

DOCUMENT RESUME

ED 038 924

HE 001 477

AUTHOR Ferrin, Richard I.
TITLE Barriers to Universal Higher Education.
INSTITUTION College Entrance Examination Board, Palo Alto, Calif.
PUB DATE Mar 70
NOTE 66p.

EDRS PRICE MF-\$0.50 HC-\$3.40
DESCRIPTORS College Admission, College Attendance,
*Disadvantaged Youth, Educationally Disadvantaged,
*Educational Opportunities, Financial Problems,
Higher Education, Junior Colleges, Relevance
(Education), *Special Programs, *Universal Education

ABSTRACT

This report was prepared as a background paper for a national study of changes in the accessibility of higher education from 1958 to 1968. It outlines four major barriers to higher education: the financial, the academic, the motivational, and the geographic. Efforts to reduce these barriers have included (1) the creation of junior colleges; (2) federal, state, and private scholarship and loan programs; (3) special college preparatory programs; (4) comprehensive talent search programs; (5) modification of admission requirements; and (6) the creation of new colleges or the extension of old ones. The study concludes that these measures have been only partially successful toward attaining a goal of universal higher education because of the magnitude and complexity of the problem. The issues are well known, the objectives clear, but the existing measures are inadequate. There is a 7 page bibliography.
(Author/AF)

ED0 38924

Access Research Office

College Entrance Examination Board
suite 363 800 Welch Road,
Palo Alto, California 94304

BARRIERS TO UNIVERSAL HIGHER EDUCATION

by

Richard I. Ferrin

March 1970

Palo Alto, California

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

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

HE 001 477

CONTENTS

Foreword	ii
Acknowledgments	iii
Introduction	1
Identification of the Barriers	3
The Financial Barrier	7
The Academic Barrier	11
The Motivational Barrier	16
The Geographic Barrier	23
Efforts to Alleviate the Barriers	29
The Financial Barrier	34
The Academic Barrier	38
The Motivational Barrier	43
The Geographic Barrier	47
Summary	53
Bibliography	55

FOREWORD

This report was prepared as a background paper for a national study of changes in the accessibility of higher education from 1958 to 1968. It outlines four major barriers to higher education: financial, academic, motivational, and geographic.

This discussion of barriers to educational opportunity is particularly pertinent right now because access to higher education has recently become a topic of intense interest, both for social and educational reasons. There have been innumerable studies and position papers on the financial barrier during the past year or so. The concept of open admission has dramatized the "academic" barrier. Federal programs have channeled new though limited resources into those conditions which repress individual motivation. And greatly strengthened state coordinating groups are addressing the problem of geographic barriers rather than leaving college location to pork-barrel politics.

This review is particularly useful because it places these barriers in the proper perspective of recent social history as well as delineating the substantive issues involved. The detailed documentation of current conditions and literature should prove useful as a contemporary picture of major forces shaping the nature of access to higher education.

Warren W. Willingham
Senior Research Psychologist

ACKNOWLEDGMENTS

Few research documents are completely the work of one man, and this present report is no exception. Kenneth Martyn's analysis of the California higher education scene provided a workable conceptual base. Frank Satterwhite's suggestions, encouragement, and assistance throughout the preparation of the report were most welcome and, indeed, necessary. Lewis Mayhew's and Warren Willingham's support and critical comments contributed greatly to the production of a presentable document. And Judith Gray's editorial and secretarial skill has been not only valuable but also a joy to behold. To these and to those others who provided information subsequently incorporated into this report I extend a hearty and sincere "thanks."

Richard I. Ferrin

INTRODUCTION

That there should one man die ignorant who had the capacity for knowledge, this I call a tragedy.

--Thomas Carlyle

While there can be no doubt that the day of mass higher education has arrived, there can be at the same time no doubt that the day of universal opportunity for higher education has not. Despite the fact that college enrollments and expenditures have increased dramatically and new institutions have been and are being established in heretofore collegeless communities, "far more young people could profit from further education than are now attending colleges."¹ Gross inequities still exist among various categories of young people, with the low-income, nonwhite individual bearing the brunt of unequal distribution of educational resources. For example, in a 1969 study of enrollments at 80 of the most prominent state universities in the United States, Black students on the average represented only 2 percent of the student population. In no institution was the proportion of Blacks as high as 12 percent (the figure for the proportion of Blacks

¹Knoell, Dorothy M. Toward Educational Opportunity for All. Albany: SUNY, 1966, p. vii.

in the national population).² In Coleman's 1965-66 survey of enrollments at over 2,000 institutions, he found that only 20 public and 26 private institutions had between 10 and 50 percent Blacks. In other words, most Blacks attending college either went to a predominantly Black institution, typically located in the South, or to an institution where there were fewer than 10 percent Blacks. In this latter group 61 percent enrolled fewer than 2 percent Blacks.³

A third survey, this one conducted by the American Council on Education, gives further evidence that Negroes in particular and students from low-income families in general are still underrepresented among college attendees. The results of questionnaires administered to students entering college in the fall of 1969 showed that only 6 percent reported themselves to be Negroes and only 28 percent reported that they came from families earning less than \$8,000 in 1968.

Politicians and college administrators have become quite aware of the educational inequities that continue to plague this country, but they often speak optimistically of the programs that have come into being and the great strides forward that are being taken. Ghetto workers, on the other hand, are often more cynical in their

²Egerton, John. "Almost All-White," Southern Education Report, May 1969, 4 (9), pp. 2-17. For a more complete treatment of the topic, see Egerton's State Universities and Black Americans. Atlanta: Southern Education Reporting Service, May 1969.

³Coleman, James S. et al. Equality of Educational Opportunity. Washington: USOE, 1966, p. 419.

appraisal of the current scene. The comment made by one such individual is indicative of the reactions of many:

When the year's verbiage about ghetto youths' greater educational opportunity is matched against the actual increase of ghetto youth in today's college classrooms, the gap can embarrass any dean of admissions.⁴

As one seriously ponders this statement and the lack of educational opportunity which most certainly still remains among groups of individuals, he is compelled to go the next step and ask: Why this gap? What barriers have limited access to higher education for certain individuals? What obstacles stand in the way of further, more rapid expansion of higher educational opportunities?

IDENTIFICATION OF THE BARRIERS

Many researchers have studied this problem of access to higher education over the past 20 years and through their investigations have identified and examined several obstacles which tend to restrict access. In general, the barriers identified appear to fall into four basic categories--financial, academic, motivational, and geographic.

Barber, for example, investigated one year after graduation all the 1947 graduates of the Erie, Pennsylvania, high schools who had IQ's of 115 or higher. Of those who did not go on to college, the primary reasons given were lack of finances (34 percent) and lack of

⁴Selk, Eleanore. "Putting Muscle Behind the Reach," Junior College Journal, September 1969, 40 (1), p. 20.

academic interests (20 percent).⁵ In his examination of the Truman Report, Havighurst found that three principal obstacles to the implementation of the Commission's recommendations were: 1) finances, 2) the ability level of the nation's youth, and 3) motivation.⁶ Reeves, analyzing the findings of three different investigations about the same time, found that the following factors were frequently considered barriers to college attendance: restricted curriculum, inadequate facilities, finances, geography, race, and selective techniques of admissions officers.⁷ The three variables which Wolfle felt were most crucial were ability, motivation, and finances. Although he considered geography as being important, he relegated it to a minor role with respect to the other three.

In 1955 the Florida legislature created a council which was to evaluate the higher educational needs of the state and to formulate a long-range plan whereby opportunity would be extended to all its citizens. In the course of its work the council identified certain barriers which the members felt were preventing approximately two-thirds of the state's youth from seeking post-secondary education.

⁵ Barber, Leroy E. "Why Some Able High-School Graduates Do Not Go to College," School Review, February 1951, 59, pp. 93-96.

⁶ Havighurst, Robert J. "Social Implications of the Report of the President's Commission on Higher Education," School and Society, April 1948, 67, pp. 257-261.

⁷ Reeves, Floyd W. "Barriers to Higher Education," Phi Delta Kappan, January 1950, 31, pp. 214-224.

The barriers they uncovered were geography, finances, and motivation.⁸

The authors of the 1964 Illinois master plan were also concerned about the various barriers which resulted in inequality of higher educational opportunity when they stated:

Young people who live many miles from any institution of post-high school education are less likely to reap its benefits [geographical barrier]. Others find it impossible to attend college because of the cost [financial barrier]....All too many young people, and adults, do not find available to them the particular programs best suited to their needs [academic barrier].⁹

In a 1969 study of the college-going behavior of urban high school graduates, Dorothy Knoell found the stated reasons for not going to college are financial problems (49 percent), academic difficulties (12 percent), and no desire to go (10 percent).¹⁰ It is understandable that no mention was made regarding the lack of an available institution, because the study was conducted in areas of five cities served by community colleges.

For the typical student not attending college, it would be impossible to isolate one barrier and conclude that this one, and only this one, has kept him from furthering his education. Rather, two,

⁸ Florida State Department of Education. The Community Junior College in Florida's Future. Tallahassee: FSDE, 1957, pp. 12-14.

⁹ Illinois Board of Higher Education. A Master Plan for Higher Education in Illinois. Springfield: SIBHE, July 1964, p. 12.

¹⁰ Knoell, Dorothy M. A Study of the College-Going Behavior of Urban High School Graduates, with Particular Attention to Black Youth Not Now in College. Interim Report. Washington: American Association of Junior Colleges, 1969, p. 16.

three, and sometimes all four barriers have been lined up against him, and although one may be eliminated, the others continue to restrict his opportunity. For example, whereas the establishment of a highly selective, expensive liberal arts college one block from a large city ghetto may eliminate the geographic barrier, it is doubtful that the inhabitants of that ghetto will feel that their opportunity for higher education has been significantly increased. By the same token, their reaction may be much the same with respect to a nearby community college which offers only a transfer curriculum. As a further example, the existence of a college that is low-cost and nonselective and offers a program which is relevant to the needs of these same youth is not likely to attract many of the students for whom it is presumably designed if it is geographically inaccessible to those living in the ghetto. Any meaningful effort to expand higher educational opportunities must attack each of these mutually interrelated barriers.

Before launching into a discussion of the barriers themselves, it would be well worth remembering that "The nature of a hindrance to college attendance depends more on the potential student's perception of the difficulty, in many respects, than it does on the true character of the problem."¹¹ In other words, if any one or more of these four categories--finances, academics, motivation, and geography--is perceived

¹¹Martyn, Kenneth A. Increasing Opportunities in Higher Education for Disadvantaged Students. Sacramento: Coordinating Council for Higher Education, 1966, p. 13.

as a barrier, then it, in fact, does become one for that particular individual.

The real issue in expanding higher educational opportunities is, as ~~Harer~~ Babbidge has expressed it, to "pierce the veil of surface equity, and make some positive effort to provide not only 'equality of opportunity' but 'opportunity for equality' as well."¹² Lyndon Johnson made particular reference to the plight of the Negro in his elaboration on this subject when he stated in 1965,

You do not take a person who for years has been hobbled by chains and liberate him, bring him up to the starting line of a race, and say, "You are free to compete with all the others," and still justly believe that you have been completely fair.

Thus it is not enough to open the gates of opportunity. All our citizens must have the ability to walk through those gates.¹³

The Financial Barrier

There are three basic components which have worked in concert to produce a financial barrier to higher education for many potential students. The components, each of which looms larger in absolute terms today than it did a decade ago, include: 1) direct costs (tuition, fees, books, and commutation), 2) subsistence costs (room, board, clothing,

¹²Dennis, Lawrence E. "Equalizing Educational Opportunity for the Disadvantaged." In Mayhew, Lewis B., ed. Higher Education in the Revolutionary Decades. Berkeley: McCutchan, 1967, p. 297.

¹³Parsons, Talcott and Clark, Kenneth B., eds. The Negro American. Boston: Houghton Mifflin, 1965, p. v.

and other personal expenses), and 3) indirect costs (foregone personal income and reduced contribution to family support).¹⁴ As Richard Pearson said in a comment that was directed particularly at New York but that has national applicability, "The door to educational opportunity beyond high school...is now about half open."¹⁵ By that he meant that opportunities in 1966 were quite open to students from families whose income was above the national median and fairly restricted for those from families whose income was below the median. Data from an American Council on Education national survey of 1966-67 freshmen tend to support Pearson's contention in that they show that almost three-fourths of all entering freshmen came from families with incomes above the United States median.¹⁶

About two years prior to Pearson's study of New York, Sanders and Palmer undertook a major study of California higher education in

¹⁴ Tuition and fees doubled at private institutions between 1958 and 1968 while at the same time increasing more than 50 percent at public institutions. During the same period subsistence costs, as measured by one barometer, the consumer price index, moved up more than 20 percent. Although it is difficult to calculate the change in indirect costs for all income levels, one can be reasonably certain that for low-income groups the increase in family income has been more than offset by the increased cost of living, thus making indirect costs at least as formidable an obstacle to higher education in 1968 as it was ten years earlier.

¹⁵ Pearson, Richard. The Opening Door: A Review of New York State's Programs of Financial Aid for College Students. New York: CEEB, 1967, p. 76.

¹⁶ Astin, Alexander W., Panos, Robert J., and Creager, John A. "National Norms for Entering College Freshmen--Fall 1966," American Council on Education Research Reports, 1967, 2 (1), p. 23.

which they set out to determine the size and scope of its financial barrier. In their report they presented a rather interesting set of statistics which serve primarily to give an idea of the sheer magnitude of the problem. They suggested that

If all the [18-year-old] children not now in college from homes with incomes above \$12,000 were to come to college, the number in college would increase from 24,000 to 37,500....By contrast, if all the 18-year-old children from families with incomes from \$6,000 to \$8,000 were to register, the enrollment among 18-year-olds would increase from 14,000 in this group to 61,700.¹⁷

In the first instance enrollments would increase 55 percent, whereas in the second it would expand 440 percent--eight times as much.

What makes these statistics so intriguing is that California was at that time and still is the state with the largest system of tuition-free post-secondary education in the nation. Explanation of the situation, then, would seem to rest with two nondiscrete alternatives. First, it is possible that the other barriers were limiting access to those low-income students not in college. Second, it is possible that the subsistence and indirect costs, along with certain direct costs, such as fees, books, and commutation, were sufficient financial obstacles to keep such students from enrolling.

In reference to the second alternative, Pearson, writing in a later publication, made an obvious but sometimes forgotten observation

¹⁷ Sanders, Edward and Palmer, Hans. The Financial Barrier to Higher Education in California. Sacramento: California State Scholarship Commission, 1965, p. 83.

when he noted that "being poor means you don't have any money."¹⁸ He went on to say that

According to the standards of the College Scholarship Service, more than one-quarter of all families in the United States lack the financial resources to meet any of the expenses of college attendance, even at a low-cost commuting college or university.

The concept of the tuition-free public higher educational system as the great equalizer of opportunity is increasingly coming under question. For example, at the 1970 annual meeting of the American Economic Association, several speakers, including Clark Kerr, former president of the University of California and now chairman of the Carnegie Commission on Higher Education, expressed the sentiment that such institutions were in reality benefiting the middle- and upper-income students at the expense of those from lower-income families.¹⁹ At the same meeting W. Lee Hansen, an economics professor at the University of Wisconsin, suggested that low or no tuition provides a large subsidy that is given out indiscriminately to every enrolled student, regardless of his ability to pay. He then emphasized that in cases where public funds for subsidies are limited (which is in every state every year) those with the greatest need, i.e. the lower-income students, should be helped first. Kerr said that it would be much more equitable

¹⁸ Pearson, Richard. "Can Colleges Reclaim the Non-student? Maybe--With Hard Cash." College Board Review, Winter 1967-68, 66, p. 16.

¹⁹ Jacobson, Robert L. "Clark Kerr Changes View, Backs Public-College Tuition," The Chronicle of Higher Education, January 12, 1970, 4 (14), p. 4.

to charge some tuition at all public institutions and then supplement such charges with a "substantial" program of grants and loans to low-income groups.

The Academic Barrier

For many students, particularly those from educationally or economically disadvantaged backgrounds, higher education is perceived as being only for "the brains." They see college as being representative of an alien culture, one which places heavy emphasis on verbal ability and linguistic skill. Various obstacles, such as admissions requirements, entrance examinations, language tests, general education requirements, course prerequisites, and bureaucratic procedures, combine to present a formidable academic barrier to the student.

Admissions requirements and entrance examinations have recently come under considerable attack from those who feel that they have unfairly restricted college admission for minority students. On many occasions in the past few years, both at conference meetings and on college campuses, cries have been raised that minority young people should not be subject to the same admissions criteria as other students and, once enrolled, should be allowed at least a year to adjust to the rigors of academe. One such meeting, called a Statewide Seminar on Race and Poverty in Higher Education, was held in California in February 1968. Two of the primary recommendations which came out of that seminar

were: 1) "Tests should be ignored or discarded in favor of intuitive judgments and intensive counseling..."; and 2) "Minority/poverty students should be allowed at least one year to adjust to the campus, and there should be no dismissals until the third semester or fifth quarter."²⁰ At the 1969 annual meeting of the National Association of College Admissions Counselors, assembly members passed several resolutions designed to reduce the academic barrier for minority students, including measures to "eliminate the use of aptitude test scores as a major factor in determining eligibility for admission for minority students" and to "assure minority students at least two years in which to adjust to university environment."²¹

While many have argued quite emotionally that entrance examinations are biased,²² others have reacted by saying that biased

²⁰McKendall, Benjamin W., Jr. Statewide Seminar on Race and Poverty in Higher Education. Palo Alto: CEEB, 1968, pp. 18-19.

²¹National Scholarship Service and Fund for Negro Students. "NACAC Passes Revised CCA Resolutions," NSSFNS News, December 1969, p. 4.

²²On the question of test bias, Warren Willingham has cleared the air considerably through his discussion of five types of bias--social, measurement, predictive, construct, and operational--at the 1970 regional meeting of the Western membership of the College Entrance Examination Board. His comments focused on the Board's SAT test, with two main conclusions resulting: 1) the test is indeed socially biased in the sense that it faithfully reflects a social system in which ample evidence of de facto bias is easily demonstrated; and 2) available research does not indicate that the SAT is biased in a predictive sense; that is, it can be used to predict grades in present college curriculums equally well for both Blacks and Whites.

or not, tests contribute to the academic barrier built up against minority students and, therefore, should not be employed as an admissions criterion for such students. Frank Sandage, Director of the federally-funded Morehead State University (Kentucky) Talent Search Project, made the feeling of this latter group crystal clear when he explained:

Our students know they do not measure up on such devices [standardized tests]. No one needs to test them and tell them they do not qualify. Our students need help in finding avenues for individual growth and development. Our students need someone who can explain the processes of our educational system so that they may be able to take advantage.²³

Another factor working against the disadvantaged youth as he seeks admission is the rigidly bureaucratic procedures which have come to be in force at most institutions. As Dorothy Knoell has put it,

The problem is often less one of qualifications and costs than of conformity and adherence to certain behavior patterns which middle class youth and their parents find more facile than does the lower class. The problem is less one of achieving certain test scores than of arranging to take a test on a particular date (and to pay a fee to do so); less a matter of achieving a certain record in high school than of persisting to graduation and submitting a transcript to prove it; less a problem of health than of getting to a physician for an examination on a certain day.²⁴

While one might disagree with her as to the emphasis of her statement, the point is nonetheless made; institutions tend to act inflexibly and

²³ Sandage, Frank. "ETS Evaluation of Talent Search," Memorandum, October 17, 1969, p. 1.

²⁴ Knoell, Dorothy M. "Are Our Colleges Really Accessible to the Poor?" Junior College Journal, October 1968, 39 (2), p. 9.

impersonally in this vital area of admissions.

A third element which contributes to the construction of the academic barrier is the nature of the curriculum and the types of skills needed to survive in the "academic jungle." For many, the knowledge that they bring inferior reading and writing skills to the institution is sufficient to keep them from attending. These and others view relegation to remedial courses as another piece of evidence that they are educational failures, or as one student put it, "Remedial classes do nothing more than to make the student remedial." Also, according to most research findings students in such courses tend to achieve limited success in college. Richardson and Elsner, for example, have concluded that "Remedial courses do not meet the needs of the educationally disadvantaged."²⁵ The Chicago Loop Junior College reported that only about 1 percent of the students enrolled in programs of remedial courses and special counseling later succeeded in the transfer curriculum.²⁶ There are certain programs which do seem to be successful, such as the one at Forest Park Community College in St. Louis and the Experiment in Higher Education at Southern Illinois University, but these are strongly oriented toward student interests and capabilities rather than institutional goals and prescribed requirements.

²⁵ Richardson, Richard C. and Elsner, Paul A. "General Education for the Disadvantaged," Junior College Journal, December 1965, 36 (4), p. 18.

²⁶ Martyn, p. 21.

For many students failure to attend college is partially a result of their perception of educational irrelevance in the curriculum. In a discussion of various types of relevance in higher education, Willingham has defined educational relevance as "Helping students to learn modes of action required to fulfill adult responsibilities."²⁷ Often these students have an idea of the adult roles they would like to play but fail to see the curriculum as a means of learning appropriate modes of action so as to be able to play those roles. Education writers, too, have criticized higher education on these grounds. The Hazen Foundation's Committee on the Student in Higher Education, chaired by Joseph Kauffman, has suggested that higher education is impeded by organizational structures that prevent both faculty and administration from engaging in the kinds of educational innovation which are necessary for greater development of its students.²⁸ They further castigate those developers of curriculums who seek to isolate cognitive growth from moral and affective development and who attempt to determine what subject matter should be taught independent of a consideration of the needs and interests of the recipients of this instruction.²⁹

Charles Frankel is equally severe in his criticism when he

²⁷ Willingham, Warren W. The Importance of Relevance in Expanding Post-Secondary Education. Palo Alto: CEEB, 1969, p. 43.

²⁸ The Hazen Foundation. The Student in Higher Education. New Haven: Hazen, 1968, p. 4.

²⁹ Hazen, pp. 8, 36.

says, "It would be odd if any thinking man were to pronounce anything but a severe judgment on the present condition of higher education in our country."³⁰ William Moore adds his voice to those chiding academe for its lack of educational relevance with this statement:

Students who finish our colleges know more about Greek antiquity than about the Negro in contemporary America; they can understand the causes of the fall of the Roman Empire in 476 A. D., but cannot conceptualize the causes of the devastation of a part of Detroit in 1967. American students are taught to speak a foreign language by professors who cannot teach a Mexican-American child or a child from the Negro ghetto to speak standard English.³¹

One could continue ad nauseum about those that have written on the topics of educational irrelevance and curricular reform, but to spare the general reader from that fate, the writer suggests that those particularly interested in this area refer to reports such as Axelrod et al.'s Search for Relevance, Martin's Alternative to Irrelevance, Yamamoto's The College Student and His Culture: An Analysis, Mayhew's Contemporary College Students and the Curriculum, and Dressel's College and University Curriculum, as well as to the references previously cited in this section.

The Motivational Barrier

Prior to the 1950's the main obstacle to college attendance

³⁰Frankel, Charles. "The Educational Impact of American Foreign Policy." In Smith, G. Kerry, ed. Stress and Campus Response. San Francisco: Jossey-Bass, 1968, p. 53.

³¹Moore, William, Jr. "Opportunity for the Disadvantaged." In Smith, p. 233.

was viewed as being financial, and the standard remedy was to offer scholarship aid. "If takers did not immediately appear, it was simple to conclude that those who were unresponsive were not seriously interested in further education, and so, clearly not of 'college caliber.'"³²

However, studies by Berdie,³³ Little,³⁴ and others in the 1950's challenged this assumption, finding that only a portion of those regarded as "lost talent" were deterred solely by lack of money. Many others were kept away from college because of lack of motivation. In fact, a 1961 report which presented an analysis of the findings of several such studies concluded that "lack of motivation is probably the greatest single deterrent to college attendance by capable youth."³⁵ More recently, the Office of Program Planning and Evaluation of the USOE undertook an analysis of selected federal programs for higher education in which they also suggest that motivational factors are even more important barriers to higher education for low-income youth than lack of finances. For example, in the lowest income quartile,

³²Thresher, B. Alden. College Admissions and the Public Interest. New York: CEEB, 1966, p. 11.

³³Berdie, R. F. After High School--What? Minneapolis: University of Minnesota, 1954; and Berdie, R. F. and Hood, A. B. Decisions for Tomorrow. Minneapolis: University of Minnesota, 1965.

³⁴Little, J. K. et al. Explorations into the College Plans and Experiences of High School Graduates: A Statewide Inquiry. Madison: University of Wisconsin, School of Education, 1960.

³⁵Beezer, R. and Hjelm, H. F. "Factors Related to College Attendance," Monograph #8. Washington: USOE, 1963, p. 124.

"about 3 times (25.8% of the high school graduating class) as many children are kept from attending postsecondary institutions by financial and motivational factors jointly as by financial factors alone (7.2%)." ³⁶ In other words, even with the removal of financial obstacles, one quarter of the high school graduates from the lowest income quartile would not attend college. While one may justifiably question the speculative nature of these statistics, the point can still be made: lack of motivation is an important barrier to college attendance, particularly for low-income students.

What accounts for this lack of motivation for college? For the past decade educational and sociological journals have been replete with reports of studies demonstrating the importance of parental and peer encouragement or lack thereof. Haller's work in Michigan, ³⁷ Sewell's studies in Wisconsin, ³⁸ McDill and Coleman's

³⁶ Froomkin, Joseph. Students and Buildings. Washington: USOE, May 1968, p. 3.

³⁷ Haller, A. O. and Butterworth, C. E. "Peer Influences on Levels of Occupational and Educational Aspiration," Social Forces, May 1960, 38, pp. 289-295.

³⁸ Sewell, William H. and Shah, Vimal P. "Social Class, Parental Encouragement, and Educational Aspirations," The American Journal of Sociology. March 1968, 73, pp. 559-572; and Sewell, William H. and Armer, J. Michael. "Neighborhood Context and College Plans," American Sociological Review, April 1966, 31, pp. 159-168.

analysis of Midwestern students,³⁹ Rehberg and Westby's Pennsylvania study,⁴⁰ Tillery's SCOPE Project,⁴¹ and Trent and Medsker's longitudinal study of students from 16 varied communities⁴² are a few of the more prominent pieces of work done on these topics. In almost all cases parental encouragement is considered to be more important than peer pressure. Rehberg and Westby put the matter quite strongly when they concluded, "...parental encouragement comes close to being a necessary condition for the continuation of education beyond the high school level in all strata and not just in the lower classes."⁴³ Trent and Medsker's data led them to report that nearly 70 percent of the high school seniors who completed four consecutive years of college said that their parents had definitely wanted them to attend, compared with less than 50 percent of the withdrawals and less than 10 percent of those who did

³⁹ McDill, Edward L. and Coleman, James. "Family and Peer Influences in College Plans of High School Students," Sociology of Education, Winter 1965, 38, pp. 112-126.

⁴⁰ Rehberg, Richard A. and Westby, David L. "Parental Encouragement, Occupation, Education and Family Size: Artifactual or Independent Determinants of Adolescent Educational Expectations?" Social Forces, 1967, 45, pp. 362-374.

⁴¹ Tillery, Dale. School to College: Distribution and Differentiation of Youth. Berkeley: Center for Research and Development in Higher Education, 1965.

⁴² Trent, James W. and Medsker, Leland L. Beyond High School. San Francisco: Jossey-Bass, 1968.

⁴³ Rehberg and Westby, p. 371.

not attend college at all.⁴⁴

Intertwined with the idea of encouragement are the notions of expectation and aspiration. For the upper-middle class youth or the child of college-educated parents it is almost, if not completely, taken for granted that he will attend college. To do otherwise, as Jencks has put it, "would be to step onto the down escalator which leads to a poor job, low income, the wrong friends, and a generally unacceptable way of life."⁴⁵ Downward mobility is regarded as a process to be avoided at all costs; therefore, motivation to attend college is virtually built in.

For the student from a low socioeconomic background, on the other hand, college attendance is normally considered an upwardly mobile act, and although desirable, it is viewed by many parents and children as unrealistic. A child who has grown up on the streets of Harlem, in the hills of Kentucky, or in the home of a West Virginia coal miner may wish for a better life and even fight hard for it while at the same time being convinced that he will likely adopt the life style of those adults he sees around him. In a study of New York state high school seniors who were not planning to attend college, Dorothy Knoell discovered that the majority had never felt part of the group that was experiencing strong pressure for college attendance. Most did not even seem to have "going

⁴⁴Trent and Medsker, p. 223.

⁴⁵Jencks, Christopher. "Social Stratification and Higher Education," Harvard Educational Review, Spring 1968, 38, p. 310.

to college" as a dream, nor did they seem to feel cheated by their inability to attend. "They accepted their fate and made other plans."⁴⁶

Unfortunately, schools have not done particularly well in raising the educational aspirations of their low-income students. They can, of course, point to notable successes (i.e. talented students who have been nurtured by teachers and counselors and eventually placed in outstanding colleges where they have performed brilliantly), but the fact that these successes are notable and are exceptions only serves to point out the gravity of the situation. Counselors and teachers have often been guilty of assuming that there is a high degree of correlation between cleanliness or "good" behavior and intellectual ability. The student who is academically mediocre but polite tends to be regarded more favorably by many teachers than the student who is bright but unruly. It is not at all inconceivable that the mediocre student may be placed in an academic curriculum while the bright child is placed in a vocational curriculum. The most tragic aspect of this tracking is that the former will invariably be stamped "college material" and the latter "noncollege material," and in subsequent years each will typically live up to the expectations attached to these labels.

One Massachusetts student who received the "noncollege material" stamp expressed his dual feelings of frustration and impotence when he remarked:

⁴⁶Knoell, Toward Educational Opportunity for All, p. 181.

"I really liked school through the eighth grade. Then for some reason, I was 'advised' to go to vocational high school. I guess it seemed like reasonable advice to my parents. They aren't the kind of people who would question a thing like that, and it just wouldn't have occurred to them that I might have done well in the college course. I was too young to realize that there might have been a choice, though it did occur to me that a friend who hadn't done nearly as well in school as I had took the college course. Not that I didn't learn anything in vocational high school. I learned that I was stupid, and I learned it with a vengeance. They drilled it into us."⁴⁷

In a study of a national sample of 1965 high school seniors conducted by the United States Census Bureau, it was found that only one student in five who had not entered college had taken the college preparatory curriculum. This contrasts with the statistic that over half of those entering two-year colleges and over 80 percent of those entering four-year colleges had taken that curriculum.⁴⁸ Referring to these and other data, Adams spelled out what to him is the crucial factor contributing to the construction of the motivational barrier when he noted that

For large numbers of students going to college or not seems to have been determined rather early in their high school careers simply by the course of study undertaken. Since the two-year college entrants differ only slightly in ability [from the nonentrants], it

⁴⁷O'Connell, Thomas E. Community Colleges: A President's View. Urbana: University of Illinois Press, 1968, p. 66.

⁴⁸Adams, Walter. "Caste and Class, Relative Deprivation, and Higher Education." New York: Bureau of Applied Social Research, Columbia University, 1968, mimeo, p. 26.

appears to be the course in high school per se that determines entrance to a two-year college or failure to enter any college.⁴⁹

One must remember that the selection of a particular secondary school curriculum is a result of multiple factors. Inappropriate guidance or lack of understanding and interest within the educational system certainly are critical elements, but home environment and family aspirations are often equally responsible. To cast all the blame on one and absolve the other is indicative of an incomplete understanding of the problem and will undoubtedly result in an inadequate solution.

The Geographic Barrier

President Kennedy told Congress in 1963 that "the opportunity for a college education is severely limited for hundreds of thousands of young people because there is no college in their own community."⁵⁰ He further remarked that studies indicate that a high school graduate living within 20 to 25 miles of a college is 50 percent more likely to go to college than is the student who lives beyond commuting distance.

The first extensive study of the importance of proximity for college attendance was conducted by Koos in 1940-41 when he investigated 57 communities and 11,932 high school graduates throughout the Midwest,

⁴⁹Adams, p. 26.

⁵⁰O'Hara, William T. John F. Kennedy on Education. New York: Teachers College, Columbia University, 1966, p. 157.

⁵¹Koos, Leonard V. "How to Democratize the Junior-College Level," School Review, May 1944, pp. 271-284.

South, and Far West. He discovered that communities with no higher educational institution of any kind nearby had the lowest percentage of its high school graduates attending college (17 percent), whereas at the other end of the spectrum communities with public junior colleges had the highest percentage (48 percent). Communities with other alternatives, such as private universities or state university extension centers, registered at various points within that range. As one might have expected, the presence of a public junior college with its low tuition charges made a great difference in the college attendance rates of students from low socioeconomic backgrounds. Whereas in communities without public junior colleges only 11 percent of these students attended college, in communities with such institutions 39 percent attended.

Armed with these data as well as statistics which showed that 44 percent of the high school graduates he studied entered a junior college when it was in their home town as compared with less than 13 percent when the college was 7 to 15 miles away, Koos fought hard for the establishment of local public junior colleges to meet the needs of particular communities rather than centrally located regional or state junior colleges which would be geared to meet the needs of a larger geographic area. He contended that the geographic barrier would become significant in the latter instance so as to actually cut off opportunities for higher education for low socioeconomic youth.⁵²

⁵²Koos, Leonard V. "Local Versus Regional Junior Colleges," School Review, November 1944, p. 527.

Daughtry also researched this problem of proximity through a series of studies of Kansas high school graduates. In his 1957 investigation⁵³ he found that a higher percentage of graduates who lived in a college community matriculated to college than did those whose homes were not in such a community. He found that in communities that had at least one college, 51 percent of the graduates enrolled in college, whereas in communities that had no college within 10 miles the figure dropped to 32 percent enrolled.

Medsker and Trent conducted further research on the proximity question through their College Attendance Study in 1959.⁵⁴ In this study of 10,755 high school graduates from 37 communities throughout the Midwest, California, and Pennsylvania, they confirmed Koos' findings of almost 20 years earlier. They found that communities with junior colleges had the highest percentage (49 percent) of students attending college. Next came communities with state colleges (45 percent), followed by communities with multiple colleges (42 percent). Communities with no colleges of any kind had the lowest percentage (32 percent).

When speaking of a geographic barrier, one typically

⁵³Daughtry, Alex A. and Hawk, Richard C. A Report on the Post-graduation Activities of the 1957 High School Graduates. Emporia: Kansas State Teachers College, Bulletin of Information, 38, September 11, 1958.

⁵⁴Medsker, Leland L. and Trent, James W. The Influence of Different Types of Public Institutions on College Attendance from Varying Socioeconomic and Ability Levels. Berkeley: Center for Research and Development in Higher Education, 1965.

calculates in terms of time or physical distance. For example, a 1967 study of junior college students (the majority of whom commute to college) revealed that over 70 percent reported spending less than 30 minutes commuting to and from the campus and almost three out of five said they lived within five miles of the college.⁵⁵ A 1967 survey of California State College students discovered that 20 percent lived within one mile of the campus they were attending and 60 percent lived within ten miles.⁵⁶

Chicago has also conducted research in this area. In 1958 investigators discovered that in this highly urbanized area approximately 60 percent of all students attending the Chicago City Junior College lived within two and one-half miles of the particular branch they attended.⁵⁷ Reanalyzing the situation five years later, researchers found that the average student residential density was more than twice as large within a one-mile radius of the college as it was between one and two miles distant and students within one mile were three times as

⁵⁵ Baird, Leonard L., Richards, James M. Jr., and Shevel, Linda R. "A Description of Graduates of Two-Year Colleges," ACT Research Report, January 1969, 28, p. 20.

⁵⁶ Coordinating Council for Higher Education. "Council Staff Response to the Board of Governors' Review of the February Report on the Need for Additional Junior College Campuses," 1969, mimeo, p. II-17.

⁵⁷ Willis, Benjamin C. The Second Report on the Chicago City Junior College to the Chicago Board of Education. Chicago Board of Education, 1958, pp. 15-17.

likely to enroll as were students two and one-half miles away.⁵⁸

As states have analyzed their needs for additional institutions, they have often set specific time or distance commuting guidelines. Illinois, for example, assumes that 30 minutes is a reasonable commuting time, California assumes 45 minutes,⁵⁹ and New York assumes 60 minutes. Florida simply regards 30 miles as a state-wide commuting radius, evidently assuming that the degree of urbanization in any given area is of minor significance.

The implication that may be drawn from the above research findings and policy decisions is that students living beyond these time and distance guidelines are without reasonable geographic access to higher education. For these students, then, a geographic barrier is very much in existence.

Geographic accessibility cannot be measured only in terms of minutes or miles; it must also be measured in terms of psychological obstacles which result from physical distance. For example, many students choose not to go "away to college" because it would mean disassociating themselves from old friends and familiar patterns of living in order to enter a world full of strangers.

⁵⁸Willis, Benjamin C. Higher Education. Part I: The Chicago Teachers Colleges; Part II: The Chicago City Junior College. Study Report No. 10, Chicago Public Schools, 1964, p. 59.

⁵⁹The Board of Governors of the California Community Colleges suggested in 1969 that a more reasonable time for community college students, many of whom have to work part-time while attending college, should be 25 minutes. Coordinating Council for Higher Education, p. II-18.

For the middle class student the problem is somewhat minimized because he is likely to be attending an institution where middle class attitudes prevail, where middle class English is the language of the professor, and where the majority of his fellow students are also from middle class backgrounds. On the other hand, it is because of these same factors that the lower class student (particularly the lower class minority student) finds the proximity question more complex than simply the physical distance to be traveled. For him it may mean leaving one cultural setting (in which he is quite comfortable) for another (in which he is quite uncomfortable). It may mean being required to operate within a value or attitude structure that has in the past been unacceptable to him. It may mean reading, writing, and listening to a language in which he has never felt competent. It may mean attempting the difficult task of establishing social relations with students who have never lived in circumstances like his and who have concerns quite different from his own.⁶⁰ In short, he may have to leave his neighborhood and travel to a "foreign" institution, be it uptown, downtown, out of town, or out of state. While there would undoubtedly be other students whose backgrounds and interests were similar to his, the very fact that they would constitute and be

⁶⁰ Social psychologists have researched the question of social interaction and have concluded that people generally restrict most of their social relations to others with similar backgrounds. One of the most famous studies on the subject was conducted by Hollingshead and Warner in southern Illinois and reported in Hollingshead, August B. Elmtown's Youth. New York: Wiley, 1949.

treated as a minority group only serves to highlight the implication that the institution is designed primarily for other types of students.

To recapitulate, then, the geographic barrier consists of two components: physical distance and psychological distance. Equally important to college accessibility are the number of miles (or amount of time) necessary to commute to the campus and the types of psychological adjustments one must make in order to attend college. While these obstacles might be in effect for students from all socioeconomic class levels, they are particularly crucial for students from the lower class.

EFFORTS TO ALLEVIATE THE BARRIERS

A major thrust of the Truman Report 23 years ago was that all barriers to higher education be abolished immediately. Although this obviously did not happen, it is incumbent that a discussion of what has happened, particularly in the last decade, be undertaken at this point.

Many efforts to reduce or even eliminate those conditions which restrict certain individuals from taking advantage of higher education have tended wisely to attack multiple barriers simultaneously. Architects of these proposals have recognized, as was mentioned earlier, that to concentrate on only one barrier would certainly be ineffective if the other three continued to restrict accessibility.

In recent years state master planners, concerned with reducing barriers and expanding educational opportunities, have recommended most frequently "the creation of new junior colleges, expansion of existing

four-year institutions and creation of new institutions in populated areas where no public institution exists."⁶¹

Junior colleges particularly have attempted to attack the financial barrier by charging little or no tuition, the academic barrier by having "open-door" admissions policies, and the geographic barrier by locating in densely populated areas. Since the motivational barrier is typically a product of the elementary and secondary school years, junior colleges are left with the task of finding ways to "turn on" those that have been "turned off" by education in the past. The mere presence of a low-cost, open-door institution within the community may influence some marginal students to attend, but it is likely to have a more substantial impact if it is able to articulate the relevancy of its programs through word-of-mouth, pamphlet distribution, and other media publicity.

The fact that public junior colleges have assumed an increasingly prominent role in higher education is no longer news to anyone. Between 1960 and 1968 such institutions more than doubled (315 to 739), and their enrollments more than tripled (571,930 to 1,810,964).⁶² Also, according to James Allen, U. S. Commissioner of Education, one of the top priorities

⁶¹ Mayhew, Lewis B. Long Range Planning for Higher Education. Washington: Academy for Educational Development, 1969, p. 83.

⁶² American Association of Junior Colleges. 1960 and 1969 Junior College Directory. Washington: AAJC, 1960, 1969, p. 26, p. 7. It should be recognized that junior colleges normally report to AAJC all students enrolled, including those in adult education, thus making these figures spuriously high. USOE, on the other hand, restricts the information reported, and they gave public junior college enrollments in 1960 and 1968 as 393,557 and 1,647,664, respectively.

of the Nixon Administration is the support and encouragement of junior colleges "toward the overall goal of seeing to it that those who have been denied opportunity for education at all levels be given that opportunity."⁶³

To be able to act intelligently in the future, one must understand the past, and an important question that needs to be answered is: Who have been the primary beneficiaries of the junior college movement? Schoenfeldt, in his follow-up study of Project TALENT students, concluded that while junior colleges have benefited both students of low ability and of low socioeconomic status, their major contribution has been in providing higher educational opportunity for middle class students of low ability. Referring to his data he notes that "Junior college students tend to be more like noncollege students in terms of ability, and more like college students in terms of socioeconomic factors."⁶⁴

Jencks also spoke to this point in his discussion of "social stratification and higher education." He noted, on the one hand, that the existence of two-year colleges is responsible for large numbers of low socioeconomic students attending college, but, on the other hand, middle-class students take more advantage of junior colleges as a second-best option than do lower-class students. "If middle-class children

⁶³McNett, Ian E. and Jacobson, Robert L. "Education's Man in the Administration: The Commissioner's Candid View," The Chronicle of Higher Education, September 29, 1969, 4 (1), p. 3.

⁶⁴Schoenfeldt, L. F. "Post-High School Education." In Flanagan, J. C., ed. Project TALENT: One-Year Follow-Up Studies. Pittsburgh: University of Pittsburgh, Project TALENT Office, 1966, p. 92.

don't get to a four-year college, they often go to a two-year college instead, whereas a poor boy who does not get to a four-year college seldom gets to a two-year college either."⁶⁵

The authors of two recent surveys of state planning have taken a long look at what action states are taking to facilitate access to higher education for low-income groups, and all have expressed dissatisfaction with what they have found. Mayhew reported that insufficient attention has been given to minority groups, the educationally disadvantaged, and the problems of the inner city,⁶⁶ and Livesey and Palola suggested that higher educational leaders do not yet fully comprehend what they may do for the disadvantaged in both urban and rural areas.⁶⁷

With respect to access to higher education for the Negro, it is interesting to look at the pattern of events in Florida in the mid-1960's. As Florida developed its system of integrated public junior colleges, it also closed the doors of its Negro counterparts under the impression that those students who had been served by the latter would now be served by the former. Unfortunately, however, in the two years following the 1965 completion of the changeover, Negro enrollments actually decreased in a majority of institutions. For example, Gibbs

⁶⁵Jencks, p. 307.

⁶⁶Mayhew, Long Range Planning for Higher Education, p. 160.

⁶⁷Livesey, Lionel J., Jr. and Palola, Ernest G. Statewide Planning for Higher Education. Will appear in the Encyclopedia of Education, 1970, in press, p. 42.

Junior College, the largest Negro junior college in Florida, enrolled 936 Blacks in 1964, its final year of operation. In 1965 only 500 Blacks enrolled in nearby St. Petersburg Junior College, and by 1967 that figure had dropped to 348.⁶⁸ (According to an Office of Civil Rights survey Negro enrollment in 1968 had diminished to 272, or only 3.7 percent of the total enrollment.⁶⁹)

According to an article written on the subject, two of the primary factors that caused this rather unexpected occurrence were: 1) the Negro student's fear that he was not sufficiently prepared to compete in the White campus culture, and 2) the college's failure to provide programs geared to his needs or to advertize the fact that such programs were in existence as much for Negroes as for Whites.⁷⁰ Extensive recruitment, which administrators at the defunct Negro colleges had considered vital, was noticeably lacking at most institutions; and students, being left to their own devices, were getting the word that their high school preparation was inadequate and that "Man, they'll flunk you out there."

This situation in Florida is only one example of attempts that have been made to reduce the barriers to higher education for all

⁶⁸ Marsh, Georgia. "Junior Colleges and Negroes," Southern Education Report, September 1968, 4 (2), p. 14.

⁶⁹ The Chronicle of Higher Education. "Negro Enrollments this Year on the Nation's Campuses," April 21, 1969, 3 (16), p. 4.

⁷⁰ Marsh, p. 11.

people. Their less-than-complete success is an indication of both the magnitude and complexity of the problem. As was previously stated, the barriers are mutually interrelated, and success in expanding opportunity is dependent upon a concerted attack on all four--finances, academics, motivation, and geography. However, since a multi-faceted program is difficult to make operational because of the overwhelming number of organizations and agencies that must necessarily be involved, most efforts have tended in the past few years to focus on one barrier and have attempted to increase accessibility through its reduction. In the following four sections, examples of efforts to reduce each barrier will be discussed.

The Financial Barrier

Although there are literally thousands of private scholarship and loan programs in existence,⁷¹ those programs which have had the greatest impact on increasing college accessibility have come through either federal or state channels. For example, the National Defense Student Loan Program, which has provided over \$1 billion to over one million students since its inception in 1958, was established to identify and educate more of the talent of the nation. Recent statistics

⁷¹For publications listing numerous private scholarship and loan programs, see Oreon Keeslar's Financial Aids for Students Entering College. Dubuque: William C. Brown, 1969; Samuel C. Brownstein and Mitchel Weiner's You Can Win a Scholarship. Woodbury, N. Y.: Barron, 1964; or S. Norman Feingold's Scholarships, Fellowships, and Loans. Cambridge, Mass.: Bellman, 1962.

seem to indicate that it is helping to educate talent from a wide range of income levels; in fact, in 1968-69 it awarded an equal percentage (23 percent) to students whose family income was under \$3,000 and to those whose family income was over \$9,000.⁷² Its step-sister program, the federally-sponsored Guaranteed Loan Program, has had scant effect on increasing accessibility for low-income students, however, and in 1968-69 loaned 50 percent of its funds to students whose families earned more than \$9,000 with only 10 percent going to students at the other end of the income continuum.⁷³

As numerous authorities on the subject have suggested, the way to reduce the financial barrier for low-income students is primarily by means of large grants, with loans acting as supplementary aid. To quote John Morse of the American Council on Education:

We must not pile debt on debt on our most deprived young people. We [need to] give our neediest a boost with a grant that those from more fortunate circumstances expect as a matter of birthright from their parents.⁷⁴

Howard Bowen, who has spent a great deal of time in recent years thinking, writing, and speaking on the subject of financing higher education, has concluded that "heavy reliance on loans would

⁷²The Chronicle of Higher Education. "69 Percent of Opportunity Grants Go to Low-Income Students," January 12, 1970, 4 (14) p. 7.

⁷³Ibid.

⁷⁴Morse, John F. "The Federal Role in Education: One View." In Southern Regional Education Board. Proceedings: A Symposium on Financing Higher Education. Atlanta: SREB, 1969, p. 40.

present a serious obstacle to low-income students."⁷⁵ He feels that to ask a low-income student to assume an indebtedness of \$5,000, \$10,000, or \$20,000 to get through a program of higher education certainly does nothing to reduce the financial barrier.⁷⁶

Partially as a result of sentiments such as these, Congress established the College Work-Study Program in 1964 and the Educational Opportunity Grants Program in 1965. The 1964 program may be classified as a half-way measure between loans and grants in that needy students were neither given money outright nor were they asked to incur a large debt to be paid off from post-college earnings. In 1968-69 \$140 million was distributed through this program with 57 percent going to students from families with incomes under \$6,000.

The Educational Opportunity Grants Program was particularly designed for the student with exceptional need and represented a major federal commitment to increase college accessibility for low-income

⁷⁵Bowen, Howard R. "Who Pays the Higher Education Bill?" In SREB. Proceedings, p. 10.

⁷⁶There is a continuing national debate over the procedures for financing higher education, and four of the leading spokesmen aired their views once again at the 1970 annual convention of the American Association for Higher Education. Howard Bowen advocated lowering tuition and thrusting more of the financial burden on society. William Bowen proposed a program of high tuition and high student aid. Alice Rivlin suggested moderate tuition and federal grants to students based upon need, the latter being accompanied by cost of education allowances to institutions. All three favor the loan bank concept as a supplementary form of aid. The fourth spokesman, Stephen Tonsor, has recently become prominent because his comments have drawn public support from President Nixon. Tonsor favors full-cost pricing buttressed by a system of guaranteed loans.

students. In 1968-69 more than \$85 million of the \$125 million distributed went to students from low-income (below \$6,000) families, entirely in the form of unrestricted grants.

A host of state financial aid programs have also been developed to meet the needs of residents who wish to attend college. Many of the older programs began with competitive programs but in recent years have launched into the noncompetitive area as well. New York, for example, inaugurated its competitive program in 1913 but did not begin its noncompetitive Scholar Incentive Program until 1961. This latter program makes \$100 to \$600 grants available to low-income students to attend approved universities and colleges within New York.

Three other states that have initiated fairly large noncompetitive programs, all in 1969, are Pennsylvania, New Jersey, and California. Pennsylvania's Education Incentive Program awards an average of \$400 to students from low-income (below \$6,000) families who do not achieve the minimum score on the SAT examination to qualify for financial aid under other existing state programs. New Jersey's Educational Opportunity Fund awards grants of \$250 to \$1,000, depending on the need of the student and the expenses of the college.

California's College Opportunity Grant Program is unique in that it marks the first state-wide effort to provide subsistence costs to low-income students. The 1,000 recipients each year are expected to attend one of the state's tuition-free two-year colleges with the \$500 to \$1,000 grant being used for living, transportation, and educa-

tional expenses. Although the full award does not cover the income a student foregoes to attend college, it does reduce subsistence and direct costs to a minimum, and in doing so it should be a major step toward the elimination of the financial barrier for many young people.

While it is yet too early to accurately assess the impact that these new noncompetitive programs will make on the rate of low-income students attending college, it is interesting to note that according to one study conducted by the U. S. Office of Education the older aid programs have been at least partially responsible for 66,000 more low-income freshmen enrolling in college in the fall of 1968 than might have been expected on the basis of past enrollment trends.⁷⁷

The Academic Barrier

The assassination of Martin Luther King, Jr., on April 5, 1968, probably did more than any other single event in the past decade to reduce the academic barrier for thousands of minority young people. Colleges and universities across the country were forced to look at the admissions and academic structures they had built and ask whether or not they could (or even should) make alterations so as to be more accessible to the nontraditional student. Over the course of the past two years, some colleges have responded that this is not their problem; they will accept any student, regardless of color, if he can meet their normal

⁷⁷Jacobson, Robert L. "Education Gain by Poor Called 'Revolutionary,'" The Chronicle of Higher Education, March 10, 1969, 3 (13), p. 1.

requirements. Others have made minor alterations by becoming more flexible in their admissions process. Still others have made more extensive alterations: they have created special admissions programs, added ethnic studies to the curriculum, and in some cases, revised their curriculums so as to be more relevant to the concerns of society. In some locations individuals felt that the best way to reduce this barrier was to create an entirely new structure, i.e. a new institution.

There were, of course, many programs already underway prior to King's assassination, programs such as the College Readiness Program at the College of San Mateo (California), the Experiment in Higher Education at Southern Illinois University, the CUNY SEEK Programs, and the various Educational Opportunity Programs throughout the University of California and California State College systems,⁷⁸ but this tragic event seemed to generate a new feeling of urgency with respect to minority student accessibility on the part of many both within and outside academe.

Many institutions have tried to reduce the academic barrier by modifying the rigid bureaucratic procedures so often attendant to the admissions process. One method has been to reduce the number and length of forms to be filled out. Another has been to go to where

⁷⁸ See John Egerton's Higher Education for "High Risk" Students. Atlanta: Southern Education Foundation, April 1968, for a discussion of 19 special admissions programs, 12 in public and 7 in private institutions.

minority students are and encourage them to enroll rather than sitting back and waiting for such individuals to seek out the institution. A third method which has had numerous individual proponents but as yet few "takers" among selective institutions is to give only minor emphasis to high school grades and test scores and place major emphasis on factors such as letters of recommendation, self-assessment statements, and personal interviews in the admission of minority students. One institution which has recently taken this step is Bowdoin College (Maine). At Bowdoin the decision was made to make the submission of test scores voluntary for applicants to the 1970 freshman class. As Richard M. Moll, director of admissions at the college, stated, "Some applicants may choose to state their case for admission on what they consider to be more relevant data."⁷⁹ A fourth method is exemplified by the new CUNY plan for granting admission to any high school graduate who desires to attend.

Some institutions feel that a de-emphasis of traditional admissions criteria is only the first step toward reducing the academic barrier for educationally disadvantaged students. Each of the programs mentioned earlier as being in existence prior to 1968, for example, makes an effort not only to bring in students who would not meet the normal entrance requirements, but also to become interested and involved in every phase of the student's academic life. They provide tutorial

⁷⁹The Chronicle of Higher Education. "Bowdoin Will Stop Requiring Tests of Applicants," February 2, 1970, 4 (17), p. 1.

assistance, professional counseling, and academic advisement, but most important, they bring together a group of students who can look at each other and themselves and know that they can "make it" through the academic gristmill. These students see, many of them for the first time, that the cycle of educational failure can be broken.

Two examples of new programs which follow this general format are the New Educational Horizons Program at California State College, Fullerton, and the SUNY Higher Education Opportunity Program. The former was established in the fall of 1968 and is an excellent model of a small program which has thus far been successful in providing "comprehensive educational services for culturally different students."⁸⁰ The latter, while similar in emphasis, is quite dissimilar in size. Although only in its first year, HEOP has already placed 50 different projects into operation on private and public college and university campuses throughout New York. Some projects involve a single institution and a handful of students, whereas others involve institutional consortium arrangements and several hundred students.

The federal government is also getting into this field through its new Special Services to Disadvantaged Students. Under this program, which was first funded in 1970 at the \$10 million level, approximately 100 colleges and universities across the country will develop formal

⁸⁰Speech made by James Fleming, Director of New Educational Horizons at California State College at Fullerton, on July 23, 1969.

strategies for providing counseling, tutoring, career guidance, and other educational services to help "risk" students stay in college once they are admitted.

In a few cases, educators and civic leaders have determined that the best way to reduce this academic barrier for large numbers of young people is to go outside the traditional academic structure entirely and create an educationally relevant alternative. Four recently inaugurated examples of this type of activity include the State University of New York at Buffalo's University of the Streets, the Rhode Island Urban Education Center, Navajo Community College, and Nairobi College. In Buffalo the university has established several "ghetto outposts" which serve a variety of purposes, one of the most important being the offering of college-credit courses to nonmatriculated students.⁸¹ The Rhode Island program has been specifically organized "to provide a center where people can come to learn what they want to know." Navajo Community College (Arizona) is the first college located on an Indian reservation and "the first college totally sensitive to the needs of Indian students." Nairobi College (California), which hopes to appeal particularly to people of color, was founded on the belief that "no one need destroy his past or strip himself of his dignity to become a liberated human being" and is being designed to produce individuals with professional skills that are desperately needed in virtually all communities of color.

⁸¹Egerton, "Almost All-White," p. 12..

The Motivational Barrier

Programs which have had a noticeable impact on increasing the motivation of students to attend college have been those which reach into the secondary school years and try to understand and deal with the culture from which noncollege oriented students come. One of the main problems appears to be that compared to the middle class culture, the lower class culture is one in which little effort is made to instill in the child a drive to achieve in school and to forego the pleasures of the present for possible greater gains in the future. As Richard Plaut recommended,

We must help [students] to change their own, as well as their parents' image of themselves: The image of themselves as permanent strugglers for survival to one in which going to college is not only possible but likely--not just for the sake of going to college but to prepare for careers for which college training is necessary.⁸²

The most expensive and, by design, comprehensive effort toward combating this motivational problem is the federal Upward Bound program budgeted at \$30 million for fiscal 1970. Individual centers have been established at approximately 300 colleges and universities and given the mandate to provide the means by which able high school students living in poverty can be given an equal opportunity to enter and succeed in college. According to its national director, Thomas A. Billings, the

⁸²Plaut, Richard. "Personal Incentive for Higher Education Among Deprived Groups." In Brown, Nicholas C., ed. Higher Education: Incentives and Obstacles. Washington: American Council on Education, 1960, p. 103.

program is designed for "students who lack motivation, who see the world as a sand castle, who believe that poverty automatically prohibits a college education and who say, 'Why...bother?'"⁸³

Although Upward Bound has been criticized by some for not attacking the root causes of poverty and for not dealing with the "hard-core" poor who have little formal education,⁸⁴ the general evaluation after four years of operation was that

The Upward Bound program has provided disadvantaged student participants with opportunities which they might not have received otherwise to overcome handicaps in academic achievement and in motivation, to complete high school and to enter college.⁸⁵

The report goes on to cite evidence that Upward Bound students have 1) substantially lower high school dropout rates than is considered normal for the low income population, 2) considerably higher college admission rates in comparison with the national average of all high school graduates, and 3) college retention rates above the national average. For example, of the pilot group (1965) of 1,277 students, 80 percent entered college, and 77 percent of those had completed their

⁸³Billings, Thomas A. "Upward Bound Works," Educational Opportunity Forum, Winter 1968, pp. 1-2.

⁸⁴See Gloria I. Joseph's article "The Upward Bound Program" in Educational Opportunity Forum, 1 (2), pp. 27-32 for an elaboration of these criticisms.

⁸⁵Educational Associates, Inc. A Report on Upward Bound to the Office of Economic Opportunity. Washington, EAI, 1969, p. 7.

junior year three years later.⁸⁶ The program has been equally successful in its full scale operation, for the National Advisory Commission on Civil Disorders reported that 83 percent of the 23,000 students (52 percent of whom were Negro) that participated in Upward Bound in 1967 went on to college.⁸⁷

Another federal program which is attempting to attack the motivational barrier is the Educational Talent Search Program, funded at \$5 million for 1970. In 1969 there were 67 separate Talent Search projects around the country funded by this program, each developing its own procedures whereby it seeks to identify and encourage young people of exceptional financial need to complete high school and, where appropriate, go on to college. Each project provides information about college programs and the various sources of financial aid to the students and stands ready to refer students to any college that inquires. It is undoubtedly safe to say, however, that no two programs have approached their task with the same strategy. For example, a project such as SET-GO in Chicago has its workers walk the streets and mingle with gangs in their search for students, whereas PACT in Berkeley, California, has primarily utilized the referral services of various schools and community agencies, and the Southern Illinois Center has employed the assistance

⁸⁶ Billings, p. 2.

⁸⁷ National Advisory Commission on Civil Disorders. Report of the National Advisory Commission on Civil Disorders. New York: Bantam, 1968, p. 452.

of a computer in its search for economically needy rural youth. Some projects are operated by colleges, others by state and local education agencies, and still others by public and private nonprofit organizations. Some deal primarily with poor Whites, others with Blacks, American Indians, Puerto Ricans, Mexican-Americans, or a mixture of all five. Those interested in a thumb-nail description of the diverse activities of each project funded in 1968 are encouraged to read the pamphlet Search '68 prepared by the U. S. Office of Education. (No pamphlet was published for the 1969 projects, many of which were the same.)

Of the hundreds of nonfederal talent search organizations also attempting to demonstrate to educationally disadvantaged young people that they can "make it" in college and/or society, two prominent programs in New York City are indicative of what has been developing in urban and rural areas throughout the nation in the past few years.

The first of these is the New York College Bound Corporation, a consortium of over 100 Greater New York colleges and universities, the City secondary schools, and selected minority-oriented associations. The program consists of identifying ninth-grade (in some cases tenth-grade) students from poverty areas of the city and enrolling them in a four-year program of cultural enrichment, academic skill development, and professional counseling. The hope is that the students will not only improve academically but also that they will be motivated to raise their sights with respect to what they will do with their lives. One measure of the success of this venture is that by June 1970 the first

group of students, 1,000 in all, will have satisfactorily completed the program, have secured an academic diploma, and be qualified to attend college this fall. Each higher educational institution in the Corporation has agreed to accept students who graduate with a 70 scholastic average or above and provide them with sufficient financial aid.

The second is the CUNY College Discovery Program. One of the emphases of this program, like that of the College Bound Corporation, is the identification and development of high school underclassmen who are from poverty neighborhoods around the city and who have poor grades and little prospect of college entrance. Through five Development Centers, one in a high school in each borough, students are provided with tutoring, counseling, and cultural stimuli. One index of College Discovery's success is that of 529 tenth-graders who entered the program in 1965, 78 percent graduated from high school three years later and gained automatic admission to a unit of CUNY. It should be emphasized that these students represented 78 percent of a group which had been identified by teachers and counselors in the ninth grade as being not only unlikely to succeed in college but also unlikely to succeed in a college preparatory program. Once again the factor that made the difference was the realization that college was within their realm of possibilities and that others were willing to help them help themselves.

The Geographic Barrier

In virtually every state master plan developed in the last decade as well as in most pronouncements on educational opportunity, one

is sure to discover the sentiment that higher education should be accessible to (within commuting distance of) every high school graduate. The theme of total accessibility also ran through each state profile of a 1966 booklet devoted to descriptions of junior college developments in 20 states.⁸⁸ As of 1970, however, only one state has suggested that it has reached this lofty goal. Most states maintain they are getting closer, but only Florida claims that it has arrived at the point where higher education is geographically accessible to 99 percent of the state's population.⁸⁹

According to USOE data the United States added 360 new public institutions in the period 1958-1968, of which 304 were two-year institutions.⁹⁰ To the extent that these institutions were established in areas not already served by higher education, the geographic barrier was reduced for area residents.

Different states have chosen different procedures for increasing geographic accessibility. Ohio represents one example of action taken on multiple fronts. Between 1963 and 1968 six new state universities, eighteen new university branches, four new community colleges, and five new technical institutes were added to the state system. Not all were new

⁸⁸Yarrington, Roger, ed. Junior Colleges: 20 States. Washington: American Association of Junior Colleges, 1966.

⁸⁹Yarrington, Roger, ed. Junior Colleges: 50 States/50 Years. Washington: AAJC, 1969, p. 60.

⁹⁰U. S. Office of Education. Education Directory, 1958-59, Part 3, Washington: USGPO, p. 9; and Education Directory, 1968-69, Part 3, p. 6.

institutions; some had been privately or municipally operated.⁹¹

Although there are people living within commuting distance of more than one public institution, there has been a conscious effort to blanket the state, both urban and rural areas, with centers of higher education.

Wisconsin, North Carolina, and South Carolina are three states that have endeavored to extend higher education to their residents primarily through new university branches and technical institutes. South Carolina, for one, developed eleven technical education centers and ten university branches within the period 1963-1968.⁹²

By far the most common method used by states to reduce the geographic barrier has been the creation of comprehensive public community colleges. Massachusetts, for example, opened its first such state-supported institution, Berkshire Community College, in 1960 with an enrollment of 150 students; by 1968 it had established a system of 12 institutions from Cape Cod to Northern Essex to Springfield enrolling over 19,000 students. New York increased the number of its community colleges from 12 to 32 in the decade 1958-1968. During this expansion enrollment shot up from under 16,000 to over 136,000. Alabama, which had no state-supported community colleges prior to 1964, opened the doors of 15 such institutions between 1964 and 1968. By 1968 they enrolled 20

⁹¹Ohio Board of Regents. Ohio's New Look in Higher Education. Columbus: OBR, 1968, back cover.

⁹²Ferrin, Richard I. and Willingham, Warren W. A Comparable Universe of Higher Institutions for 1958, 1963, and 1968. Technical Memorandum. Palo Alto: CEEB, 1969.

percent of all students seeking higher education within the state. Connecticut similarly established 10 new institutions between 1964 and 1968 to supplement the two already existing, with enrollments increasing tenfold from 1,400 in 1963 to 14,000 in 1968.⁹³

California has long been the acknowledged leader and recognized forerunner of the "community college movement." While the state cannot lay claim to the first such institution, it can boast of passing the first legislation permitting secondary schools to provide college-transfer programs (1907) and the first to make provision for vocational and technical courses in two-year colleges (1917).⁹⁴ Since that era community colleges have become more and more numerous throughout the state. The first institution was organized in Fresno in 1910, and by 1930 there were 13. Despite the interruption of World War II, the number had increased to 53 by 1949, to 60 by 1958, and to 84 by 1968.⁹⁵ Approximately one-half of all the state's community colleges are located either in the Greater Los Angeles area or in the San Francisco Bay area, a fact that is not unexpected since about two-thirds of the state's population

⁹³For more descriptive statements on the progress made in each state, the reader is urged to consult the AAJC publication Junior Colleges: 50 States/50 Years.

⁹⁴Blocker, Clyde E., Plummer, Robert H., and Richardson, Richard C., Jr. The Two-Year College: A Social Synthesis. Englewood Cliffs, N. J.: Prentice-Hall, 1965, p. 27.

⁹⁵The data are from the following sources: USOE. Biennial Survey of Education in the United States, 1930-32, Washington: USGPO, p. 365; Biennial Survey, 1948-50, Chapter 4, Section 1, p. 4; Education Directory, 1958-59, Part 3, p. 9; Education Directory, 1968-69, Part 3, p. 6.

live in those two areas.⁹⁶

While California has been trying to place community colleges within reach of most of its residents for over half a century, Florida has been making its effort for only a little more than a decade. In 1958 there were 8 colleges with a total enrollment of 7,323, but by 1968 there were 27 institutions enrolling 92,863. Enrollment over this ten-year period increased almost twelve times.

Because of this unusually rapid growth, Florida has become fertile ground for proximity studies. Two such studies which illustrate the result of eliminating the geographic barrier for people in particular counties have been reported by Wattenbarger and Bashaw. Wattenbarger disclosed that in Marianna, before Chipola Junior College was established, about 8 percent of the high school graduates went on to higher education. After the community college was established, he noted that 8 percent still went away to colleges and universities outside the immediate area; however, an additional 40 percent were staying and attending Chipola.⁹⁷

Bashaw investigated the changes in college-going rates between 1957 and 1962. He examined two types of counties: 1) those which had no community colleges through the duration of the study, and

⁹⁶U. S. Bureau of the Census. County and City Data Book, 1967. Washington, USGPO, 1967.

⁹⁷Wattenbarger, James L. "Programs in Florida for Post-High School Age Youth and Adults," Meeting Educational Needs for Post-High School Age Youth and Adults in Alabama. Auburn, Ala.: Auburn University, School of Education, 1964, pp. 42-48.

2) those which had no community colleges prior to 1958 but which either in that year or in 1960 established such institutions. He discovered that the percentage of residents in type #1 counties who enrolled in college increased by only 13 percent between 1957 and 1962, whereas the percentage of residents in type #2 counties who enrolled in college advanced 215 percent in the same period.⁹⁸

One further indicator of the geographic accessibility of public community colleges may be found in the mid-1960's data from the Coleman study, Equality of Educational Opportunity. Coleman and his colleagues discovered that in the Southeast and Southwest, where the availability of free-access higher education was low, smaller proportions of Black than of White college students attended public community colleges--8 percent versus 12 percent. In the Far West, on the other hand, where such availability was comparatively high, far larger proportions of Black than of White students attended these institutions--71 percent versus 49 percent. One can also note from the data that much higher proportions of both White and Black students enrolled in community colleges in the Far West than in the Southeast and Southwest, but the difference is considerably greater in the case of the Black students.⁹⁹

⁹⁸Bashaw, W. L. "The Effect of Community Junior Colleges on the Proportion of the Local Population Who Seek Higher Education," Journal of Educational Research, March 1965, 58, pp. 327-329.

⁹⁹Coleman et al., p. 445.

SUMMARY

The United States has committed itself, both individually as states and collectively as a nation, to further expansion of higher educational opportunity. Many national spokesmen, including Secretary of Health, Education, and Welfare Robert H. Finch, have argued that expansion should not stop short of universal opportunity, that all people should have higher education accessible to them.¹⁰⁰ If the United States does adopt this more idealistic notion as a legitimate goal (and trends certainly indicate a definite movement in that direction), then it is necessarily obliged to take whatever steps it can to alleviate the financial, academic, motivational, and geographic barriers which still make higher education inaccessible to so many.

Although considerable action has already been taken at the federal, state, local, and private levels, the door to equal higher educational opportunity is still only partially open. There are still numerous young people who are unable to pay even the transportation and incidental expenses necessary to attend a tuition-free institution. There are many who view existing colleges as being representative of an alien culture. Colleges appear not only difficult to enter but also as having programs largely irrelevant to the perceived needs of these students. There are others who tend to regard college attendance as an

¹⁰⁰Jacobson, Robert L. "Finch Promises Junior College 'Cover' Plan," The Chronicle of Higher Education, October 13, 1969, 4 (3), p. 4.

unrealistic alternative to immediate post-secondary employment because of either their home and neighborhood environment, their previous educational experiences, or both. Still other students fail to attend college because there is no institution within commuting distance and they cannot afford or do not choose to go away to college.

Within the past decade the nation has attempted to make higher education a realistic possibility for all by means of substantial federal student aid expenditures, comprehensive talent search programs, institutional revisions of admissions procedures and curriculum patterns, and the location of a multitude of low-cost institutions within population centers. The fact that these and other actions have been only partially successful toward attaining a goal of universal higher educational opportunity is indicative more of the magnitude and complexity of the problem than it is of the failure of these provisions to come to grips with the issues at stake. The issues are well known, the objectives are clear, but the existing measures are as yet inadequate.

BIBLIOGRAPHY

- Adams, Walter. "Caste and Class, Relative Deprivation, and Higher Education." New York: Bureau of Applied Social Research, Columbia University, 1968, mimeo.
- American Association of Junior Colleges. 1960 Junior College Directory. Washington: AAJC, 1960.
- American Association of Junior Colleges. 1969 Junior College Directory. Washington: AAJC, 1969.
- Astin, Alexander W., Panos, Robert J., and Creager, John A. "National Norms for Entering College Freshmen--Fall 1966," ACE Research Reports, 1967, 2 (1), pp. 1-51.
- Axelrod, Joseph et al. Search for Relevance. San Francisco: Jossey-Bass, 1969.
- Baird, Leonard L., Richards, James M., Jr., and Shevel, Linda R. "A Description of Graduates of Two-Year Colleges," ACT Research Report, January 1969, 28, pp. 1-25.
- Barber, Leroy E. "Why Some Able High-School Graduates Do Not Go to College," School Review, February 1951, 59, pp. 93-96.
- Bashaw, W. L. "The Effect of Community Junior Colleges on the Proportion of the Local Population Who Seek Higher Education," Journal of Educational Research, March 1965, 58, pp. 327-329.
- Beezer, R. and Hjelm, H. F. "Factors Related to College Attendance," Monograph #8. Washington: USOE, 1963.
- Berdie, R. F. After High School--What? Minneapolis: University of Minnesota, 1954.
- Berdie, R. F. and Hood, A. B. Decisions for Tomorrow. Minneapolis: University of Minnesota, 1965.
- Billings, Thomas A. "Upward Bound Works," Educational Opportunity Forum, Winter 1968, pp. 1-2.

- Blocker, Clyde E., Plummer, Robert H., and Richardson, Richard C., Jr. The Two-Year College A Social Synthesis. Englewood Cliffs, N. J.: Prentice-Hall, 1965.
- Bowen, Howard R. "Who Pays the Higher Education Bill?" In Southern Regional Education Board. Proceedings: A Symposium on Financing Higher Education. Atlanta: SREB, 1969.
- Bowles, Frank. Access to Higher Education, Vol. 1. New York: Columbia University Press, 1963.
- Brownstein, Samuel C. and Weiner, Mitchel. You Can Win a Scholarship. Woodbury, N. Y.: Barron, 1964.
- The Chronicle of Higher Education. "Bowdoin Will Stop Requiring Tests of Applicants," February 2, 1970, 4 (17), p. 1.
- The Chronicle of Higher Education. "Negro Enrollments this Year on the Nation's Campuses," April 21, 1969, 3 (16), p. 4.
- The Chronicle of Higher Education. "69 Percent of Opportunity Grants Go to Low-Income Students," January 12, 1970, 4 (14), p. 7.
- Coleman, James S. et al. Equality of Educational Opportunity. Washington: USOE, 1966.
- Coordinating Council for Higher Education. "Council Staff Response to the Board of Governors' Review of the February Report on the Need for Additional Junior College Campuses." Sacramento: CCHE, 1969, mimeo.
- Daughtry, Alex A. and Hawk, Richard C. A Report on the Post-graduation Activities of the 1957 High School Graduates. Emporia: Kansas State Teachers College, Bulletin of Information, 38, September 11, 1958.
- Dennis, Lawrence E. "Equalizing Educational Opportunity for the Disadvantaged." In Mayhew, Lewis B., ed. Higher Education in the Revolutionary Decades. Berkeley: McCutchan, 1967, pp. 297-304.
- Dressel, Paul. College and University Curriculum. Berkeley: McCutchan, 1968.
- Educational Associates, Inc. A Report on Upward Bound to the Office of Economic Opportunity. Washington: EAI, 1969.

- Educational Policies Commission. Universal Opportunities for Education Beyond the High School. Washington: National Education Association, 1964.
- Egerton, John. "Almost All-White," Southern Education Report, May 1969, 4 (9), pp. 2-17.
- Egerton, John. Higher Education for "High Risk" Students. Atlanta: Southern Education Foundation, April 1968.
- Egerton, John. State Universities and Black Americans. Atlanta: Southern Education Reporting Service, May 1969.
- Feingold, S. Norman. Scholarships, Fellowships, and Loans. Cambridge, Mass.: Bellman, 1962.
- Ferrin, Richard I. and Willingham, Warren W. A Comparable Universe of Higher Institutions for 1958, 1963, and 1968. Technical Memorandum. Palo Alto: College Entrance Examination Board, 1969.
- Florida State Department of Education. The Community Junior College in Florida's Future. Tallahassee: FSDE, 1957.
- Frankel, Charles. "The Educational Impact of American Foreign Policy." in Smith, G. Kerry, ed. Stress and Campus Response. San Francisco: Jossey-Bass, 1968, pp. 52-63.
- Froomkin, Joseph. Students and Buildings. Washington: USOE, May 1968.
- Haller, A. O. and Butterworth, C. E. "Peer Influences on Levels of Occupational and Educational Aspiration," Social Forces, May 1960, 38, pp. 289-295.
- Havighurst, Robert J. "Social Implications of the Report of the President's Commission on Higher Education," School and Society, April 1948, 67, pp. 257-261.
- The Hazen Foundation. The Student in Higher Education. New Haven: Hazen, 1968.
- Healy, Timothy S. "Will Everyman Destroy the University?" Saturday Review, December 20, 1969, pp. 54-.
- Hollingshead, August B. Elmtown's Youth. New York: Wiley, 1949.
- Illinois Board of Higher Education. A Master Plan for Higher Education in Illinois. Springfield: SIBHE, July 1964.

- Jacobson, Robert L. "Clark Kerr Changes View, Backs Public-College Tuition," The Chronicle of Higher Education, January 12, 1970, 4 (14), p. 4.
- Jacobson, Robert L. "Education Gain by Poor Called 'Revolutionary,'" The Chronicle of Higher Education, March 10, 1969, 3 (13), p. 1.
- Jacobson, Robert L. "Finch Promises Junior College 'Cover' Plan," The Chronicle of Higher Education, October 13, 1969, 4 (3), p. 4.
- Jaffe, A. J. and Adams, Walter. Social and Economic Characteristics of the College Population and Others with Some College Training. New York: Bureau of Applied Social Reserach, Columbia University, 1965.
- Jencks, Christopher. "Social Stratification and Higher Education," Harvard Educational Review, Spring 1968, 38, pp. 277-316.
- Joseph, Gloria I. "The Upward Bound Program," Educational Opportunity Forum, 1 (2), pp. 27-32.
- Keeslar, Oreon. Financial Aids for Students Entering College. Dubuque: William C. Brown, 1969.
- Knoell, Dorothy M. "Are Our Colleges Really Accessible to the Poor?" Junior College Journal, October 1968, 39 (2), pp. 9-11.
- Knoell, Dorothy M. A Study of the College-Going Behavior of Urban High School Graduates, with Particular Attention to Black Youth Not Now in College. Interim Report. Washington: American Association of Junior Colleges, 1969.
- Knoell, Dorothy M. Toward Educational Opportunity for All. Albany: SUNY, 1966.
- Koos, Leonard V. "How to Democratize the Junior-College Level," School Review, May 1944, pp. 271-284.
- Koos, Leonard V. "Local Versus Regional Junior Colleges," School Review, November 1944, pp. 527+.
- Lecht, Leonard A. Goals, Priorities, and Dollars. New York: The Free Press, 1966.
- Little, J. K. et al. Explorations into the College Plans and Experiences of High School Graduates: A Statewide Inquiry. Madison: University of Wisconsin, School of Education, 1960.

- Livesey, Lionel J., Jr. and Palola, Ernest G. Statewide Planning for Higher Education. In press.
- Marsh, Georgia. "Junior Colleges and Negroes," Southern Education Report, September 1968, 4 (2), pp. 11-17.
- Martin, Warren B. Alternative to Irrelevance. Nashville: Abingdon, 1968.
- Martyn, Kenneth A. Increasing Opportunities for Disadvantaged Students: A Preliminary Outline. Sacramento: Joint Committee on Higher Education, California Legislature, December 1967.
- Martyn, Kenneth A. Increasing Opportunities in Higher Education for Disadvantaged Students. Sacramento: Coordinating Council for Higher Education, 1966.
- Mayhew, Lewis B. Contemporary College Students and the Curriculum. Atlanta: Southern Regional Education Board, 1969.
- Mayhew, Lewis B. Long Range Planning for Higher Education. Washington: Academy for Educational Development, 1969.
- McDill, Edward L. and Coleman, James. "Family and Peer Influences in College Plans of High School Students," Sociology of Education, Winter 1965, 38, pp. 112-126.
- McKendall, Benjamin W., Jr. Statewide Seminar on Race and Poverty in Higher Education. Palo Alto: College Entrance Examination Board, 1968.
- McNett, Ian E. and Jacobson, Robert L. "Education's Man in the Administration: The Commissioner's Candid View," The Chronicle of Higher Education, September 29, 1969, 4 (1), p. 3.
- Medsker, Leland L. and Trent, James W. The Influence of Different Types of Public Institutions on College Attendance from Varying Socioeconomic and Ability Levels. Berkeley: Center for Research and Development in Higher Education, 1965.
- Moore, William, Jr. "Opportunity for the Disadvantaged." In Smith, G. Kerry, ed. Stress and Campus Response. San Francisco: Jossey-Bass, 1968, pp. 232-238.
- Morse, John F. "The Federal Role in Education: One View." In Southern Regional Education Board. Proceedings: A Symposium on Financing Higher Education. Atlanta: SREB, 1969.

- National Advisory Commission on Civil Disorders. Report of the National Advisory Commission on Civil Disorders. New York: Bantam, 1968.
- National Association of State Universities and Land-Grant Colleges and American Association of State Colleges and Universities. Recommendations for National Action Affecting Higher Education: A Joint Statement. Washington: NASULGC and AASCU, February 1969.
- National Scholarship Service and Fund for Negro Students. "NACAC Passes Revised CCA Resolutions," NSSFNS News, December 1969, p. 4.
- O'Connell, Thomas E. Community Colleges: A President's View. Urbana: University of Illinois Press, 1968.
- O'Hara, William T. John F. Kennedy on Education. New York: Teachers College, Columbia University, 1966.
- Ohio Board of Regents. Ohio's New Look in Higher Education. Columbus: OBR, 1968.
- Parsons, Talcott and Clark, Kenneth B., eds. The Negro American. Boston: Houghton Mifflin, 1965.
- Pearson, Richard. "Can Colleges Reclaim the Non-student? Maybe--With Hard Cash." College Board Review, Winter 1967-68, 66, pp. 14-19.
- Pearson, Richard. The Opening Door: A Review of New York State's Programs of Financial Aid for College Students. New York: College Entrance Examination Board, 1967.
- Plaut, Richard. "Personal Incentive for Higher Education Among Deprived Groups." In Brown, Nicholas C., ed. Higher Education: Incentives and Obstacles. Washington: American Council on Education, 1960.
- Reeves, Floyd W. "Barriers to Higher Education," Phi Delta Kappan, January 1950, 31, pp. 214-224.
- Rehberg, Richard A. and Westby, David L. "Parental Encouragement, Occupation, Education and Family Size: Artifactual or Independent Determinants of Adolescent Educational Expectations?" Social Forces, 1967, 45, pp. 362-374.
- Richardson, Richard C. and Elsner, Paul A. "General Education for the Disadvantaged," Junior College Journal, December 1965, 36 (4), pp. 18-21.

- Sandage, Frank. "ETS Evaluation of Talent Search," Memorandum, October 17, 1969.
- Sanders, Edward and Palmer, Hans. The Financial Barrier to Higher Education in California. Sacramento: California State Scholarship Commission, 1965.
- Schoenfeldt, L. F. "Post-High School Education." In Flanagan, J. C., ed. Project TALENT: One-Year Follow-Up Studies. Pittsburgh: University of Pittsburgh, Project TALENT Office, 1966, pp. 91-130.
- Selk, Eleanore. "Putting Muscle Behind the Reach," Junior College Journal, September 1969, 40 (1), pp. 20-22.
- Sewell, William H. and Armer, J. Michael. "Neighborhood Context and College Plans," American Sociological Review, April 1966, 31, pp. 159-168.
- Sewell, William H. and Shah, Vimal P. "Social Class, Parental Encouragement, and Educational Aspirations," The American Journal of Sociology. March 1968, 73, pp. 559-572.
- Thresher, B. Alden. College Admissions and the Public Interest. New York: College Entrance Examination Board, 1966.
- Tillery, Dale. School to College: Distribution and Differentiation of Youth. Berkeley: Center for Research and Development in Higher Education, 1965.
- Trent, James W. and Medsker, Leland L. Beyond High School. San Francisco: Jossey-Bass, 1968.
- U. S. Bureau of the Census. County and City Data Book, 1967. Washington: USGPO, 1967.
- U. S. Bureau of the Census. We the Mexican Americans. Washington: USGPO, 1970.
- U. S. Bureau of the Census and Bureau of Labor Statistics. The Social and Economic Status of Negroes in the United States, 1969. BLS Report No. 375; Current Population Reports, Series P-23, No. 29. Washington: USGPO, 1969.
- U. S. Office of Education. Biennial Survey of Education in the United States, 1930-32. Washington: USGPO, 1932.
- U. S. Office of Education. Biennial Survey of Education in the United States, 1948-50. Washington: USGPO, 1950.

- U. S. Office of Education. Education Directory, 1958-59, Part 3. Washington: USGPO, 1958.
- U. S. Office of Education. Education Directory, 1968-69, Part 3. Washington: USGPO, 1968.
- Wattenbarger, James L. "Programs in Florida for Post-High School Age Youth and Adults," Meeting Educational Needs for Post-High School Age Youth and Adults in Alabama. Auburn, Ala.: Auburn University, School of Education, 1964, pp. 42-48.
- Willingham, Warren W. Accessibility of Higher Education. Palo Alto: College Entrance Examination Board, 1970.
- Willingham, Warren W. The Importance of Relevance in Expanding Post-Secondary Education. Palo Alto: College Entrance Examination Board, 1969.
- Willis, Benjamin C. Higher Education. Part I: The Chicago Teachers Colleges; Part II: The Chicago City Junior College. Study Report No. 10, Chicago Public Schools, 1964.
- Willis, Benjamin C. The Second Report on the Chicago City Junior College to the Chicago Board of Education. Chicago Board of Education, 1958.
- Yamamoto, Kaoru, ed. The College Student and His Culture: An Analysis. New York: Houghton Mifflin, 1968.
- Yarrington, Roger, ed. Junior Colleges: 50 States/50 Years. Washington: American Association of Junior Colleges, 1969.
- Yarrington, Roger, ed. Junior Colleges: 20 States. Washington: American Association of Junior Colleges, 1966.