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ABSTRACT

A summary report of the available literature on research in the principal components of Higher Educational Opportunity Programs, (HEOP) i.e. curriculum, instructional techniques, admissions policies, and others. This paper focuses on the discussions of HEOP's organizational format, materials, innovative educational techniques, and philosophies or theories of learning which have significant impact on student performance. A secondary focus is the identification of studies that have been done on the parts of the HEOP programs, individual counseling, tutoring, testing, and other supportive services aimed at academic development of the students. This report also identifies evaluative studies of Higher Educational Opportunity Programs which explore the degree of success and effectiveness of the program. Bibliographies are provided for sections on curriculum and instruction, tutoring, counseling, testing, and instructional program policies. The dilemma for these programs is held to be in how to produce substantial evidence of their contribution when their funding does not provide for this sort of research. (Author/AM)

A REVIEW OF RESEARCH AND DEVELOPMENTAL EFFORTS IN HIGHER EDUCATIONAL OPPORTUNITY PROGRAMS[1]

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A Review of Research and Developmental Efforts in Higher Educational Opportunity Programs

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RESEARCH AND DEVELOPMENTAL EFFORTS IN HIGHER EDUCATIONAL OPPORTUNITY PROGRAMS

Introduction

Over the last decade a large percentage of colleges and universities have responded to the demand for increased access to higher education for minority and non-traditional students by introducing "special" programs. The social and political climate of the sixties provided an atmosphere of urgency that resulted in governmental encouragement in the form of federal funding for the development of such programs. Prior to this time the ability to obtain a higher education depended on one's social status and financial wherewithal.

Approaches to the problem of educating the poor and academically unprepared youth have been diverse in scope and resources. The available literature on this subject is indicative of the degree of experimentation in this field of higher education. Accounts of various programs have been primarily descriptive in nature. There is a paucity of substantial research data or evaluative reports.

This paper is a summary report of the available literature on research in the principal components of Higher Educational Opportunity Programs, i.e. curriculum, instructional techniques, admissions policies, etc. The literature reviewed was extracted from several bibliographical sources which were comprehensive but by no means exhaustive.

This review has as its primary focus the discussions of HEOP's organizational format, materials, innovative educational techniques, and philosophies or theories of learning which have significant impact on student performance. As a secondary focus, this report identifies studies that have been done on the parts of HEOP programs, individual counseling, tutoring, testing, and other supportive services aimed at academic development of the students.

In addition this report will identify evaluative studies of Higher Educational Opportunity Programs which explore the degree of success and effectiveness of the programs.

Curriculum and Instruction

Designing a curriculum and developing the appropriate teaching strategies for the needs of college-level, unprepared students involves consideration of this population's background, prior learning experiences, and individual skills and competencies, both academic and social. HEOP programs generally claim to make concerted efforts in both the areas of affective and cognitive development, but a careful scrutiny of the existing programs and their functioning leaves one with doubts about the existence or adequacy of mechanisms for handling such problems.

Research reports such as that of Astin, et al (1972) indicate that in most cases, given the overall institutional policies to which most HEOP must adhere, the attention of special programs is focused on academic achievement. They require students to follow courses of study similar to those of the traditional student. Most instructional techniques and curriculum formats utilized in special programs mirror the institutional traditions (Gordon, 1972). Typical methods such as lecturing, large-group instruction, independent projects and papers are widely used in special programs. These methods assume mastery of skills stressed within the dominant academic culture, but often undeveloped by the special student. The result is that special students are compelled to adapt to the institution rather than the institution accommodating the student.

Curriculum designs for non-traditional students deserve serious research and development. Re-packaging traditional courses to present the same material at a slower pace and in a less-defined manner doesn't benefit the non-traditional student. Some educators argue that the

universities should modify their curricula to reflect the realistic concerns and interests of minority students (Fantini & Weinstein, 1972) and that instructional techniques should be altered to reflect differences in the affective domain and in learning style.

Yet many directors of special programs vary in their attitudes toward remedial courses and ethnic courses. Some are highly supportive; others are considerably more cautious in their assessment of the value of these courses. One apparent source of concern is the social and professional effects such courses have on the special student's degree (Williams, 1969). Students are often dissatisfied with these courses because they offer no credit or the course content is unchallenging. This results in low attendance and the poor work habits acquired in the secondary school experience are sustained.

Curriculum plans for the special student programs need to balance traditional course content with experimental instructional innovations. The special program with a completely separate curriculum must be carefully evaluated because this kind of separation serves to define one segment of the student population in terms of the stigma of skill inferiority. But, as many directors suggest, some separate courses are necessary to insure the attention of students in need of special educational assistance particularly where the larger campus community feels that the HEOP student is academically expendable.

More emphasis on the development of positive attitudes toward the learning experience as well as remediation of skills would benefit this type of student. Smaller classes fostering closer teacher-student interaction and group discussions fostering self-expression and verbalization of idea, as well as developmental courses in basic skills, should form the foundation for the special student's collegiate education (Williams, 1968) The most successful instructional approaches utilized in New York were interdisciplinary

approaches to the investigation of contemporary society; the use of a number of instructional techniques and devices including: seminars, discussion groups, individual and group projects--written and oral, field research and work experiences, self-instruction, simulation games, audio-visual equipment, and computers. Reportedly, seminars and individual programmed instruction attain the highest degree of success with disadvantaged students.

Innovations in instructional techniques alone are not the answer to all the problems facing the staff in a HEOP program. One of the largest obstacles to the instruction of the students lies in the course materials. Materials written at the proper skills level are almost invariably too young in terms of content. These students who are struggling to raise their reading levels need motivation; materials which are of high-interest--because they can be related to their own experiences and/or are relevant to the course materials they are introduced to in college--provide some of that motivation.

High interest/low skills materials in the form of texts are not readily available. As a result most instructors have had to develop their own and the quality of these materials may vary from program to program.

Universitites and colleges in New York State employed a variety of means to obtain the necessary financial support for many educational innovations such as grants for centers for instruction/supportive services, and in-service faculty-staff training (HEOP Final Report, 1972). Additional outside funds are usually required since these special compensatory programs have limited financial support. This is indeed one of the major reasons that innovations in instruction have been limited in either scope or duration. In some cases innovations are never implemented because of a lack of funds or because of administrative rigidity.

Obviously, the issues of program survival have taken precedence over research and development in instruction, but educators and administrators committed to quality education for all populations will need to demand a greater priority in the allocation of funds for research and evaluation in the area of instruction for the non-traditional student.

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Tutoring

Kinds

The tutoring components in HEOP programs provide the area of greatest departure from traditional educational strategies. Over the years the tutorial format has become more diversified and colleges have become more responsive to innovative arrangements. Individual tutoring is still the principal method used in most programs and tutorial assistance is obtained at the request of an instructor or the student. However, there are variations on the individualized assistance. In some instances tutoring has become an integral part of the course-work (Ludwig and Gold, 1969). This is particularly true of many developmental or basic skill courses. Students receive group lectures on the subject area and individualized tutoring helps anchor the concepts and skills for the students. (Elizabeth City State University, 1969).

Group tutoring has emerged as a useful format for the teaching of some basic skills. Instead of assigning students to individual tutors, several tutors will work in a class rotating among students (Reed and Hodgkinson,1973). This method proves effective for only a limited number of skill levels and inevitably students need individual assistance in areas of major deficiencies. In some instances group counseling is incorporated into the total tutorial structure. Small adjunct discussion sessions help focus shared personal problems. They also allow others to share and learn from the common struggles associated with overcoming skill deficiencies.

As a further extension of the classroom and tutorial sessions, tutors have taken on the responsibility of conducting class-related field trips (Hernandez, 1969). In some instances field trips by tutors are a part of the course lesson-plan and in other cases they are an extension of the tutorial instructional techniques completely independent of the classroom experience.

By far the most popular and highly publicized idea in tutoring has been the use of peer tutors. As a result of the Educational Opportunity Programs, the "new student" began to be admitted to many colleges. It was at this time that many of these institutions adopted peer tutor programs (Ludwig and Gold, 1969). The major impetus for the adoption of the new approach to tutoring was the difficulty traditional college students--predominantly white, middle class--had in communicating with HEOP students, who were generally members of ethnic minorities from the lower socio-economic class. The assumption behind the use of peer tutors was that another student with a similar cultural and social background and a solid understanding of the course material could translate this information into comprehensible and familiar jargon. He or she would also help create a more conducive learning environment because of his or her ability to establish rapport with a social counterpart.

Subject Areas for Tutoring

The subject areas on which many of the tutoring programs focused are involved in the development of basic skills. Areas were identified as essential for skills building for the HEOP student. These included English, expressive writing, reading, math and science. Since the subject matter in most of these areas is at a high school level, college students at all levels could qualify as tutors. A major objective of the tutor is to help facilitate building student skills for rapid transition into college level work (Weinrich et al, 1971). Other areas in which tutors were frequently employed were as "adjunct instructor" in regular coursework. In many instances the HEOP student not only was deficient in basic skills but also lacked the informational background essential for satisfactory performance in advanced college courses. Tutoring services in these instances are usually administered by special individual assistance.

The areas of expertise defined for peer tutors varied depending on their competencies and group size. Since many of the peer tutors were deliberately recruited from the campus minority populations, they very frequently were also products of an Opportunity program, Peer tutors would either be classmates competent in the tutee's area of need, or peers who had recently completed the course and were one or two semesters in advance of the person being helped (Turner, 1970). The pool of peer tutors increased with the longevity of the Higher Educational Opportunity Programs.

Tutors often encounter many of the same problems that confronted the regular class instructor. One of these is the question of what materials to use. In a majority of instances the standard procedure was to collect and develop instructional materials with high interest value on the student's skill level. A recurrent problem in instruction has been to provide interesting and educationally motivating materials for students of college age with skills at the

high school or lower levels. Tutors, like instructors, tend to exploit the pesonal interests of their students to develop "low-skill/high-interest" materials. There are few commercial educational materials which meet this criteria of need for HEOP students. Multi-media, that is video-tape, programmed instruction, and other such aids have been useful in assisting the special student to build skills but they are still inadequate to meet the needs in remediation. It has also been found that heavy supplementation of regular courses with tutors is no substitute for having basic skills courses. For some students the basic skills courses should be mandatory prerequisites before they enroll in anything requiring more advanced skills.

A Profile of Tutors

The recruitment of tutors varied from institution to institution. However, there were some general trends in organizational structure and personnel selection. For some programs students were recruited from the College's central office for all tutors. Other schools established Program Tutor Coordinators expressly to service these academic needs. Program tutor coordinators and the College's central office of tutors in some instances work collaboratively in this area of recruitment. HEOP personnel often reserved the right to screen and finalize all potential tutors (Miami-Dade Junior College, 1972).

The student tutors recruited ranged from undergraduates to graduate students and faculty (Wright, 1971). The peer tutoring programs relied less on advanced competencies or course completion for selection of tutors. Competency in a particular subject area coupled with satisfactory completion of the course by the tutee were often criteria of evaluation. For some Programs, there was a graded system for ranking tutors which governed not only how their services were distributed but also their level of wages.

Faculty members also functioned as tutors on occasions, but this was rare. Upon occasion

workshops were conducted for teachers to help them develop better instructional strategies involving tutors.

Outcome From Tutoring Services

The effectiveness of tutoring programs vary. For the most part tutoring projects have proven successful (Williams et al, 1971). Many school sand programs which incorporated the peer tutoring/counseling services saw this service as essential. Peer tutoring seems to have become an established service at a great many institutions.

Generally speaking, tutoring improved the grade point averages of the tutors as well as the tutees. Both participants benefited from the instructional relationships. The increased demand for tutors brought about by Opportunity Programs elevated their stature. These positions became a major form of employment under the college work-study programs. Special grants were received by some institutions for the purpose of reorganizing and developing their tutoring services. Volunteer tutoring also became an expanded operation on HEOP campuses.

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Counseling

Despite the predominance of articles and tests devoted to the needs of the special student in the area of academic improvement, few educators will deny the equal importance of counseling in Higher Educational Opportunity Programs. Personal growth is inseparable from scholastic achievement in student development. The HEOP student brings with him a myriad of socio-emotional needs and conditions of survival often alien to the academic community. Counseling provides a vital service to the student and the institution. It facilitates the student's transition from the secondary school to the higher education environment. At the same time it provides the institution with a vehicle for the assimilation of the special student into college life (Martyn, 1968).

The counseling service's major objective with respect to the special student is to help him adjust to the life-style and academic pressures in institutions of higher education. This task is made even more difficult by the fact that the social life on most campuses is geared to the needs and interests of the white middle class. Social alienation is one of the major problems counselors face (Wisdom and Shaw, 1969). Add to this the fact that students are poorly prepared in study skills, management of time, and attitudes towards classwork and the problem becomes monumental.

As with every other aspect of the non-traditional student's education, the counselors need to possess considerable sensitivity to the particular circumstances of these students. Very often the regular college counselors lack this sensitivity to the social/personal problems and academic needs of the "new student" type (Dispenzieri et.al., 1968). Universities and colleges responded to this problem by recruiting minority staff to serve as counselors.

But often they selected personnel solely on the basis of skin tone rather than qualifications (San Juaquin Delta College, 1971).

Although the presence of black counselors alleviated some of the difficulties of providing services for the special student, at times the nature of the role of counselors within the institution negated their impact and effectiveness. Occasionally reports of student hostility and distrusts, a too close identification between student and counselor, or guilt on the part of the counselor are associated with black counselors dealing with black students (Wisdom & Shaw, 1969). The literature suggests that such incidents could be avoided if counselors concerned themselves with their clients from a more objective perspective than race. In most cases, however, individual counselor responsiveness and the desire to provide those services necessary to maintain minority students in HEOP programs provided the impetus for successful counseling services.

A more general problem in counseling is the conflict between the reality known to the special student through his experience and the attempt on the part of the college personnel to modify his attitudes rather than assist in the development of internal mechanisms in the student for coping with existing situations (Gordon and Wilkerson, 1966).

Techniques and features of counseling should change according to the needs of the individual client. Some HEOP programs have made seemingly successful attempts to address this issue through innovative practices such as peer counseling. The following section presents and discusses some counseling services provided by HEOP programs.

Counseling Techniques

Individual counseling is the standard method used in working with the emotional problems of the student. Since some students have had unpleasant

experiences with this technique in the past, it has been necessary to re-educate students to the benefits of this service. While I do not mean to disparage the value of the professional social worker, these professionals dealt prominently in the negative image of counseling services held by many students.

Counselor services in many programs channeled their efforts into group counseling models. This format helped to combat the hesitancy on the part of many individuals to solicit and utilize counselor services. Some programs even made this an integral part of the overall required activities of the students. In some instances group counseling became an adjunct part of the regular instruction (U.S., DHEW, 1970). That is, student concerns, self-doubts, and student/teacher relationships were aired in the classroom during or after class meeting. Group counseling creates an atmosphere of openness and camaraderie which contributes to identification with the program and its objectives.

Using the peer tutoring program as a model, counseling services adopted the idea of using student peers as counselors (Lahn, 1971). The success of this venture was equally rewarding as that of the peer tutoring programs. Peer counselors were students, preferably minority students, who shared many of the social and cultural attributes of the HEOP student. In the selection of the peer counselors, considerable emphasis was placed on the maturity and responsibility of the candidate. Peer counselors were often assigned in groups under the supervision of a regular professional college counselor. Again, as with peer tutoring, the rationale behind the establishment of peer counseling programs was the belief that responsible peers are better able to identify and empathize with certain kinds of problems than the professional college counselor.

In order to combat the insensitivity of regular college counselors, "sensitivity training" became a popular in-service training experience. Peer counselors at times participated in these sessions to give representation to the attitudes and sentiments of the Opportunity students.

Evaluation of Counselor Services

The impact of counseling is somewhat difficult to determine from the literature. Many documents attest to the advantages of having minority counselors and peer counselors for HEOP students (Lahn, 1971). There is evidence that counseling contributes to student development. But like all other indices employed in the assessment of the effectiveness of services, the criteria are generally global and highly inferential. That is to say, determination of a counselor's effectiveness is weighed against his caseload, counselor-student contact time, number and kinds of problems handled and resolved (rarely used however), GPA of caseload, or retention and school completion record of one's caseload. The quality of the counseling process and the subsequent personal development of the student is rarely considered worthy of examination. This may be in part due to the difficulty in specifying and measuring the qualitative domain, and also because institutions are "statistics conscious" (Gordon, 1972).

A major contribution to the relative success of counselor services in Opportunity programs is the reduced caseload. Unlike the usual college counselor, counselors in HEOP programs very often carry less than half the cases required of the college counselor. This allows for greater individual attention. However, this arrangement is somewhat deceptive since the HEOP student usually has more personal adjustment concerns and survival problems than the average college student. Therefore, HEOP counselors may

invest more time resolving the problems of his caseload than the regular college counselor with twice the number of students. This is an area in need of further investigation when HEOP counselor services are evaluated.

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Testing and the HEOP Student

The Use of Tests for Admissions

The literature of testing in HEOP deals extensively with all of the problems and issues of testing the minority student. Reports concentrate on the predictive validity of measures used in the admissions and placement processes (Cleary, 1968). The predictive measure used in most admissions is the Scholastic Aptitude Test (Brown, 1964). High school grades is another index for projecting the academic success of students. Using SAT scores and high school grades, institutions feel they can in part determine the risk factor in accepting students. Some institutions, and Opportunity programs in particular, add "homemade" tests to a battery of exams to profile skill proficiencies.

But it is, for the most part, the SAT that dominates the traditional admissions selection process. The criteria for admissions are often modified in the admission of the Opportunity student. Since most minority students are expected to score lower on standard tests, admission standards are waived or lowered. The Opportunity program is expected to compensate for performance deficiencies through remediation services, special courses, and counseling (University of New York State, 1973).

An outstanding issue in many of the reports dealing with testing is the controversy over the relevancy of the tests. HEOP staff and students frequently question the fairness of standardized tests for minority students. Tests are considered culturally biased--slanted in favor of the educationally advantaged who are usually members of the white middle class population. The majority of HEOP students are minority group members from low-income families with distinct educational disadvantages. Consequently, the

performance yardstick is perceived as grossly inappropriate. Test content is considered irrelevant and unrepresentative of the cultural and social background experiences of the minority student. The verbal content of tests is particularly cited as a principal area reflecting this measurement deficiency (Gentile et al., 1970.) Discriminatory practices in the admininstration, interpretation, and use of tests are other areas in which minority students' performance is effected. A report by the Educational Testing Service indicates that the physical and psychological atmosphere of test administration has significant influence on performance (Flaugher, 1970).

Some investigators feel that in spite of the low scores obtained by minority students on standard measures which many attribute to cultural and economic bias in the tests, they are still good gauges of academic achievement (McKelpin, 1965). In many institutions, therefore, reliance on the SAT and high school grades continues to be the general admissions policy. In one study, high school averages were found to be the best predictors for both black and white students (Horowitz, 1972). The SAT-Verbal predicted more accurately for white than black students. It was certainly a poor measure for HEOP "risk" groups (Cherdack, 1971).

Many studies cite other factors as important variables in predicting the academic success of minority students. These include motivational factors such as interest and self-confidence (Flaugher, 1970). Similarly students who succeeded in spite of low test scores attributed their achievement to personal discipline, good study habits, the influence of parents, teachers, and counselors, plus a sheer determination to overcome odds imposed by skills deficiencies (Brown & Henderson, 1967; Brown & Russell, 1964). Apparently these factors coupled with good programmatic support services can invalidate the predictions of standardized tests.

The Use of Tests for Diagnosis

There have been few studies done on the use of tests beyond initial selection. Although a distinction is made in the testing literature between admissions testing and diagnostic testing, it is the latter area that requires further study and test development.

A HEOP staff requires extensive information on the skill deficiencies of students in order to specify proper remediation services. High school grades and SAT scores provide insufficient information for this purpose. Consequently other "skill specific" diagnostic tests are added to the continuing process of skill-building instruction. The interdependence of diagnostic tests, curriculum, and instruction is crucial to the establishment of appropriate remedial assistance.

Evaluation of Test Usage

The testing controversy for minority populations will persist for some years to come. Research in this area has been initiated, but considerably more extensive work is still to be done. This does not eliminate the current dilemma facing HEOP staff who must assess student skills, nor does it reduce the problem of establishing equitable admission standards. The general sentiment is that in developing educational Opportunity programs, tests for minority students must be carefully weighed for their utility. Until such time as confidence is restored in the fairness of measures administered to diverse populations, improvised testing along with standardized tests will form the assessment procedure for Opportunity programs.

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Institutional Program Policies

Admissions

Admissions policies in higher education have evolved into a complex process over the past fifty years. The pattern for admissions for some institutions has been clearly observable, while others have systems which border on obscurity in terms of observable patterns. Thirty years ago 14% of 18-21 year olds attended college. The 1970 census indicates that approximately 50% of 18-21 year olds attend colleges or universities. (Wing and Wallach, 1971). This increase in applicants and student enrollment has caused considerable changes in the admissions policies and processes.

Today college attendance has become a prerequisite for competition in the job market. The university has taken on a more central function--the preparation of people with the academic and coping skills demanded by the labor force. As demands for specialization increase in the general society, so the demand on educational agencies to supply qualified and adequately trained personnel increases. Thus, the college education gains more importance as a means for attaining a particular professional status and solidifying or altering one's social status.

Given the importance of a college education, admissions policies have became increasingly more important to those who seek access to the white-collar job market and social mobility. Admissions policies affect the poor and members of minority groups profoundly. In the past, and even now, these policies have worked to exclude them from the advantages that accompany higher education. With the inception of compensatory programs the issue of admissions policies came to a head and many policies were challenged

for their rigidity and exclusiveness. Educators and administrators realized the need to remove some barriers and to alter some criteria in order to increase minority and low-income enrollment. Some colleges adapted the new approach to admissions as an institutional policy; others used them as a secondary admissions policy applicable only to those acceptable to special programs (Cross, 1971).

Admissions policies are continually being analyzed by educators attempting to correlate specific criterion to college academic success. The advent of public colleges and increased availability of higher education initiated the meritocratic phase of admissions: Those students with above-average high school grades and college entrance examination scores were admitted. It was believed that there is a direct correlation between these criteria and academic success.

There are many reports that are critical of the serious relaxation of admissions requirements for "special" students. For example, the University of Illinois Special Educational Opportunity Program reported that a comparison of mean scores of regular and special students on two standard admissions tests (the HSPR and the SCAT) showed vast differences indicating "more restrictive (admissions eligibility) within the regularly admitted groups" (Aleamoni and Bowers, 1974). Further studies by Bowers concluded that measures of traditional students don't assess the abilities of the non-traditional student. The use of standardized measures provide admissions officers with inaccurate information for selection (Aleamoni and Bowers, 1974).

Research has identified the primary selection criteria of most institutions for the non-traditional student as being high school grades and pre-admissions test scores. Other types of predictors such as biographical.

data or status characteristics have also been utilized. It is the thinking of some universitities that this information will reveal the intelligence, aptitude, and ability of the individual (Wing and Wallach, 1971). When one reviews the literature on the admissions criteria of Opportunity programs, they seem very similar to the more general admissions practices. Biographical data, personal characteristics, achievement potential, and high scholastic and admissions test performance are the primary criteria for both. The only additional information utilized in Opportunity programs is the educational and financial facts that enable the student to be classified as disadvantaged.

The most significant change compensatory programs have brought has been the temporary advantage minority students enjoyed in competing for admission to colleges and graduate schools. During the 1960's there was a surge of non-white recruitment and blacks were sought and selectively admitted to regular and special programs. It should be noted that being black often had a positive effect on admission, but a negative effect on status. For many universities and colleges, admitting a minority student was synonymous with admitting someone academically or culturally deprived. This assumption then limited admissions into regular college programs and siphoned all new minority applicants into the special programs.

Financial Aid

Financial aid practices for students in compensatory programs have varied among institutions. The literature clearly reports that most financial assistance has not been adequate, given the composition of non-traditional students and their personal and family-related responsibilities. Most often students have had to seek additional sources of assistance, be it part-time employment or loans.

Most students' families are unable to assist them financially. College grants provide funds primarily for tuition and books, and only rarely for living expenses. The expense to the family of losing a potential working member places additional burdens on the student. The sense of family responsibility and the knowledge of the sacrifice necessary because of college attendance cause quite a few students to drop out during the first two years of school.

The correlation between family income and college attendance seems high (University of New York State, 1973). When the factors of family income and minority status are considered, the issue becomes even more complicated. As mentioned earlier, students from the lower income groups are less likely to attend college due to financial burdens on their families. The resources available for assistance have not adequately solved this problem. The federal financial aid programs, with the exception of Educational Opportunity Grants which are aimed toward needy students, are primarily geared toward high ability students, who are usually of the middle-income stratum. Besides the limited funds available to the seriously needy student, federal moneys are accompanied by strict guidelines on maximum amounts available to an individual student. This forces admissions officers and financial aid officers to exclude the most needy students. For example, an institution may receive applications from four students, all needy, but in varying degrees. One student may need $2,000; two may need $500 each; and another may need $1,000. Given the limited money available, the institution would be more likely to divide the funds among the three less needy students than give the most needy student the entire aid he or she needs (CEEB, 1972). These practices

greatly hurt the most needy student's chances to obtain the assistance he or she requires to attend college. The offer of a loan would further reduce his chances since most low-income students avoid accruing debts the size of tuition expenses.

State financial aid, though slightly more flexible in its guidelines, has also been aimed at high-ability students. It is less likely to accommodate low-income students and is offered to state residents only. According to most of the literature, more students from high-income families become eligible for grants and low-income students receive loans and work-study assistance (University of New York State, March 1974). Some states have devised programs which attempt to meet need and ability--the most successful being Massachusetts, Michigan, Minnesota, New Jersey, and New York.

Unfortunately, financial aid programs have been affected by the recent national recession. The government's attempts to curtail spending have reduced the amount of available funds for education on all levels. This obviously hinders those persons lowest on the scale of financial resources, thus affecting the overall ability of minority and poor persons to obtain higher education. Reductions in appropriations by Educational Opportunity Grants and National Defense Loan have caused universities and colleges to reduce their support for special programs. Most institutions created programs as a direct response to the availability of federal and state funds. This relationship between money and program existence poses a serious threat to special programs. If individual institutions are not committed to the purpose of Opportunity programs, their response to a loss of funds will naturally be the systematic demise of such programs. Even those institutions committed to education of the disadvantaged may have too many serious financial limitations to continue their programs.

Funds will simply be unavailable from regular operating budgets to cover the expense of educating the non-traditional student (Astin et al., 1972). It is clearly more expensive to operate such programs due to the additional remedial courses, supportive services, and faculty and staff needed. Poor response from state legislators and boards of trustees to requests for additional support and general public opposition to the use of public funds to support special programs further reduces chances for survival.

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Conclusions

The most outstanding fact in a review of developments in Higher Educational Opportunity Programs is the lack of rigorous evaluative data. Most of the information in the literature is of a descriptive nature, generally characterizing the objectives of the program or the needs of its special students. Research in the effectiveness of teaching or counseling techniques for special students rarely presents any systematic empirical observations. Without such information we are left to our own inferences from gross measures (e.g. descriptive statistics).

Unfortunately, the controversy which accompanies the establishment of educational opportunity programs forces the advocates of such programs into the untenable position of defending their worth and success with little supportive evidence. In a statistics-oriented bureaucratic society, the fiscal watchdogs of funding agencies will demand more than anecdotal human interest stories as proof that money expended has been well spent.

The dilemma for Educational Opportunity Programs is how they are to produce substantial evidence of their contribution when their funding does not provide for that sort of research. The budget allocations for HEOP hardly cover the cost of providing enough staff to monitor general student needs, much less any substantial evaluative research enterprise. Yet most funding agency and grantee contracts require the submission reports. Little forethought is given to the manpower needed to generate report data and write it up.

Moreover, many such evaluative reports seldom find their way into the archives of libraries. Consequently, a review of the literature must be tempered by the realities of the limited capability of many institutions to

produce reports and of HEOP programs to provide us with extensive information on the successes and failures of their educational endeavors.

HEOP serves a vast number of poorly prepared students. The credibility of these programs frequently hinges on their ability to prepare them for college in a limited amount of time. As can be observed in the area of curriculum and instruction, there are considerable questions of efficacy left unanswered. The unprepared student brings many pedagogic challenges to any instructional staff. Still unanswered are "What kinds of instructional techniques facilitate and expedite the acquisition of basic skill by HEOP students?" "How can we cope with the motivational problems caused by students more mature than the level of their skills and the requirements of their materials?" "Are small classes and low teacher-student ratios as beneficial as we tend to believe?" "What is the importance of human-relations dynamics in the classroom environment, particularly since the threat of student alienation looms potentially large in the atmosphere of traditional academia?" Most important in a discussion of curriculum and instruction is the question: "What proven models are available which clearly allow us to equip unprepared students for the rigors of the college-level work?"

Coupled with our questions on curriculum and instruction is the equally unclear position of scholars in the literature on the effectiveness of counseling. The reports on peer counseling are informative and argue for the continued utilization of this mode of assistance. In some reports the race of the counselor raised the issue of conflicting identification, but limited assessment of which is ultimately more effective--racial identification or human empathy--still leaves us ill-advised for the future. Equally unspecified are the counselor skill requirements for working with the

non-traditional student. When is individual and group counseling effective and with what type of format? In summary, the real impact of counseling is still in need of a comprehensive evaluation.

In closing, I would like to reiterate my position that all of the major program components of HEOP are in need of systematic evaluation. This should not be misconstrued as support of evaluation solely for accountability, but rather an argument for evaluation for the purposes of development and refinement of this unique educational process. The assignment of most Educational Opportunity Programs is awesome. To add the responsibility of research and evaluation chores to these program while providing them with negligible funds for that purpose is unjust. It is therefore equally unjust to expect exacting information on pedagogic techniques and their effectiveness.

Greater support of research and development in HEOP programs is essential to determine the true value of this major educational enterprise. It is strongly recommended that assistance for programmatic research become an integral part of HEOP programs.

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