the student whose success in overcoming cultural handicaps promises success far beyond his present level of development.

In reviewing need, the college can consider special factors contributing to the cost of education that the state must ignore. It can take account of special factors affecting the ability of the family to contribute to the student's education. It is in the position to apply the total financial package—scholarships, loans, and jobs—to the individual student whose particular problems might be overlooked in the process of large-scale state administration.

Finally, the college and the foundation are in a position to experiment, to evolve new procedures, that will help to point the direction for the future. For example, if a forgiveness feature is to be built into loans on the basis of high scholastic performance, or employment in critical vocational areas, the likelihood of approval by a state or national legislature would be much enhanced if there were a background of satisfactory college or foundation experimentation.

Have we left no part now for the federal government? Not by any means. The federal government has two vital roles—leadership and equalization.

Today, the role of the federal government in education is increasing and needs to increase. It is indisputable that the problems that beset our schools and colleges in America are of national concern, for the achievement of our national purposes depends upon all Americans having full access to an education of the highest quality.

The question of whether or not we should have federal aid for education has long been academic; we have it, we have had it for a long time, and we shall have more and more of it. Indeed, we must have more of it.

What about federal control?

The key question is what a continuation and extension of federal aid will mean in terms of federal involvement in the management and control of education, and in terms of the traditional rôles of the states and local educational entities. The answer rests in a number of factors.

The point that I wish to emphasize as strongly as possible is that federal support of student aid programs, whether they are scholarship or loan programs, should be provided to and through the states. The application of the fundamental principle of the states' responsibility for education is just as important in the allocation of federal funds for student financial aid as in the allocation of federal aid for public education.

If federal funds for student financial aid are to be most effectively used, it must be recognized that the states differ in many respects. The problem of a state that has a large public higher education system and no scholarships is not the same as the problem of a state that has only a few public institutions and a substantial scholarship program. These two states may validly wish to apply federal funds in different ways. Flexibility of approach is, therefore, essential.

For example, a state that has reached a reasonable level of financial assistance to college students by virtue of its own funds might well be permitted to apply its federal fund quota to allied purposes, such as secondary school guidance, a program for developing intellectual resources among the culturally deprived, or to improving advanced placement programs in secondary schools.

What are the dangers if the United States Office of Education bypasses the state departments of education and attempts, instead, to administer student assistance directly to the more than 2,000 individual colleges in the country?

First, the cause of education is weakened. While some state education departments are not so strong or so free from political influences as would be desirable, it would be unwise to ignore them. Though to do so might in some cases seem to provide a more immediate and direct approach, in the long run it would not help the cause of education. The success of education in this country depends in large measure on the strength and vitality of the state education departments. If we bypass the state departments—if we undermine their status and impair their potential as a force for good education—we are perpetuating and aggravating existing faults, rather than contributing to the strength of state leadership so urgently needed.

Furthermore, strength and status and effectiveness are unitary. You cannot weaken an organization in one area of its responsibility without impairing its total effectiveness. Conversely, strengthening the state departments in this one area of financial assistance will make them a more effective force for improving education generally.

Second, a fragmented college approach is basically inequitable to the student and inconsistent with the principle that financial assistance should, insofar as is practicable, go to the most able and the most needy. No one would argue that 2,000 colleges will attract comparable samples of able and needy pupils.

The students who win scholarships at some colleges will be far less deserving than students who fail to win scholarships at other colleges simply because of the accidents of college choice and attendance. Under a state-wide competition, on the other hand, students can compete on far more equitable terms, with freedom of choice of college after the award.

It is simply incomprehensible to me that we should establish a federal scholarship system that would compel students to shop around for the best scholarship offers, that would encourage the colleges to engage in a mad scramble to outbid each other with federal money in order to attract students, and that would put the weak college, with low standards and meager offerings, in a position to reward mediocrity or to entrap talent.

Third, the existence of dual federal and state programs in loans and in scholarships would lead to confusion, duplication, and inefficiency. This situation, I am afraid, now exists to some extent in New York State with respect to loans. An even more confusing situation may arise if we are confronted with competing and different scholarship programs. The student will have to find his way, as well as he can, among the complexities of the various choices offered by programs that have different selection procedures, stipend scales, financial need criteria, and terms and conditions of study.

If the federal and state scholarships were to be held concurrently without limitation, duplication of awards would result in some students receiving more than they need; if concurrent use is arbitrarily restricted, many students may receive less than they need and could obtain under a coordinated program where the two awards can supplement each other.

The simple matter of timing, if the awards are announced at different times, could introduce complications for the states, the institutions, and the students. It seems clear that the task of administering and coordinating separate and perhaps conflicting scholarship programs must necessarily be infinitely more complex than a single, unified administration.

Finally, I believe it would be unwise for the United States Office of Education to become enmeshed in a program of long-distance, large-scale, direct administration with students or with colleges.

Needed: A long-range look

The Office of Education needs to be free, I believe, to give more attention to the long-range goals of education; to the development of criteria for evaluating education at the state and local levels; to the encouragement and evaluation of research and experimentation; and to serve as the universally recognized and respected conscience of education.

The current trend in administration is toward decentralization. Large corporations and big government are establishing regional offices. The state departments of education could provide ready-made regional offices, close to the colleges, acquainted with their characteristics and problems, and in many cases having legal responsibility for their supervision. To ask the Office of Education to handle all the details of routine administration with 2,000 colleges is to create a huge bureaucracy that can only detract from the far more important functions of national leadership that this office should perform.

In planning for a nationwide program of financial assistance to students, we are in the formative stage. There is still time to work out a pattern which will be of greatest value to the young people of our nation and will be at the same time most effective in using our total resources. We must not lose this opportunity to see that all interested parties—the states, the colleges, the private foundations, and the federal government—play their proper roles, each assuming those responsibilities it is best able to handle, coordinating their functions in a smooth and harmonious operation.

Let us avoid conflicts of interest and duplication of efforts that can only serve to slow our progress and defeat our ends. The stakes are large, the need is critical. If we fail our college youth, the blow to human aspiration will be severe, and the loss of manpower resources fatal to the national welfare.

Estimating the cost of an ideal student aid program

by HOMER D. BABBIDGE, JR.

The cost of a future ideal student financial aid program cannot be discussed except in the context of the total cost of quality higher education for the nation. For student aid—in the sense of identifiable expenditures for scholarships, loans, and guaranteed student employment—is only that part of the iceberg of higher educational finance that shows above the sea of subsidy and the horizon of personal resources.

The means of meeting the total cost of higher education, by public subsidy or by private payment, is a subject of current debate among many educators. In determining the proper relationship between student aid and fees, some would enlarge both tuition and student aid. Others would reduce both tuition and student aid. But each group would pursue its separate course to arrive at the same end—a higher educational establishment worthy of the needs and aspirations of our society.

Upon the resolution of this larger question rests the answer to the more particular question of the cost of an ideal student aid program. I can attempt to set the stage for the larger debate by suggesting some of the total cost dimensions of American higher education. This is, in itself, not easy to do. One has to proceed from inadequate current data, make purely subjective assumptions, and apply highly speculative factors and formulas. It's analogous to the art of shooting at a moving target with a crooked rifle, while standing up in a hammock. But projection—even to the point of pure speculation—is one of the principal instruments of social planning, and it may be worthwhile.

In talking about future costs of higher education in the United States, I want to make clear certain limitations I have imposed on the subject. I have confined myself to what I have termed "teaching expenditures." Expenditures for teaching, as defined here, include current costs of instruction, departmental research, and that part of expenditures for general administration, libraries, and

physical plant that are used for instruction. The term excludes the following expenditures which are listed in the United States Office of Education's category of "total educational and general expenditures:" extension, public services, organized research, and organized activities relating to educational departments and administrative outlays connected with these activities.

I shall use figures that are, in a quaint current phrase, "orders of magnitude." They aren't very precise. The reasons for my resort to this device should be well known to anyone who has been asked to do any forecasting. For the complex job of projection, one needs benefit of both human and mechanical help.

Programming a "Jiffy Estimator"

I ask you now to contemplate the machine I have constructed to do these projections. I call it The Little Jiffy Order-of-Magnitude-Estimator. Its facade is a welter of dials and knobs. Inside, it is packed full of data on historical and current enrollments, expenditures, faculty-student ratios, and the like. It remains only to set the knobs and dials and gauges of this mythical machine in accordance with one's estimates or hopes for the future.

There is a panel of dials headed "enrollments." One control refers to the census of college-age youth, another to the proportion of such youth seeking a higher education, and still another to the rate of retention of those who do enroll. After a good deal of tinkering with these separate controls, I set the "master enrollment control" at 7 million for 1970 and 8.7 million for 1975. I did this simply because I regard enrollment pressures as virtually irresistible in our kind of society. Individual institutions may be able to maintain current enrollment levels, but higher education in the aggregate will have to make room for numbers such as these.

Because we are considering an "ideal program," I turn next to the panel of dials headed "qualitative factors." On the assumption that none of us believes that higher education is as good as it ought to be, I proceeded to boost each of several controls here. I set forward the dial marked "faculty salary increases needed to make profession competitive." "Repair of existing deficiencies in library and laboratory resources" was set high, and I gave a brisk clockwise turn to the knob marked "new programs." I made these moves because I believe quite strongly that the future of this nation depends as much on having higher education grow better as it does upon its growing bigger.

There is a rather troublesome panel on my machine, called "efficiency." Individual dials here refer to such factors as "increased utilization of plant," "class size," "effects of television," and "independent study." I was cautious in

setting most of these, partly because the higher education establishment seems to me to be essentially conservative and slow to modify its practices. But that was not my only reason. I am satisfied that many of the newer devices and techniques of learning and teaching—if they have real educational merit—are going to lead ultimately to greater expenditures rather than to a reduction of costs. New methods of language instruction, as an example, have proven more efficient and educationally valid but have led to greatly increased demand, and thus greater expenditures, for language instruction—much as the building of a new freeway brings more cars out onto the road and creates a demand for still more freeways. New methods may be regarded as progress, but claims for reduction of costs are specious.

But I had to make some gesture in the direction of increased efficiency. The times demand it. I knew the machine would ultimately yield a staggering dollar figure, and I wanted it to be conservatively staggering. I set the faculty-student ratio dial at “minus 20 to 25 per cent.” Even the Ford Foundation couldn’t ask for more.

The panel of dials marked “economic assumptions” was, in some respects, even more troublesome. I was anxious not to reveal a lack of confidence in President Kennedy’s efforts to halt inflation, but I was persuaded to assume an economy growing at a rate of 3.7 per cent per annum measured in constant prices, and at about 5 per cent given a continuation of past price trends. I set the dials accordingly.

In my haste to come up with figures that would be responsive to the question before us, I may well have overlooked, or failed to set, some critical dials. I purposely pretended not to see the dial marked “national emergency?” But most of the significant controls, at least, were set when I pushed the starter button. Slowly at first, as it digested the mass of raw data, and then faster and faster as it skipped through the facile assumptions I had made, the Little Jiffy Order-of-Magnitude Estimator went to work.

Costs will triple in a decade

Now in order not to keep you in further suspense, let me say that the machine’s answer to the question, “How much will it cost to provide quality education in sufficient quantity?” was \$9 billion per year, as of 1970, and \$12.5 billion per year as of 1975. These figures contrast with a 1960–61 figure of about \$3 billion.

The estimates of growth offered here over the next 10 to 15 years should not be mistaken—as they sometimes are—for descriptions of a short-term crisis. The trends they suggest do not stop at the edge of the chart; they go on—

ward and upward. Solutions to the financial problems of higher education that fail to take this fact into account, will fail us. If changes in pattern and practice are called for, we might just as well face up to a major overhaul. String and glue repairs simply will not do the job.

Compared with historical and present rates of expenditure for higher education, these figures may seem overwhelming. But a decade hence the people of this nation will have a greatly enlarged income out of which to pay for higher education. If one assumes no more than past trends in prices and productivity per man and accepts the Bureau of Labor Statistics estimate of an employment increase of 1.7 per cent per year, the gross national product will exceed \$850 billion by 1970 and go beyond the \$1 trillion mark by 1975. The \$12.5 billion expenditure to which I have referred would, therefore, call for little more than 1 per cent of the 1975 gross national product. One of the things we will have to do is get over our anxiety about increases in absolute levels of expenditure and think more in terms of their relationship to our capacity to meet them.

If such a heavy burden of expenditure is to be borne by American citizens, through one device or another, those citizens are going to have to be satisfied that the mechanism and the subsequent allocation of the cost load are equitable. This, for me, means that a very careful assessment must be made to determine who the beneficiaries are of a strong system of higher education, and what their fair, proportionate shares are of the costs.

We have a patchwork pattern of higher education in the United States, and a system of financing to match, as Frederick Rudolph has so eloquently said.¹ For me, there is something very reassuring about this assorted group of patrons of higher education. Students, alumni, business and industry, government and churches all acknowledge the benefits they derive from a strong system of colleges and universities. The costs of the productive machinery are shared by churches that get clergy, communities that get better citizens, and businesses that get better employees, as well as by the student who, whether he pays a tuition or not, makes a major outlay for college in both forfeited earnings and expenditures for personal support during college. The question is whether this patchwork pattern will continue to be serviceable during the years ahead.

In the present pattern of payments for support of teaching (including administrative and other costs allocable to teaching), about 35 per cent of the funds come from tuition and student fees, about 15 per cent from gifts and earnings on endowments, and more than 40 per cent from state and local taxes. The remainder comes from a variety of other sources (including federal aids

¹ See pp. 1-11.

which amount to about 4 per cent of the total). In private institutions, of course, tuition and student fees provide a large share of total funds—about 55 per cent. In public institutions, tuition currently amounts to only about 15 per cent.

Obviously, it seems to me, there must be great increases in support from all these sources, if the bill for quality higher education is to be paid. Each, of course, is capable of considerable expansion. It is especially interesting to note that student payments in tuitions and fees will grow greatly in absolute terms even if they do not grow proportionately. Tuition rates have increased about 47 per cent in the last seven years. Even in public institutions the rate has grown 36 per cent in this period. Whether or not tuition should increase as operating costs do, is, as I have suggested, a major issue of educational policy today. Without seeking to project myself further into that debate, let me say simply that the question of tuition rates is a great deal more than one of educational finance. It is a question of educational and social policy and thus not to be answered in terms of economic considerations alone.

If tuition rates were to remain constant, which appears highly unlikely, growing enrollments would nonetheless increase tuition revenues to about \$2.5 billion or 20 per cent of estimated 1975 needs. If tuition continues to increase at recent rates, averaging 6.7 per cent per year, it would yield about \$5.5 billion, or about 45 per cent, of those needs. And if tuition per student were to increase in proportion to family income, it would provide over \$3.5 billion or about 30 per cent of the 1975 income needed by colleges and universities for teaching (and other costs allocable to teaching).

Let me take the popular position that tuitions are at present "high" by most people's standards, and that from here on they should increase only in direct relationship to growth in family income—an escalator clause, if you will. Tuitions could then be expected to yield \$3.5 billion toward the 1975 teaching bill of \$12.5 billion—30 per cent of the burden as compared with a current figure of 35 per cent.

How much identifiable, separately budgeted student assistance will have to be available in the year 1975-76, in order for us to give our students as much as we do now?

Let me start with scholarships, fellowships and other outright grants that do, in fact, substitute for expenditures from personal and family resources. Loans and employment opportunities, viewed in one light, are great conveniences to students and their families, but they are only marginal factors in the economic analysis of sources of income. Loans are true student aid only insofar as their availability and interest rates represent an advantage over conditions of an open money market. Student employment affects our analysis only insofar

as work performed by students is uneconomic from the point of view of the employer.

Rexford G. Moon, Jr., director of the College Scholarship Service, recently completed *Student Financial Aid in the United States: Administration and Resources*,² a report summarizing the amount of current student aid available. A hasty analysis of his figures indicates that about \$340 million is available in scholarships, fellowships, and grants, from all sources. Acknowledging that not all this amount is applicable against tuition and fees, it will nonetheless give us a helpful ratio. Tuition and fees now provide 35 per cent, or \$1.05 billion, of our \$3 billion teaching bill, and direct student aid is equivalent to about one-third of that amount.

Pricetag: \$3 billion

The tuition and fee bill for 1975, based on my previously stated and admittedly shaky assumptions, is going to be more than \$3.5 billion (30 per cent of 12.5 billion). Thus, in order to maintain the current ratio, it can be said that we will have to award about \$1.2 billion in scholarships, fellowships, and other grants in 1975-76.

Mr. Moon's figures suggest that outright grants may represent half of the total of current student aid in all forms. Thus, to maintain current ratios, a program of student financial aid in the year 1975-76, would cost \$2.4 billion. If, as seems to be the sentiment among many in the financial aid field, our present ratio of student aid to teaching costs is not ideal, this figure would have to be adjusted upward still further. If, in terms of adequate provision for the talented youth of our nation, our present level of aid should be, let us say, 25 per cent greater than it now is, then this increase should be applied to the \$2.4 billion figure.

Although it totters precariously on its statistical stilts, the result of these projections is a beautiful figure to behold: An ideal program of student aid in 1975 would cost \$3 billion.

Plus, of course, some amount for the cost of the 1975 CSS colloquium, which that year, I venture to predict, will have as its theme, "What can we do to get a federal scholarship program enacted?"

² (New York: College Entrance Examination Board, 1962).

Should all higher education be tuition-free? A debate

We need both public and private colleges

by WILLIAM C. FELS

If one believes in equality of opportunity, as I do, he must hold as an ideal free higher education available to all who can benefit from it, for, unless it is free, the opportunity to enjoy it will not be equal.

I am sure we do not disagree about ends. The question, then, is one of means — whether the desirable ends should be achieved by low student charges made possible by subsidizing institutions, or by high student charges made possible by subsidizing students.

For the long run, I reject the possibility that students and parents should bear a major share of the cost of higher education through direct charges. Elementary and secondary education are free because they serve the public interest (though they serve the private interest as well), and higher education is no different. The nation can afford to provide it; indeed, for social, political, and economic reasons, it cannot afford not to provide it.

For the short run, I have taken a different position. A college that desires to maintain and improve its quality cannot wait for the development of a rational and effective nationwide financial aid scheme. It must immediately maximize income from all sources. The way to increase tuition income is to charge the cost of instruction to those who can afford to pay it. It would be possible to charge more than the cost of instruction. Some institutions do, putting a part or all of the surplus into financial aid. But we prefer to be able to say that no parent is being asked to pay for any part of the cost of any other parent's child. Since the college's purpose is to maintain and improve quality, and since this is dependent on the student body as much as on income, the college must also increase its

financial aid funds. In doing so it fulfills, at least partially, its obligation to equality of opportunity.

But this is only a short-run position adopted to deal rationally with an irrational situation. In the meanwhile, by proposing this colloquium, and by advocating federal and state scholarships and other forms of aid, I am trying to nudge us all toward the millennium.

Subsidize students or colleges?

I return to the question of whether the long-range ends should be achieved by low student charges made possible by subsidizing institutions, or by high student charges made possible by subsidizing students. We now use both means. State and municipal institutions incline to the former; independent institutions lean to the latter.

In recent years the trend has been toward higher student charges ameliorated by scholarships, loans, and jobs. The fees of independent institutions have risen steadily, as have their dollar allocations for student aid, though the value of scholarships relative to costs has declined slightly as faculty salaries have increased and faculty members have been relieved of a part of the burden of supporting their students.

Public institutions have also raised their charges to both domestic and imported students. Scholarship programs have been introduced in several states; New York has pioneered with its Scholar Incentive Program, as it did with its scholarship program. And, of course, there is a federal scholarship program before Congress now.

Loans, once a minor element of financial aid, have loomed large since the passage of the National Defense Education Act. (Incidentally, though I have supported loans for the short run, I hope we will not allow them to be built into our permanent future. It is an abdication of our generation's responsibility to its children to allow them, and especially the poorer among them, to begin their mature lives saddled with the double debt of principal and interest. It is a contradiction of the ability-to-pay principle that underlies our tax structure to tax these youngsters equally, whatever their income or assets, for a part of their education.)

Though the trend is toward higher student charges, nobody likes them. Public institutions prefer low tuitions. Independent institutions raise fees reluctantly. Certainly students and their parents prefer low fees. Why has the trend run contrary to everyone's wishes?

The independent institution has had no alternative. It has attempted to increase its efficiency and to raise more money from all private sources, but its in-

come has not kept pace with its expenses. In the face of rising costs, especially faculty salaries, it has had to raise student charges. On the other hand, it could not have maintained such intellectual quality and social heterogeneity as it may claim without adding scholarships.

Public colleges squeezed, too

The public institution has had no alternative either. Usually bitterly opposed to increasing student charges, and deeply committed to obtaining its income from the taxpayers of its state, it has nevertheless been unable to persuade legislators to match rising costs with increased appropriations. This is not universally true, but it is sufficiently pervasive to have produced the trend. Faced with the same problems as the independent institution, the public institution has also had to raise charges. Similarly, it has had to generate scholarships.

There is no doubt that the increasing costs at both types of institutions have adversely affected equality of opportunity, since financial aid has not risen as rapidly as costs. The opportunities to choose an independent institution, to choose a public institution in another state, to go to college at all—all have been nibbled at.

Can the high-charges trend be reversed? I think it can be slowed, but I doubt that it can be turned. John D. Millett, president of Miami University, a state university of Ohio, and once director of the Commission on Financing Higher Education, has said, "The argument is not that higher education should be free; that position was abandoned a long time ago. The argument is only that charges to students should be kept within some limits in order to make it possible for many young people to have some reasonable hope of financing their higher education through personal earnings, loans, and scholarships, and modest family assistance."¹ I don't agree that the position that higher education should be free has been abandoned. At least I haven't abandoned it. But I do believe that for a long time it will be all we can do to generate enough institutional and student aid to keep charges within the limits President Millett describes.

Independent institutions certainly, and public institutions probably, can only slow the trend if they receive increased federal aid. Without reviewing the arguments for and against it, let me repeat what others have said: it is necessary and it is here. The remaining questions are only for what purposes, in what measure, and under what conditions.

But if the high-fees-plus-scholarship trend could be reversed, should it be?

¹ "The Role of Student Charges," in *Financing Higher Education: 1960-70* (New York: McGraw-Hill Book Co., Inc., 1959), p. 170.

Here we come to the crux of the problem. If, of the various possible methods and combinations of methods of financing institutions and students, we chose only complete support of public institutions, what would happen? The immediate effect would be to give that free access to higher education that we all think desirable. Assuming that all states would eventually be as liberal in their policies regarding studying out of state as is Commissioner James E. Allen, it would give the student free choice among public colleges. But it would inevitably weaken all but the strongest—and perhaps even the strongest—of the independent institutions. And it is my conviction that public institutions will for many years and in many places need the benign competition and indirect support of independent institutions. The obvious argument for diversity need not be made again.

I seem to have concluded that high student charges do prevent equality of opportunity, but that they should be continued in order to preserve institutions, public and independent. That is true, but it is only partly true.

I desire to see equality of opportunity attained through free higher education. I desire to see a diversified system of public and independent education. And I desire to see youngsters have reasonable access to the colleges of their choice. If these goals are to be attained, then we must use a planned variety of institutional and student aids, including student charges offset by student aids. Free tuition may well prove to be the reasonable solution for the community college; high tuition and scholarships for the first-line institutions, public and private.

Neither my side of this debate nor my opponent's alone holds the answer. Only if both of us lose can the nation win.

All colleges should be tuition-free

by BUELL G. GALLAGHER

Let me begin by complimenting those who drafted the subject for this discussion by William C. Fels and me and labeled it "a debate." But the compliment is more for sanguineness than for wisdom, a contingency forecast in the letter of instructions which said in part, "Obviously this issue cannot be completely

resolved. Private colleges need to solve it one way and public colleges another." It is therefore possible—perhaps probable—that there will be no debate within these pages. President Fels and I may be like ships that pass in the night.

Actually, I must admit that I see no possible subject for debate in the phrasing given to us. No man of conscience would face contemporary America and openly argue that the actual net cost to students ought to be raised in general and across the board. The days of academic freebootery are gone. Those who defend mounting tuition charges must therefore argue for at least a commensurate increase in scholarship aid. In that case, scholarships become merely a device for raising funds while keeping student charges down. The proposed debate thus becomes merely a wrangle over methodology, or a colloquium on how best to reach an agreed goal of lowering student charges while keeping the colleges solvent.

Believing that such a discussion would be less profitable than a more searching inquiry, I choose to make a proposal which may, perhaps, provoke sharp debate. Before stating the proposal, let me summarize the assumptions on which it rests.

There will not be, and ought not to be, a decrease in the percentage of the population stream pursuing post-high-school studies. If any change occurs, it will be an increase in the ratio of those attending post-high-school institutions compared to those who do not.

The foregoing assumption rests on the forecasts of changing employment patterns. Because of automation and other technological change, the labor market into which the young American goes as he terminates his formal education is radically changing. Within a decade, we are told, the demand for unskilled and semiskilled labor will drop by 25 per cent, while the demand for professional and technical workers will double. Tomorrow's typical working man will not be the pipe fitter or the bus driver; he will be the airplane pilot and the electronics technician. Already the results are apparent and the trend has only begun to be felt. Where a high school diploma was an adequate entrance paper for permanent life work a quarter of a century ago, the Associate in Arts degree has taken its place, and the bachelor's degree is increasingly the earliest acceptable terminus for those who have collegiate abilities. Both the economy and the culture of the nation require the fullest and richest educational opportunity each youth can profitably use.

The population bulge now reaching the collegiate level brings my first two assumptions into focus with a doubled impact. With twice as many youth demanding post-high-school education in at least a constant ratio, and needed by society and industry at the peak of their preparation rather than when they are

half ready, the dam will break if the sluice gates are not opened. The Council on Financial Aid to Education estimates that about \$5 billion of capital funds must immediately be made available to contain the flow of the nation's most precious asset—its youth.

We must assume that the nation will meet this crisis. It now appears that we will meet it late rather than being prepared in advance, but we must reject the possibility of academic nonfeasance. Somehow, we will marshal the necessary forces, recruit and train the necessary teachers, build the institutions, and do the job. Among other things, this means a much wider variety of institutional patterns rather than a swelling of present institutions and a proliferation of duplicating institutions.

It is within this enlarged framework of assumptions that we face the question of student tuition charges. It takes no crystal ball to read the future. The decade of decision is upon us. We stand today, with reference to higher education, where the nation stood a little more than a century ago with reference to elementary education. Horace Mann led the people of America in devising what is probably the most revolutionary invention in human history—the universal compulsory free elementary school. More widely copied than any other single feature of our democracy, it has been the secret weapon of our strength.

We have made marked strides toward extending educational opportunity through the high school years and into the collegiate years, as Robert J. Havighurst's data have shown.¹ The progress since 1940 shows that for every five young people who formerly graduated from high school, seven now graduate; for every two who entered college, four now enter.

Free college the ultimate goal

But our failures are at least as significant as our successes. Our educational institutions—at all levels—have not been flexible enough, and varied enough, and resourceful enough to make sure that two basic desiderata are reached: that each youth is motivated to pursue educational opportunities appropriate to his talents and interests right up to the limit of his potential; and that every youth has the financial ability to complete the studies appropriate to his potential. The two factors of motivation and financial ability appear to be closely interrelated. The principle of the universal compulsory free elementary school can and must be adapted to fit the needs and possibilities of higher education. The nation cannot afford not to do it.

Let me lay to one side all problems other than the single question of a stu-

¹ See p. 30.

dent's financial ability to pursue education up to the limits of his own potential. (I owe at least this gesture of deference toward the subject assigned.) Let us indicate in passing that there should be very few dropouts at any point on the educational ladder. Instead, appropriate diagnosis and counseling should lead to a whole series of points at which students, instead of dropping out of an inappropriate course of study, are graduated from one which is appropriate. Possibly the school-leaving age should be lowered for some, provided education is also adapted to make them productive and useful members of society as their studies terminate. Certainly, much more must be done to adapt curriculums in the junior high schools and high schools and junior colleges and colleges to provide constructive terminal points for education as each successive level of potential is realized, rather than continuing to see a stream of failures and discards thrown off an assembly line designed solely for the elite. Only by thus factoring out the high potential from the median and lower ranges can we salvage the top tenth of talent and bring to full fruition that tiny elite on which democracy's full strength strategically rests. Let us suppose, then, that all these basic objectives will be achieved—because they must be.

The question which remains is that of financing the student on his way through education. And on this issue, higher education is as outmoded as a stagecoach in the jet age. More accurately, that single segment of education which lies between high school and graduate school, the segment called the college, stands alone in its adherence to nineteenth century financial ideas. I cannot, for the life of me, understand why we should regard it as wise social policy to provide free education through high school, and again substantially free education in graduate school, while insisting that in the intervening four years of college, a student must pay through the nose. To the degree that bachelor's and master's candidates are paying the freight for doctoral candidates; the fuzzing of institutional bookkeeping actually hides a venal lapse; but the fact is that from some source or other, graduate students pursuing the Ph.D. pretty generally find financial aids which substantially offset tuition charges, making graduate work essentially like high school studies—free of tuition charge. But not so for those four years of undergraduate work.

Among the more curiously aberrant proposals for correction of the situation is that suggested by Seymour Harris, professor of political economy at Harvard. Children of the rich and very rich are to be graduated without a burden of debt; while all others must mortgage their futures in order to get a bachelor's degree. Professor Harris correctly argues that future earnings are greater when one has

completed college; but he is wrong in using the device of the promissory note to cover the investment. The proper device, one which more accurately measures the financial return to each educated individual and more equitably distributes the social burden in the light of general social benefit, is the graduated income tax.

Instead of the somewhat ingenious and frequently tortuous and not uncommonly inequitable processes of the means test for apportioning inadequate scholarship aid or diverting less affluent students to cheaper schools and colleges, and instead of long-term loans which give to each bride and groom a dowry of debt as they begin their families and establish their homes, would it not be more equitable and more in the interest both of the general public and of each educated individual, to rest the cost of instruction in higher education on the graduated income tax?

The prototype of this proposal is seen in two of the more distinguished educational complexes of the nation—public higher education in California and in New York City. Instead of insisting that these free institutions should begin to charge tuition, other institutions might well join us in the defense of the principle and the fact of free higher education—free, at least, from tuition charge. As for the individual taxpayer, his increase in earnings resulting from his college education will enable him to pay back, through the income tax into the public treasury, many times over what was invested in his behalf by a wise and prudential nation.

Standards must remain high

I am not arguing for a free ride for anybody who thinks he wants it. Free higher education must be accompanied by rigorous academic standards, both at admission and in retention. That this can be done is amply demonstrated by the examples I have already cited.

If some institutions of higher education choose not to become part of a nationwide network of free higher education, I would not object. Let them go their way. But do not let them stand in the way of the nation's youth and of the nation which depends on that youth.

There is a motto which a far-visioned mind caused to be inscribed over the door through which I go to work every morning. It is a good motto. I commend it. "Eruditio populi liberi spes gentium."

Our student aid patchwork needs drastic revision

by WILBUR J. BENDER

We have had college student aid problems, philosophical and practical, for as long as we have had college students, and no one has worried very much about them, publicly at least, until recently. Certain developments in recent years have so increased the magnitude and central importance of the student aid problem nationally, however, that we can no longer afford to try to cope with it in the traditional piecemeal ways. Our present student aid system, if indeed it can be called a "system," is so seriously inadequate, and is about to become so grossly inadequate, that radical changes are necessary.

The developments that now confront us with the necessity of creating an adequate national student aid program are familiar to all of us. There has been a change in our national mores in the last generation which has made college attendance a mass desideratum, something essential for careers and the achievement or maintenance of middle-class status in a society which is almost completely middle class in its feeling about itself. There has been an increase in the birth rate which has produced a large increase in the absolute number in the age group under 18. These two factors—the absolute increase in the age group and the steady increase in the proportion of the group entering college—have combined to produce an extraordinary increase in the total number entering college, an increase which will probably continue indefinitely. Furthermore, there has been an alarming increase in the last 15 years in the cost of college attendance as a result of the explosion of knowledge and the way we run our institutions of higher learning, and there is no end in sight to the upward curve of college charges.

The central fact is that we are engaged in this country in a unique, unprecedented experiment in mass higher education. We are developing an "educatocracy," or a "meritocracy," in which college is no longer just an adornment, a gilding or civilizing process, or a pathway to learning and the learned profes-

sions—a means of producing a learned clergy and gentlemen and rulers, which was Harvard's function for 250 years. We have abandoned entirely the idea of higher education as something only for an elite, social or economic or intellectual; we have decided, consciously or not, that college is a necessity for everybody who wants to be in the main stream of American life. It has become a central article of the American creed that college is a good thing. Rightly or wrongly the American public has come to have a kind of mystical faith in the value of college, although we are vague about what college is and how it works its magic, and we have failed so far to translate our belief in the importance of college into adequate financial support for higher education.

In fact there is solid basis for this faith. As our society now functions, college education has become intricately interwoven with key parts of the social process and the means of achieving national goals—with the identification and recruitment and distribution of talent; with social mobility; with the maintenance of economic productivity and growth; with the management of a highly complicated, advanced technological society; with our ability to understand and handle our world-wide responsibilities; with the prevention of a glut on the labor market; with our ability to build some day the great city and achieve the great society; with individual understanding and fulfillment. It follows from this that the development of a national student aid system which will provide reasonable equality of access to higher education is essential from the point of view both of our basic democratic values and of the effective functioning and survival of our kind of society.

A former aid officer comments

I want to comment about certain aspects of the current student aid situation in this country as I have observed it as a former practicing student aid officer in one of the less impoverished private colleges. It may simplify matters if I indicate my point of view by stating seven brief general propositions:

It is high time that we developed in the United States an adequate, comprehensive, national student aid program.

Leadership in the development of such a program should be taken by the colleges.

The ultimate goal of national student aid policy should be the removal of the economic barriers to higher education!

To achieve this goal, large amounts of public funds, national and state, will be needed.

The management of the program should be "mixed" that is, it should be both public and private, both federal and state.

An adequate student aid program should have a high priority among the various needs of our society competing for a share of the national income.

A high priority is justified primarily by the vital importance for our kind of society of providing maximum equality of access to appropriate higher education for the young.

It is hardly an exaggeration to say that in this country we have chaos in the student aid field. We certainly have no rational, comprehensive, national system, or plan or policy. We have hundreds of individual college student aid programs. A relatively small number of the richer colleges control a large part of the total college financial aid resources, and the great majority of colleges manage with grossly inadequate resources and programs, financed all too often out of tuition income which is badly needed for faculty salaries and other educational costs. The typical private college situation is one in which underpaid teachers in a struggling institution are subsidizing underfinanced students. The distribution of institutional student aid resources bears no reasonable relationship to national student or institutional needs, and this serious imbalance is not corrected by student aid programs outside the colleges. In fact these noncollege programs probably worsen the situation. The rich get richer and the poor get poorer.

There are slowly growing sources of student aid outside the colleges. We have a few state scholarship programs, all quite new and none really adequate. We have some federal scholarship programs at the graduate or professional level, and we have a federal loan program. We have some private foundation and corporation scholarship programs, such as National Merit and General Motors, which are useful but only a drop in the bucket. We have a lot of scholarship programs for children of corporation employees and a lot of local community scholarship programs. We have thousands of small local scholarship and loan funds—no one knows exactly how many or how much money they produce—financed by charitable trust funds or by annual fund-raising efforts of PTA's, women's clubs, fraternal and civic organizations, and community groups of various sorts. We have several private statewide guaranteed bank-loan programs like HELP (Higher Education Loan Plan) in Massachusetts. And there are a growing number of commercial insurance and bank programs which are essentially self-help installment-buying or loan programs and probably shouldn't be included as student aid since they involve no subsidy. Most important of all, but often overlooked, is the hidden, indiscriminatory taxpayer's subsidy to all students in public institutions in the form of low tuition or no tuition.

This array of financial aid resources and agencies is impressive, at least for its diversity. And the fact that so many people have gotten into the act says

something about the extent and importance of the need and the widespread awareness of it. But the fact is that despite certain beginnings there is no overall planning or coordination, and no machinery for undertaking such planning. There is, as yet, no really solid definition of the national need, of the present and future dimensions of the problem, no aggressive national rational thinking about the problem as a whole and how it can best be handled, how to get the total needed resources and use them most effectively in the national context and the national interest.

What we have is an uneven patchwork host of separate, relatively small programs, each struggling with its own special problems and goals, and another host of individuals, students, and their families, each also struggling to find his way through this largely unmarked jungle in order somehow to secure the means to finance the college education which has become in America the magic door to the future for the young.

I don't want to paint too black a picture. There are real values in our present system of private initiative in the financial aid field. This system is the product of American experience, and it has helped to make possible the unique American experiment in mass higher education. Millions of students do go to college, after all, far more both absolutely and proportionately than in any other country, and they manage to pay for it somehow. I believe it is substantially true, as I said a couple of years ago to a group of visiting Russian students when they asked how many children of peasants and workers there were at Harvard, that in this country no healthy, able, highly motivated student is deprived of a college education because of purely economic factors. Note the qualifying adjectives, however. And what price do we pay for our present system in individual, institutional, and social costs?

Aid system raises questions.

I wish we had a good study of the impact of the present system on students and their families. What pressures and burdens, what distortions of careers and lives are caused by it? How does it affect choice of college, of program, of graduate study, of career? How does it affect extracurricular and social life, emotional health, what the student gets from his college experience, his relationship with his family? How does it affect the student's values, his attitude toward intellectual activity and his college? Does it increase the tendency to measure all things in material terms? What is the effect on parents who increasingly find themselves mortgaging their whole adult working lives to pay for the college education of their children? And how many young people who ought to get a college education, in the interests of society, fail to do so because

they are not, in the present context, "able and highly motivated" because of environmental factors including finances? I don't know the answers to these questions, and the magnitude of the problem may not be so great as the questions imply, but that there are unhappy results of our present system cannot be denied.

Certainly it is clear that the present system has undesirable effects on the colleges. It imposes unfortunate limitations on the ability of the colleges, particularly the private colleges, to determine the composition of their student bodies. Of course there are also significant noneconomic factors which affect the make-up of a college student body, but our inadequate student aid system has a major influence, even on the richest colleges, in determining who applies, who is admitted, and who comes. There is no American college which has now the student body it would have if the economic barrier were removed; that is, if students could apply to whatever college they wanted knowing that if admitted they would be financed adequately and if the college knew that whatever qualified student it admitted would be financed.

The stacked deck in education

In our society the child of the upper-middle-income and upper-income family has the advantage all the way along—in cultural opportunities, in better schools, in better preparation and guidance, and in family and group expectations about college-going (which, I suppose, can be a handicap, also). Why give him, because of an inadequate national student aid system, the additional advantage of greater access to and greater likelihood of acceptance by and attendance at the better colleges? This disadvantage of the lower-income youth becomes even more significant when we observe the growing importance for careers of postgraduate professional training and the great differential among colleges in the proportions of their students who continue their formal education after college. The able student who, for economic reasons, attends a marginal college is far less likely than his brother in a selective college to get advanced training and therefore to have the maximum opportunity to make full use of his talents.

The effect on the colleges, particularly on the more expensive private residential colleges, is to give them an undesirably lopsided socioeconomic distribution in their student bodies. These colleges tend more and more to have relatively homogeneous student bodies drawn largely from middle-income and upper-income families, coming from upper-income suburban and private schools, and insulated from any real contact with students from other backgrounds. The result is to solidify and perpetuate an unhealthy social stratifica-

tion. This system simply doesn't square with our democratic values or with the need of our society to keep the road open to talent wherever found by means of equal access to quality education.

Comparing the American situation with the situation in what we commonly suppose to be less democratic societies elsewhere is ironically instructive. In class-ridden England, for instance, about 80 per cent of the students at Oxford and Cambridge receive scholarship grants, and I suppose that in most European universities the percentage of scholarship holders is in that range or higher. Yet at Harvard, which has one of the largest percentages of students receiving scholarship assistance of any American college, only 25 per cent of the undergraduates receive scholarship grants from the college and perhaps another 10 per cent get help from outside sources, usually the National Merit Scholarship Program or the General Motors Scholarship Plans.

The problem has importance not only for the socioeconomic make-up of college student bodies but also for the very survival of many private colleges and the future strength of the private sector in higher education. As tuition in private colleges generally is forced up rapidly in order to finance rapidly rising educational budgets, the less strong—or at least the financially less strong—colleges find themselves forced also to push their tuition charges to levels which threaten to price them out of the student market in order to compete in the increasingly cutthroat market for college teachers. Ambitious families may be willing to make great sacrifices to educate their children in "prestige" colleges, but if the choice is between a nonprestige college with high tuition and a much less expensive public institution, the decision is usually easy.

We are faced with the probability, unless something is done, of an alarming development in the private sector of American higher education: at one end of the spectrum the richer private institutions will survive by catering largely to a homogeneous high-income group, and at the other end the poorer private colleges will go bankrupt in droves. Perhaps some of these colleges ought to disappear, but if we look upon private institutions as a valuable part of our total higher education resources, and if we agree that in any case it is necessary to expand these resources greatly in the next decade, allowing many potentially useful colleges to disappear is hardly in the national interest. Furthermore, if private colleges and universities are valuable in terms of society's needs, how do we justify large subsidies from public funds to all students attending public institutions, whether they need help or not, while we deny such assistance to needy students in private institutions, when such subsidies would strengthen our entire higher education enterprise by helping useful private institutions to survive? Our present system is, in effect, forcing more and more students to at-

tend public institutions. Actually we might save the taxpayer some money if, by an adequate student aid program, we lessened the need for building new public college facilities.

One possible answer to this problem is to have the private colleges increase their own financial aid resources to the point at which they can do what is needed for survival and for securing the kinds of student bodies they want. This, I fear, is not likely to happen, and I cite in evidence the college I know best, Harvard.

In the 10 years from 1950 to 1960 when I was chairman of the Harvard College scholarship committee, the endowed student aid capital funds of the committee grew from \$9,989,291 to \$26,689,361. These funds increased in one decade by an amount almost twice as large as the total reached in the first 315 years of Harvard's history. My guess is that Harvard has more capital funds for student aid than any other college in the world (although a few small colleges may have more endowment per capita) and more student aid endowment than the total endowment of 9 out of 10 American colleges. Yet at the end of a decade of fantastic growth of its student aid resources, Harvard was giving scholarship assistance to almost exactly the same percentage of its students (25 per cent) as it was 10 years earlier. In fact it gave to scholarship holders significantly less help in proportion to the total cost of a Harvard education in 1960 than in 1950 and required a much larger self-help contribution from the student. Considerably fewer students were coming to Harvard from the bottom half of the national income scale in 1960 than in 1950.

If the richest college in the world found itself worse off, in terms of its ability to help its students finance their education, at the end of a decade of unparalleled increase of its student aid resources, what is the outlook for that college in the decade ahead, assuming a continuation of the upward spiral of college charges? More important, is there, realistically, any prospect that other colleges with less affluent and loyal graduates can possibly do what they want and need to do about expanding their student aid resources in the sixties? Remember that there probably will be a doubling in the total absolute number of college students in the next few years, as well as further increases in college charges, and we will need vast additions to our national student aid resources just to maintain our present inadequate level of assistance.

Private support for colleges will, one hopes, continue to grow through increased alumni, business, and community support, but the needs of student aid programs must compete for the college dollar with other institutional needs—for buildings, larger faculty salaries, and increasingly expensive libraries and research facilities and programs. If I know how college administrators operate,

student aid programs will not receive top priority in this competition.

Furthermore there is no assurance that the national need would be served equitably, even if the student aid resources in the hands of the colleges were to be greatly increased—particularly if, as is likely, these resources were concentrated in the hands of the 75 to 100 selective colleges which now have most of this money. No single institution can be expected to use its student aid funds directly in the national interest because it can't envision or encompass the national interest except in terms of "what is best for General Motors is best for the country." The individual college inevitably uses its resources, more or less broadly or imaginatively, to serve its own institutional interests, as it defines them, which may not coincide exactly with the national interest. For instance, the present group of selective colleges is fishing largely in the same pool and competing with each other for the same select group of students. The competition, incidentally, can be a lot of fun in the good American sporting tradition—let's see who can grab the prize scholar-swimmer in Winnetka away from Yale. But these colleges can't reach down very far into the underprivileged areas of our society. Practically all the scholarship candidates for any one of these selective colleges are applying to other similar colleges also and will go somewhere to college in any case. The scholarship candidates for these colleges include only a handful of people from the lowest income group.

An ideal answer to aid problems

The only good answer is to have a national student aid program of such dimensions and such flexibility that everyone—students, families, teachers and guidance people, and the general public—will know that any properly qualified student can go to college without undue financial strain. Think what the existence of such an image, such expectations, in the public mind would do to simplify all the problems I have been discussing.

The problem of college costs may seem at first to have little to do with student aid, but it cannot be ignored in any realistic discussion of the problem. If only college charges could be somehow stabilized, or at least held to an increase no greater than inflation, it would greatly simplify the problem. Conceivably, then, the largely private student aid system we now have might in time grow big enough to do the job reasonably adequately, although the impending large absolute increase in the number of college students makes even this doubtful.

As everyone knows, college charges have gone up at a fantastic rate in recent years, more rapidly than the costs of any other goods or services, except possibly medical and hospital care. In the selective private colleges a 400 per cent increase since the war is about par for the course. At the public institu-

tions, the taxpayer has paid for much of the increase in costs, but here also tuition and fees and board and room charges have been going up to the point where some of the public institutions are now worrying about the effects of high costs on the make-up of their student bodies. Inadequate as many of the private college financial aid programs are, the public university programs are generally even more inadequate. At least at the largely residential state universities, realization is growing of the need to develop strong student aid programs if these universities are to discharge their responsibilities to their constituencies properly. The growing realization of a common problem and a common concern in this area with the private institutions will, one hopes, help to bring about common action by public and private institutions and greatly strengthen the effort to develop a good national program.

Must college cost so much?

The reason for the recent rapid rise in college charges is not entirely clear, at least not to me. Inflation is one factor, of course, but tuition charges have gone up far more than inflation would justify. One factor is much-needed higher faculty salaries, but salaries haven't gone up at all proportionately with tuition. Another factor is the proliferation of administration and services and the increase in the complexity, magnitude, and cost of university research. Yet these factors do not fully explain what has happened. There is no satisfactory system of cost accounting in the universities, so no one can explain satisfactorily what has happened and why. Perhaps it is all justifiable, but before the colleges can in good conscience ask for massive increases in public support of student aid programs and higher education in general they must make sure their own houses are in order and that there isn't significant waste and inefficiency in their operations through outmoded methods of instruction, inefficient use of buildings and other resources, inefficient daily and yearly calendars, undue proliferation of courses and services, and competitive and unjustified overlapping of programs. They must make sure, in other words, that there aren't significant internal economies to be made and that the educational enterprise cannot be carried on less expensively, and perhaps even more effectively, by selective pruning and shrewd and imaginative planning. They should at least be no less sensitive than United States Steel to their responsibility to the public to keep prices down.

A special aspect of the cost problem which affects primarily the university colleges - that is, the colleges which are parts of universities rather than discrete undergraduate institutions - has troubled me increasingly in recent years. Pretty clearly, in such colleges undergraduates are helping to finance a lot of

institutional costs, primarily the costs of graduate instruction and research. I realize that it is difficult, perhaps impossible, to allocate costs rightly in these peculiar joint-cost institutions. Obviously, however, it costs a lot more to train a Ph.D. candidate in chemistry than it does to educate an undergraduate majoring in English. Yet graduate students normally pay lower—or at least no higher—tuition charges than undergraduates.

Is it justifiable to ask undergraduates to finance not only the cost of their own education but also the cost of research and the education of future faculty and the regiment of Ph.D.'s, many of whom (especially those in science) go on to high salaries in business and government? The realistic answer probably is: "Who is going to pay for these things if the undergraduate doesn't, so don't ask embarrassing questions about who is subsidizing whom." Furthermore the undergraduate presumably benefits from being in an institution where research and graduate instruction are being carried on, although this becomes increasingly questionable as those faculty members who are most deeply involved in research and graduate instruction pay less and less attention to undergraduate education. It would be interesting to know how these costs break down and who is paying for what, even if it is impossible to do anything about it.

The last point suggests another observation about our peculiar Topsy-like educational system. If one looks at the whole process from nursery school to Ph.D., one sees free education universally available at public expense through grade 12. Graduate education in graduate schools of arts and sciences is becoming almost free in the sense that at least in the best graduate schools there is so much fellowship money available that only a small minority of students pay their own way, and these fellowships are generally awarded without regard to the recipient's need. What is the logic of giving to the future Ph.D. free education from grades 1 to 12 and from the A.B. to the Ph.D. while charging him through the nose for grades 12 to 16 (and if he does get help in his undergraduate years, tailoring it rigidly to his need) when this is all one continuous process?

I am bemused also by those who advocate massive loans as the chief device for financing a student's college education on the grounds that this education is an investment which increases the individual student's earning power and therefore he ought to pay for it happily throughout his life. Yet I have never heard one of these gentlemen advocate large loans for Ph.D. candidates (or secondary school students either for that matter) even though by their own figures the Ph.D.'s average earning power is considerably greater than the average A.B.'s.

Curiously, in the professional schools other than arts and sciences and possibly divinity—that is, in the graduate medical, dental, law, architecture, and

business schools—there is relatively little fellowship money. Why? Is there a belief that lawyers, doctors, and architects will earn more money than the Ph.D.'s and therefore don't need it? Is there a feeling that there is something more righteous or moral or socially useful about the Ph.D.? I am willing to admit that business and law students are less worthy of support than graduate students of arts and sciences (don't ask me why), but I find it difficult to see why the future architect or doctor or social worker isn't morally and socially as deserving of support as the future chemistry Ph.D. Yet we don't begin to have the student aid resources in the medical schools that we have in the good graduate schools of arts and sciences despite the much longer and more expensive training required of the doctor. This is, in my opinion, an important factor in the relative decline in recent years in the quantity and quality of medical school candidates and another illustration of the illogical, unplanned, ad hoc, patchwork nature of our total student aid program in this country. Perhaps the College Scholarship Service ought to concern itself with the whole range of student aid from secondary school through all the professional schools. But if anyone thinks there is undesirable competition among the colleges for the "competitive" scholarship candidates, he ought to take a look at the dog-eat-dog competition among the graduate schools for the prestige Ph.D. candidates.

I suppose the implication of what I have been saying is that in terms of long-range social goals, all higher education ought to be free. I am not yet willing to go quite that far because I do not see how this could be accomplished without destroying the freedom of the private colleges, and I believe that it is vitally important to maintain a strong private sector in our total system of higher education. The practical problem, to me, is how to develop a national financial aid program which will minimize the economic barriers to higher education while enabling the private institutions to survive and contribute as free and independent colleges.

There will be many tough problems to solve if we do develop some kind of coordinated national student aid program financed to a significant degree by public funds. Many of these problems we face now, of course, but since hundreds of separate authorities and individuals are making decisions about them, the risks of bad decisions aren't so serious.

All student aid programs share a central problem which would become acute if government funds were involved: which college students should receive support, particularly in a period when we are moving toward a situation in which 50 per cent of the young continue their education beyond grade 12. Should it be the top 5 per cent in academic ability as measured by the usual indices or the top 10 per cent, or 25 per cent, or everybody who can get into college (as in the

state institutions)? What do we do to equalize educational opportunity for the disadvantaged groups—the Negroes, slum dwellers, “poor whites,” and other young people from culturally deprived backgrounds who aren’t likely to show up well on the normal indices of academic promise? What do we do about regional differences in quality of schooling and apparent academic ability? How broadly shall we define college? Do we include junior colleges and various kinds of technical and vocational and cultural training beyond grade 12? How do we decide what kind of higher education is socially useful and worth subsidizing? And how do we decide who should go to college at all? Aren’t there increasing numbers of young people going to college as a result of social pressures who should not be in college?

Aid without strings

There is the danger that we will use government funds to express transitory or politically determined ideas of what is in the national interest, as to some extent we do now by in effect bribing students to enter certain fields such as science or engineering or foreign languages or guidance or teaching. It seems to me essential that we avoid using a financial aid program to influence or to limit, except in the broadest way, the individual’s freedom to choose his college, program, and career. A poet is at least as valuable as a chemist, and we should not use the power of the purse or big government to push people around unduly in their decisions about their lives. Similarly there is the danger of interference with the freedom of institutions and individuals by loyalty oaths or political tests. In other words, can we have a publicly supported national student aid program without dangerous interference with the freedom, independence, and diversity of higher education and the freedom of individuals to develop in their own way?

Then there is the interesting question of how easy we should make it to finance college education. How much self-help should be expected, how much sacrifice by the student and his family? How do we measure need? Isn’t it good for people to struggle, within limits, to pay for their own education? Isn’t this a good test of motivation? Do we value enough what is made available too easily? And how do we adjust stipends to the great variations in college charges?

In conclusion, I want to say as forcibly as I can that I believe that we stand now at a critical point at which radical action is necessary. We are in the midst of a period of change which is appallingly rapid when viewed against the long, slow, conservative history of American higher education; change not planned or foreseen but forced on us by events over which we have no control—by deep social trends in birth rates and the national mores about college and by stagger-

ing and permanent increases in the cost of operating a higher education enterprise which has become fantastically complex and expensive—but not too expensive to be paid for by an affluent America which has solved the problem of production. We have to move from programs and institutions and ways of doing things which have served us not too badly until recently to other ways of doing things—and move quickly before we are overwhelmed. And we have to find new resources and new ways of doing things without destroying the values we now have—the values of diversity, of independence, of freedom to experiment, of personal responsibility and willingness to sacrifice, and of reward for high motivation. This will require cooperative thinking and planning and action. Complete laissez-faire and institutional free competition are no longer adequate.

John M. Stalnaker has spoken eloquently about the virtues of private enterprise in the student aid field, and I agree with almost everything he says, although I wish he had spoken equally eloquently about the deficiencies of private enterprise in this field, deficiencies of which he is so well aware.¹ The genius of America is a pluralist genius, the mixture of public and private activity in some kind of pragmatic balance. If an adequate rational student aid program financed entirely, or largely, from private sources were possible, I would strongly favor it. Probably almost all of us worry, as I do, about the expansion of government activity in higher education, even though we may believe it is essential and in-eyitable. Nevertheless the magnitude and the importance of student aid needs is so great that I see no possibility of finding the required resources other than by a very great expansion of public support, federal and state. To get some sense of the discrepancy between private and public resources, we have only to compare the New York State Scholarship Program, which will apparently soon be spending \$65 million a year in one state alone, with the largest of the private national scholarship programs, National Merit, which paid about \$3.25 million in 1961 to scholarship holders and colleges. The question is: have we the wisdom to shape public programs in such a way that they will not endanger some of the basic values of higher education and a free society?

Colleges should take the lead

As I said earlier, I believe that the colleges should take the lead in trying to develop an adequate national student aid program. This does not mean that such a program should be shaped exclusively by the colleges. There are others, in federal and state government and in foundations and private financial aid programs who have much to contribute and should be involved (certainly in the

¹ See pp. 52-65.

ease of the government they must be involved), particularly if we assume that the program of the future will be a mixed program, in the American tradition, involving public and private and state and federal resources and administration. All wisdom about student aid problems does not reside in the colleges.

In fact one must face frankly the question of whether the colleges are capable of taking leadership in, or even contributing significantly to, the development of a national student aid program. The record so far is not encouraging in view of the typical particularism and competitive local attitudes of the colleges in the student aid - and other - areas. Part of this unpromising record, however, is attributable to the relatively recent emergence of the student aid problem on its proper scale and to the resulting relatively recent emergence of full-time, professional financial aid officers in the colleges. There are still too few college financial aid officers, and particularly too few good ones. What is the quality, the level of competence or distinction, the status in the academic community of college financial aid officers? How many of us are competent to look at the problem as a whole, to think nationally, to do the kind of sophisticated, high-level analysis of social, economic, and political factors which is needed? And how is it to be done - through what mechanisms of investigation, recommendation, and implementation?

My final question is: can and should the College Scholarship Service assume leadership, as spokesman for the colleges, in shaping a national student aid program, and if so how should it go about it, and if not who else can and should do it? I hope we will attempt earnestly to find the answer to this urgent question.