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## A Descriptive Analysis of the Characteristics and Achievements of Black Upward Bound and Black Non Upward Bound Students at Western Michigan University from 1971-1976

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A DESCRIPTIVE ANALYSIS OF THE CHARACTERISTICS AND  
ACHIEVEMENTS OF BLACK UPWARD BOUND AND  
BLACK NON UPWARD BOUND STUDENTS  
AT WESTERN MICHIGAN UNIVERSITY  
FROM 1971-1976

by

Luther Roseman Dease

A Dissertation  
Submitted to the  
Faculty of The Graduate College  
in partial fulfillment  
of the  
Degree of Doctor of Education

Western Michigan University  
Kalamazoo, Michigan  
April 1979

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Luther Roseman Dease

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## Chapter 1

### GENERAL STATEMENT OF THE PROBLEM

Historically, education after high school was planned for the elite. Students who satisfied the academic and financial requirements for admission were admitted without reservations. For those who did not meet the necessary criteria for admission, college was beyond their reach.

The principle barriers that kept many students in general, and Blacks in particular, from entering into higher educational institutions were: (a) poor educational preparation and/or college acceptance; and (b) insufficient financial resources to defray college expenses. Consequently, Blacks and other minority group members have been disproportionately represented in institutions of higher learning (Green, 1969).

The decade of the sixties was the beginning of an era that witnessed a new attitude in America towards the education of its minority population. Upward Bound, an innovative idea which began as a part of the Office of Economic Opportunity and the "war on poverty," was an attempt to salvage thousands of underprivileged youngsters who were high in academic potential but low in aspirations.

The inequities of the national educational system with respect to the poor and the disadvantaged students have been well documented. A wide range of literature, from the narrative of Michael Harrington's The Other America to the data and controversy surrounding James S.

Coleman's Equality of Educational Opportunity, presents a dismal picture of failure. The high percentage of high school dropouts and pushouts reflects the inability of the social system generally and the educational systems particularly to fire the imagination of this group of students (Greenleigh Associates, Inc., 1970).

#### Description of Upward Bound

Historically, the Upward Bound Program began as a series of seventeen pilot projects funded under a Carnegie Commission Grant that served 2,061 students at a total cost of \$2,400,000. These summer programs were designed for low-income students who would enter college the following September. These projects were rated so successful that the model was formally adopted by the Office of Economic Opportunity (OEO) and a year-round Upward Bound Program was established on a nation-wide basis in June, 1966. Western Michigan University was one of the 215 colleges and universities initially funded.

On July 1, 1969, responsibility for the program was transferred from OEO to the U. S. Office of Education (USOE), Department of Health, Education and Welfare. As of 1976, there were 355 institutions participating in the program in every state in the country, serving approximately 29,259 high school students with a budget of \$38,237,532. (Bureau of Post Secondary Education, 1976).

Program Rationale. Designed as part of a salvage operation to identify a segment of the population which ordinarily would not have the opportunity to pursue education beyond high school, Upward Bound was intended to enable these students to escape poverty through

education, a route too often closed to them. It was primarily a pre-college program designed to generate the skills and motivation necessary for success in education beyond high school among young people from low-income backgrounds and with inadequate secondary school preparation (Federal Register, May 4, 1976).

Structure. Funding for an Upward Bound program is achieved when accredited colleges and universities submit a proposal and budget that outlines in detail their institutional plans to implement the improvement of academic preparation and motivation of potential Upward Bound students. These plans include a curriculum designed to assure postsecondary educational success by developing positive attitudes toward learning, encouraging critical thinking and effective communication, and providing tutorial assistance and exposure to cultural activities.

Clientele. The program is designed to service youth from target high schools who have completed the tenth and eleventh grades, but the Office of Education will consider proposals written to assist students who have completed the eighth grade. Students in the program range in age from fifteen to eighteen. This consideration is usually granted in cases documenting a severe dropout rate in the target area high schools. The Upward Bound guidelines urge projects to work closely with students for at least two years, a practice which affords projects time to effect positive changes within the student participants. Students selected for the Upward Bound Program must meet the economic criteria. The income criteria tables are shown in Appendix B.

Program Operation. The typical Upward Bound Project would include two phases: (a) summer enrichment and (b) academic year follow-up. The summer phase is a six to eight week residential program located on a college or university campus. Participants receive (a) instruction in basic academic skills, such as reading, writing, listening, public speaking, mathematics, and science; (b) educational guidance, personal and career counseling; (c) seminars, study skill classes, tutoring; and (d) cultural experiences such as theater, concerts and visits to museums and art shows.

The academic year phase has one basic goal: to increase the academic performance and motivation levels of eligible enrollees and maintain the pursuit and acquisition of academic achievements. High school counselors and instructional staff usually work in concert with a member of the Upward Bound staff to enable students to follow through on meeting assignments and various deadlines that are required prerequisites to enter college. The Upward Bound director continues to maintain contact with students by holding tutorial sessions, counseling sessions, Saturday classes and/or meetings and arranging special cultural activities for participants.

Because of their limited educational experience, many Upward Bound students have not seriously entertained the option of college or other postsecondary education. Of those who may have, many do not know how to actualize the possibility (Ladner, 1971). The Upward Bound Project broadens educational horizons for these students by effectively exposing them to realistic opportunities for a college education. The Upward Bound intervention helps students develop a greater educational stake: greater personal investment

in the educational process, and greater personal responsibility for self discipline and control through activities such as work which enables students to translate their growing stake into concrete, individual action.

#### Introduction of the Problem

This study was designed to research the question: Do Black students who have been identified as low-income, underachievers in high school and then recruited into the Upward Bound Program, at the completion of the ninth grade, and provided special assistance for the improvement of their motivation and academic skills, perform better academically in college when compared with Black students who entered college through the Martin Luther King Program for marginal high school graduates or regularly admissible Black students?

The Upward Bound Program is an intensive and extensive pre-college experience for low income students. The Martin Luther King (MLK) Program is an extensive program of support and services to low income, marginal Black students who have been admitted to college. Some Upward Bound students, upon admission to college, seek out the special support resources of the MLK program and others do not. Figure 1 describes the two programs in terms of their purposes, objectives, personnel, services and financial resources. There are no special programs for regularly admissible Black students except those services and resources provided to the student body at large to which all students may seek and obtain access.

Figure 1

Description of Two Programs Serving Underachieving  
Black Students at Western Michigan University

| <u>*Upward Bound Program</u><br>(pre-college)  | <u>** Martin Luther King Program</u><br>(college)   |
|--|---|
| Origin: Summer, 1966   | Origin: Summer, 1978  |
| Annual Budget: \$135,000   | Annual Budget: Approximately<br>\$18,000  |
| <u>Purpose/Goal</u>  |   |
| Upward Bound is a college preparatory program designed to generate the skills and motivation necessary for success in education beyond high school among young people from low-income backgrounds and with inadequate secondary school preparation.                              | <p>The Martin Luther King Program is a special enrichment program for marginal college students. The program conducted by the faculty and staff at Western Michigan University has a threefold purpose:</p> <ol style="list-style-type: none"> <li>1. It provides educational opportunities for a significant number of minority students;</li> <li>2. It encourages marginal students to pursue higher education by providing an incentive and the necessary remedial assistance;</li> <li>3. It expedites routine procedures and operations for admission to the University for students of minority extraction.</li> </ol> |
| <u>Objectives</u>  |   |
| <ol style="list-style-type: none"> <li>1. To assist high school students in the development of both the attitude and skills necessary to achieve success in an institution of higher learning;</li> <li>2. To make both high school and university personnel aware of</li> </ol> | <ol style="list-style-type: none"> <li>1. To provide assistance with the selection of courses commensurate with student interest and abilities while still fulfilling the requirements of the university;</li> <li>2. Students who may need assistance with group work;</li> </ol>  |

Figure 1 continued

the abilities, talents, and contributions of Upward Bound students;

3. To make local communities more responsible for the education of the total population;
4. To cultivate a significant number of students with special characteristics who are able to affect their environment through the democratic process.
3. To supervise the program's study center and insure that the necessary time is devoted to academic activities;
4. To provide special counseling to students with problem situations.

Personnel

| <u>Position</u>           | <u>Percent Time</u>  | <u>Position</u>                       | <u>Percent Time</u> |
|---------------------------|----------------------|---------------------------------------|---------------------|
| Director                  | 100%<br>Year-Round   | Director                              | 100%<br>Year-Round  |
| Secretary                 | 100%<br>Year-Round   | Assistant                             | 100%<br>Year-Round  |
| Resident Coordinators (5) | 10%<br>Academic Year | Work Study Students                   |                     |
|                           |                      | Graduate Assistants                   |                     |
|                           |                      | Counselors<br>(Total 8-12 Year-Round) |                     |

Summer Only

|                              |           |
|------------------------------|-----------|
| Instructors                  | 100%      |
| Tutor Residents              | 100%      |
| Counselors<br>(Total 2)      | 100%      |
| Consultants                  | As Needed |
| Student Teachers<br>(4 to 6) | As Needed |

Figure 1 continuedProgram Services

To work with the four target high schools:

The services offered by the college program are basically supportive:

- |   |  |
|---|--|
| <p>1. To provide an academic program including tutorial assistance, emphasizing skills in reading, writing, mathematics and science which are essential for post-secondary education and in which participants are deficient;</p> | <p>1. Tutoring, academic and personal counseling, vocational testing and career planning.</p>  |
| <p>2. To provide career education, academic guidance and counseling;</p>  | <p>2. Because the first year is crucial, primary attention is focused on the individual student's needs or total development as they relate to the college experience.</p> |
| <p>3. To assess and document the educational needs and potential for secondary success through the use of standardized measuring instruments, g.p.a.'s and other evaluative methods;</p>  | <p>3. Financial assistance efforts are coordinated with those of the Financial Aid Office to assure that all eligible students receive assistance.</p>                     |
| <p>4. To prepare and motivate program participants with a cultural enrichment program.</p>  |  |

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\*Source: 1977-78 Upward Bound Proposal submitted to the United States Office of Education

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\*\*Source: 1976 New Directions -- A special programs brochure and information obtained from the Director of the Program.

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Success in college for the low income student is contingent upon admission, economic support and quality academic performance. Therefore, two additional questions were raised to explore the performance of Upward Bound (UB) students upon admission to the postsecondary institution. These questions are stated below.

1. Do former Upward Bound Project college students perform better academically than non-Upward Bound, low-income underachieving students?
2. Is there a difference in the attrition rate of Upward Bound Project students and non-Upward Bound students who entered Western Michigan University?

Figure 1 showed the differences and similarities between the Martin Luther King Program and the Upward Bound Program. There are several factors which appeared important to note:

1. The Upward Bound (UB) budget is at least 7 times larger than the MLK budget.
2. The UB Program is an intensive pre-college experience over a two year period; the MLK Program provides intensive services during the first year of college.
3. Neither program offers direct financial aid to students during college but the UB Program supports the students in the intensive summer session.
4. Both programs monitor student achievement.
5. The UB Program helps to prepare students to perform well in order to get into college and the MLK Program supports performance in college.

General university resources for regularly admissible students include counseling center, reading center and special programs within departments and colleges. The university resources are similar to most university systems and do not require special attention for this research project. The primary concern of this investigation is the differences, if any, between a pre-college program and a college program of assistance to low income, low achieving Black students in their college persistence and performance.

#### Hypotheses

The hypotheses which emerged during the planning of this study were both nondirectional and directional based upon the literature

and the observations of this reporter.

- H<sub>1</sub>: Upward Bound participants will stop out of college at the same rate as non-Upward Bound students.
- H<sub>2</sub>: Upward Bound students will stay out of college for a shorter time than non-Upward Bound students.
- H<sub>3</sub>: Upward Bound participants will complete college at the same rate as non-Upward Bound students.
- H<sub>4</sub>: Upward Bound graduates will select science majors at a higher rate than non-Upward Bound students.

These hypotheses were developed from the questions and the specific objectives for the Upward Bound Program. The hypotheses emphasize variance or lack of variance in terms of program participation. This assumes that the Upward Bound students and the non-Upward Bound students are indeed similar prior to college entry.

Upward Bound has three major objectives:

1. To decrease the dropout rate from high schools by increasing the retention rate of its student participants.
2. To generate the skills and motivation necessary for success in education beyond high school.
3. To increase the rate of entry of Upward Bound students into postsecondary institutions.

The net effect of achieving these objectives should be to support the hypotheses listed above. Individual variations within the group might account for some of the success results in the program, therefore, individual and program data were studied. The variables selected for data collection in this study have proven important in understanding individual differences in academic achievement. Each of the variables is defined below and related to the appropriate hypothesis.

1. College completion is successful performance in a course of study and the receipt of a bachelors degree. Completion of college is an important factor in this study since the intervention into the student's educational process occurs at least one or two years prior to high school graduation. If the student is able to sustain the motivation, aspiration and achievement over a five or six year period and obtain a college degree, then the Upward Bound Program is indeed achieving its objectives. If the student does not carry over these factors, then programs such as the Martin Luther King Program need to be supported vigorously in order to help maintain these students in college and to support their completion of work. As a "salvage" operation, Upward Bound supports students to get into college and has an ethical interest, if not programmatic responsibility, in seeing that students complete college. This variable is related to Hypothesis 3.
2. Undergraduate major -- The course of study selected by college students categorized by science and non-science and related to Hypothesis 4.
3. Stop-out (number of semesters out of school) -- The term stop-out was used instead of drop-out because the former concerns itself with re-entry after having stopped-out for one semester or more, while the latter connotes a cessation of education altogether. In terms of the objectives of the UB and MLK programs, participating students should be more inclined to remain in college than regular students and further, should be more inclined to return to college if they are forced or choose to leave prior to graduation. In turn, if the stimulation is provided early in the educational process, the net effects may be expected to be more lasting and influential in decisions made at college age. Therefore, the hypothesis suggests that UB students will return to college after a stop-out period with greater frequency than non-UB students.
4. Drop-out -- Time out of college without planning to return.

#### Limitations of Study

The study is exploratory and descriptive of college performance for the two groups of students and is an assessment of some of the effects of two systematic support programs whose major differences

are in the timing and intensity of their intervention into the lives of the students they serve.

The study is also limited to Black students from four target high schools. The postsecondary institution attended by Upward Bound and non-Upward Bound Black students is Western Michigan University. Finally, the years included in this study are from 1971 to 1976.

#### Definition of Terms

A definition of terms pertinent to the investigation is provided below to give a clear and concise meaning to the study.

1. Upward Bound -- A pre-college preparatory program designed to generate skills and motivation necessary for success in education beyond high school for youth from low-income families who have academic potential but who have inadequate secondary school preparation.
2. Academic potential -- A capacity for success in post-secondary education, which is documented by standardized measurement instruments or other verifiable indicators such as written recommendations from professional educators, counselors or employees.
3. Target area -- An area having a high concentration of youth from low-income families, which will be served by an Upward Bound Project.
4. Target school -- A secondary school which serves students residing in a target area.
5. Postsecondary institution -- An educational institution in any state which admits students having a certificate of high school graduation and is recognized and authorized within such state to provide a program while in college.
6. Regularly admissible -- Students who attended college without having received the benefits of a pre-college preparatory program nor entered into a special program while in college.
7. College completion -- Receipt of a college degree at the bachelor level or its equivalent.

8. Socio-economic status -- Occupational status of the mother will be the indicator of socio-economic status. Educational level and income are also indicators but this definition will limit itself to one of these three occupational levels: (a) professional, (b) technical, and (c) laborer.
9. Undergraduate major -- Major curriculum as an undergraduate student.
10. Academic status -- A cumulative number of semester hours used to determine if a student is a freshman, sophomore, junior, senior, graduate student or beyond the graduate level. The academic year at Western Michigan University is considered to be two semesters, i.e. fall and winter semesters.
11. Pre-college academic experience -- Student involvement in a special preparatory program prior to college attendance.
12. Stopouts -- Discontinuous attendance in college, equal to or greater than one full semester out of college enrollment.
13. Entry year -- The time at which a student is formally enrolled at Western Michigan University from 1971 to 1976 are the years identified in this study.
14. Martin Luther King Program -- A unique supportive service program especially designed to assist marginal students in overcoming some of the obstacles they encounter upon entering the university.
15. Grade point average -- Point hour ratio conversion of letter grade to a four point scale: 4.00 = A, 3.00 = B, 2.00 = C, and 1.00 = D.
16. Economically disadvantaged students -- Students who meet the economic means test of the United States Office of Education and are from deprived backgrounds, with little opportunity because of pre-college preparation for success in higher education.
17. Equal access -- The guarantee that each student should be able to enroll in some form of postsecondary education appropriate to that person's needs, capabilities, and motivation.
18. Bridge program -- A six to eight week enrichment program for Upward Bound graduates prior to their first full semester of college.

19. Cultural exposure -- Field trips taken by Upward Bound students to historical sites, museums and artistic displays.
20. Poor preparation barriers -- The lack of necessary skills, in spite of financial aid, to achieve in postsecondary education.
21. Non-Upward Bound students -- Students who have the characteristics of Upward Bound students, but were not recruited from target area high schools.
22. Upward Bound students -- Students who are admitted into the Upward Bound Program.
23. Drop-out -- Time out of college without planning to return.

#### Significance of the Study

As of this writing, there has not been a formal research study conducted on the Upward Bound Program at Western Michigan University. There is very little research which describes and compares intra-group behavioral differences among low-income Black youth.

A review of the literature revealed that there has not been a study conducted at Western Michigan University (WMU) that involved a comparison of Black students from a pre-college program (Upward Bound) with Black non-pre-college program students. Both groups are from the same target high schools and possess similar characteristics.

This study will provide WMU, the U.S. Office of Education, Health, Education and Welfare, and other institutions of higher learning with information which might be used to look at the kinds of successes, if any, Upward Bound has had in preparing students for college. With these findings, it is hoped that WMU and other institutions

of higher education would be in advantageous position to plan and assist high schools to implement programs that will remove the poor preparation barriers, thereby, increasing the number of eligible college matriculants who would have equal opportunity and access to pursue their postsecondary education, maintain better persistence rates, and graduate from college in larger percentages.

This study is important to Black educators and others who are interested in and concerned about individual differences among Black students and designing more effective ways to support academic and occupational success for minority students within a majority context. For this purpose, the timing of the support (pre-college and college level), the intensity of the experience (six weeks of summer and one to two years of follow-up compared with one year of intense support and subsequent follow-up), and the duration of the support (two years or one year) become significant factors for educational planners and implementers to consider when designing support systems for low income, low achieving minority students.

It is the investigator's intention to utilize the findings and recommendations of the study to strengthen the academic phase of the Upward Bound Program, so that it may better serve students for whom completion of high school and college entry would not have been possible.

#### Summary

This chapter has described the purpose of the study, the statement of the problem, and the limitations of this investigation.

Important terms used in this study were defined and the significance of the investigation was tested.

Chapter 2 will present a selected review of the literature. The major sections of the review include (a) pre-college programs, (b) admission to college, and (c) college performance.

Chapter 3 will present the design and procedures used in the study. The major divisions of the chapter describe the design and procedures, setting, sources of data, selection of students and instruments used.

Chapter 4 will describe the analysis of the data in terms of the hypotheses listed.

Chapter 5 will present the discussion, summary, conclusions, implications of the findings and recommendations resulting from this investigation.

## Chapter II

### REVIEW OF RELATED LITERATURE

The purpose of this chapter is to present theory, practice, and research relevant to this investigation. To achieve this purpose, the materials were organized in terms of (a) pre-college programs, (b) admission to college, and (c) college performance.

#### Pre-College Programs

A basic assumption of this study was that pre-college experiences can and do increase the probability that low achievers will enter and succeed in college. This assumption was held particularly true for minority students who frequently lack the aspiration, motivation, opportunities and skills to enter and succeed in college. A systematic approach to pre-college experiences should then enable low income, low achievers to enter and succeed in college. This portion of the literature review supports the veracity of the assumption and the validity of the hypotheses through the documentation of successful pre-college programs for minority youths similar to those studied in this project.

In American society, education has been traditionally one of the most effective ways for ethnic and racial minorities to improve their economic and social status. Johnson (1974) emphasized the importance of an education for minority youth in the following:

My mother was a most foresighted individual. She knew that not only education but also opportunity had to be

available to me if I were ever to move our family's economic and social level at least one step higher. She knew that black people can never progress as a race if each generation is not given a chance to surpass the previous one . . . Have we broadened their horizons? Have they been motivated to move ahead in the black man's fight for freedom? Are they receiving the education they must have if they are to fill positions of responsibility in the future? (p. 34)

Another aspect of this concern with the importance of education is Astin's (1971) contention that students whose parents are highly educated obtain better than average freshman grade point averages. He further found in a study of 2,300 American colleges that income has no relationship to freshmen grades, academic aptitude, and college selectivity. The study further cites high school grade point average and sex as useful in predicting college performance. The most shocking revelation from this study was that more women drop out of college than men even through they receive higher grades.

Legislators as well as educators stress the importance of education for minorities. Speaking at the Mid-America Association of Educational Opportunity Program Personnel's Annual Conference in November, 1976, Congresswoman Shirley Chisholm (NY) made the following observations about postsecondary education:

Education remains for minorities and other traditionally excluded people in our society the best and most effective way of achieving career and personal parity. Most particularly, higher education continues to be the primary way in which black Americans and others have attained the advancements which bring them closer to an equitable position in relation to the larger society . . . Despite a tight job market, despite economic crises for blacks, the best route to increase earning potential in this nation and other measures of professional success continues to be the attainment of a college degree.

If it is indeed true that education is the primary route to economic and political parity, then pre-college programs must be able to demonstrate that they actually increase the potential for students to enter and succeed in college at the same rate as students who do not receive such support.

An investigation into research conducted at the pre-college level revealed a few that merit attention. However, the Upward Bound Program was the most widely researched of all pre-college programs. This investigator will summarize some of the earlier programs that the College Board has participated in or sponsored directly in a variety of demonstration guidance projects involving minority youth. (Hanford, 1976, pp. 15-20).

Demonstration Guidance Project. This project was initiated and conducted at a junior and senior high school with cooperative efforts of the New York City Board of Education and the National Scholarship Service and Fund for Black Students from 1956 to 1962. It was successful in demonstrating that levels of performance and aspiration of young people from disadvantaged backgrounds can be greatly improved by using special training techniques, special guidance, and enrichment of cultural background experiences. This project was the forerunner of what eventually became the Higher Horizons Programs in the New York City Schools. The results of this effort were an increase in the number of poor students who entered and succeeded in college.

Project Opportunity. Begun in 1964 and financed by the Danforth and Ford Foundations, Project Opportunity had as its purpose to increase the number of black high school student participants pursuing

postsecondary education. The purpose of this project is very similar to the mission of the Upward Bound Program. Participating high schools were selected on the basis of criteria that characterized disadvantaged schools. Many had critical dropout problems with a small percentage of students continuing their education beyond the secondary level. This project successfully motivated students to attend college by using methods similar to those used in the Upward Bound Program. A review of the literature gives the impression that the program ended in 1974.

Education Assistance Center. Initially receiving financial support from the College Board, this program started in 1967 as a pilot project devoted to counseling minority/poverty students, parents, and others participating in educational and vocational plans. This pre-college program was successful in increasing the number of minority and poor students who enrolled in postsecondary education and training programs. After 1972, the community was assigned to assume full responsibility for carrying on the project.

Project OPEN. This project, begun in 1967 under the initial auspices of the U. S. Office of Education, was conducted by the College Board office in Washington, D.C. Today it is the only one of the demonstration projects still operating. OPEN has a three-fold task: (1) to identify disadvantaged students capable of successfully undertaking postsecondary education; (2) to motivate and encourage these identified youth that education is within their reach; and, (3) to counsel students in setting goals and in helping them attain them. This program was assisted by a number of colleges and universities.

Project ACCESS. Begun in 1968 with support from the Ford Foundation, this project had as its goals to make available post-secondary opportunities for those students from minority and low income groups who wish to further their education and to assist them in gaining admission to college. A full time director was employed to carry out the assigned tasks. Guidance, research and test development were major components of this successful program.

#### Program Components

Through these demonstration and experimental programs, some innovative practices were developed that have since become integral in Upward Bound and similar pre-college programs. One of these practices involved tutoring. There was a tendency for some good intentioned educators to overlook the possibility of utilizing the student-help-student approach in counseling. Lewis (1976) cites as a case in point an Upward Bound and Special Services program at Jackson State University that used peer counselors. The director of the program stated that peer counselors are students who have a basic interest in the welfare of other students, show a responsibility toward the development of fellow students and have excellent rapport in informal relationships. The author took this approach a step further, stating that Black youth tend to be suspicious of counselors because so many of them have middle class value systems and are less able to work successfully with the underachiever.

Another practice involved the concept of the "high risk" student. It should be noted that the term "high risk" was not used

to describe the students mentioned in the programs cited above. This factor leaves the issue open to the question: Were only winners or the academically talented selected for these programs, even though they were demonstration by design? The vagueness of the selection criteria of some programs does not imply that the target population included high risk students. Williams (1968) states that the term "high risk" usually refers to an economically poor students who by traditional predictive standards is not likely to succeed in school. Upward Bound refers to these students as "academic risks" for college education; that is, their lack of educational preparation and/or under achievement in high school is such that they would neither have considered enrollment nor gained admission and pursued a successful academic career at a two or four year institution (Upward Bound Guidelines, 1977). This statement suggests that the Upward Bound Program is interested in this type of academic risk student.

Most research studies involving the education of minorities agree that assistance provided to minority students is primarily financial. In 1970, Cash reported that the initiation of programs such as "A Better Chance" (ABC), begun in 1964, placed poor students with academic ability and the motivation necessary to do competitive college preparatory work in boarding schools for their final two years of secondary education. Successful programs such as this one strongly support Cash's contention that education is no longer a privilege but a right. She urges educators to work in a concerted effort to fight for the academic survival of all students on all

levels of education. This is the basis for permitting students considered as high academic risks to pursue postsecondary education. The Cash study suggests that other key components of the successful pre-college program are intensity and isolation from communal distractors. The Upward Bound Programs take the students out of the home and place them on a college campus for a summer of intense work.

Banks and Finlayson demonstrated a difference of factors relating to success and failure in the secondary school. Such factors as parents' socio-economic status, family size, aspirations of both parents and children, and characteristics of the child, such as ability, motivation, and some personality traits, have all been shown to be associated significantly with school achievement in a wide variety of contexts. Ignoring or misunderstanding the influence of these factors has led to what Rowan and Mazie (1969) cited as a tragic waste of talent in this country. They contend that Upward Bound is salvaging some of this wasted talent by "turning on" the "turned off." They describe the program as seeking students high in potential but low in hope -- the would-be dropout, the academic failure. The underachiever must come from families who meet the low income criteria.

This review of the literature revealed that a large number of colleges and universities have developed their own programs to assist the underachievers and the disadvantaged. But Upward Bound serves a larger segment of the population across the nation and is the largest program of its kind, having been in existence since 1966.

Jencks (1972) views the Upward Bound Program as a creative and innovative effort to raise students' educational attainment. His rationale is based on several observations: (a) the Upward Bound Program takes students who seem to be on their way out of the public school system and shows them how to survive in high school; (b) it assists them in seeking college entry; and, (c) it encourages students to view themselves and the world in ways different from the traditional values and practices that have been conducive to their low self-esteem and lack of academic success. Jencks further recommended that Upward Bound receive increased funding to continue the job it is doing. This investigator supports this recommendation wholeheartedly.

The literature on pre-college experiences for low achievers from low income families of minority and poor students suggests rather clearly that an intense pre-college experience with follow-up can increase the number of students seeking and obtaining college entry.

#### Admission to College

The assumption that a pre-college experience will increase the likelihood of minority students with low aspirations and achievement seeking college admission is borne out by studies and reports reviewed in this section.

Crossland (1971) reported that Black college enrollment has more than doubled in the past five years and that the number of Black college students has increased almost twice as fast as the

total college enrollment. Crossland makes the vital point that Blacks are still grossly underrepresented in postsecondary institutions at a time when they need to be overrepresented. John Egerton (1968) gives further evidence for despair. He claimed that the U.S. Census Bureau's figures are "grossly inaccurate" and distorted.

Although the present study is mainly concerned with Blacks in predominantly white institutions, this investigator is compelled to discuss briefly the plight of the black colleges and the most pressing dilemma confronting most of them. The traditionally black institutions are caught up in a serious situation. At a time when financial support is desperately needed for survival, their major argument for those resources are being siphoned off into predominantly white institutions. Being a product of such a black institution, this investigator is alarmed about the further continuance and existence of predominantly black institutions because it is essential that black youth have access to both predominantly white and traditionally black institutions in their pursuit of higher education.

Crossland (1971) discusses four problems in regard to white colleges and universities as summarized below:

First, these schools are faced with the fact that black students generally receive poor high school preparation. Second, minority students require full financial support if they are to attend them. Third, the distances of many white schools from areas of black concentration decreases the possibility of large minority enrollment. Fourth, because they are less well prepared, minority students must be even more strongly motivated than white students. (pp.51-72)

The disadvantages black students are forced to overcome are the direct result of a society "that classifies people and determines their worth according to skin color." Byas (1974) also revealed that many students, whose low performance is determined by conventional scales of grade point averages and test scores, can be motivated to higher levels of academic performance and can be strengthened in areas of weakness while still in school. Indeed, this investigator's experiences bear out this observation. He has witnessed low-achieving high school graduates whose academic performances were not a true reflection of their potential in college classes achieve equal status with their more privileged classmates, a phenomenon usually apparent after one year of college completion.

Those students who drop out of school at any level are a serious problem. Austin and Walls (1974) did an intensive study on dropouts in Muskegon County. They cited several major factors involved in the dropout problem. From the standpoint of the school they are: (a) reading retardation, (b) grade retention, (c) low intelligence, (d) negative self-image, and (e) family attitude. They further state that potential dropouts can be identified as early as elementary school. The alarming part of this study is a state of Michigan survey that lists the dropout rate in 1971-72 as 40,443 students from a total population of 627,872 in grades 9 through 12. (Austin & Walls, p. 26)

Brown (1976), who is referred to by this investigator as the "granddaddy" of special programs, conducted a study of a Developmental Plan for Recruitment and Retention of Minority Students. He stated that there is a significant relationship

between the influence exerted by people in the life space of black students and their attending college through the special admission program. Family, friends and peers exert an important influence on student aspiration and achievement.

Brazziel (1970) perceives the guidance counselor's role in getting black students into college as essential. A key factor as viewed by Brazziel is to eliminate the differences between the races in preparation for college and to secure the scholarships and grants necessary for enrollment. Close to a million blacks are now enrolled in college according to Brazziel. Master counselors are needed to do the job, both to work with students and to press for more federal aid in this area.

One of the primary reasons for attending college among black students is to prepare for life employment and increased earning potential. A California report on unequal access to college addressed itself to the choices high school graduates make and how these decisions correlate with family income, the ethnic background and academic achievement. The examination was based on data collected on the personal characteristics and post-high school activities of 1,600 graduates of twenty Los Angeles high schools. Analysis of the data revealed substantial inequality of post high school opportunities between graduates of high schools serving low-income areas and graduates of high schools serving high-income areas. Actual post-high school choices of graduates revealed similar inequalities. Graduates of high schools in high-income areas are four times as likely to enter the University of California and twice as likely to attend the State University and colleges as are low-income graduates (p. 2).

Equal access into higher education at Western Michigan University has undergone several dramatic changes since 1971. As evidence of its commitment to equal access and opportunity in higher education for minorities, Western's administration appointed in 1971 an all-university Committee on Undergraduate Education (CUE) which made the following recommendations (which were part of the CUE Report):

1. A sizeable beginning freshman group -- at least 10-15% of the undergraduate student body -- should be admitted to the university each fall. The number of students involved should be relative from year to year, with changes, if any, made gradually and with sensitivity to the consequences for programs and personnel.
2. The quotas for admission of special groups of students -- including, for example, members of minorities -- who qualify for entrance by factors other than previous academic achievement should be established for each fall semester. Such students not admitted at that time should be encouraged to enroll during the winter semester or spring term.

On February 26, 1973, the final report from the Minority Students' Programs Committee was submitted to the Associate Vice President for Academic Affairs. The committee was assigned several tasks, among them to implement the recommendations in the CUE Report, with particular emphasis on those dealing directly with minority students. Some of the recommendations implemented were: (a) minority recruitment was increased; (b) the Office of Minority Student Services was charged with the responsibility of identifying and recruiting minority students; (c) a minority student scholarship program was established; (d) there was increased hiring of minority faculty; (e) the Center for Educational Opportunity was

established to render academic assistance to students for retention purposes; and, (f) curriculum changes were effected.

This literature suggests that admission to college is more than preparing the student for entry but also preparing the college for the student. Thus the hypotheses on student success assume both student and college preparation for success. With the efforts described above, one can infer that Western Michigan University was working to prepare itself for a non-traditional academic population.

Typical of programs and staff implementation and innovations occurring at many postsecondary institutions in response to this growing "non-traditional" student population, Western was simply following Egerton's recommendation in 1968 that each four year college and university adopt a "high risk" quota for the admission of disadvantaged students and provide remedial compensatory programs as necessary to raise these students to standard levels of academic performance. Emphasis heretofore had been on high achievement rather than high risk. Nevertheless, it should be noted that Egerton asserts that the most daring high risk programs seems to have resulted more from a concern of a single individual than from any other factor.

Postsecondary institutions in Michigan have, on the whole, put forth considerable effort in effecting equality of access and opportunity for disadvantaged students. Jursa delivered a speech at the Michigan Council of Educational Opportunity Program on May 7, 1975. Excerpts from his presentation are quoted from a copy given to this writer. On enrollment statistics:

By the fall of 1972, according to Civil Rights Compliance Report data, 11.4% of all Michigan college students were of minority backgrounds. Tentative figures from fall, 1974 enrollments indicate current minority enrollments in all Michigan colleges and universities stand at approximately 12% of total enrollment. This figure still remains short of proportionate representation, as does the percent of students from lower income categories (only 24.3% of entering freshmen in 1974 are from families with estimated incomes of \$10,000 or less), but improvement is being made (p. 2-3).

The Michigan State Board of Education is equally concerned with the problem of access to postsecondary education. In 1974, it issued a formal paper, "Equality of Access to Postsecondary Education," which set forth a series of recommendations ranging from an "open admissions" policy at all Michigan community colleges to extended support for financial assistance. This concern on the part of the state board and institutions of higher education has contributed greatly to the area of admissions for black students in the state of Michigan.

In summary, admission to college becomes a fact for low achieving, low income minority students, only when the student is prepared to seek admission and the postsecondary institution is prepared to grant it. Through the efforts of the Upward Bound Program and the CUE Committee, both the students and the university were prepared to help students succeed. Support by the university, persistence and academic success on the part of the student should therefore lead to no differences in attrition, performance and employability between Upward Bound and non-Upward Bound minority students.

### College Performance

The final phase of the three parts of the review of literature section will analyze the research that describes student behaviors in college.

If the college or receiving institution is prepared for the "academic risk" student such as those enrolled in Upward Bound, then the performance of these students should not vary significantly from regularly admissible students. The grade point averages, choice of majors, drop-out and stop-out rates should be equal or show no significant differences between groups.

Clark (1963) presented evidence that black students attending interracial colleges and universities are far less likely to drop out prior to graduation than are white students or black students attending segregated colleges. This significant finding resulted from a study entitled "The Negro Student at Integrated Colleges." Other findings were: (a) these students felt motivated to complete college; dropping out means a step backwards into the unspecialized labor force; (b) financial reasons led all others; (c) grades were average but 30% earned "B" averages or better, less than 10% graduated with honors, there was no relationship between family income and academic success; and, (d) academic success was found to be related to parents' occupational level.

Interested in exploring similar findings, the Research Triangle Institute (1976), under contract with the United States Office of Education, conducted a study of the Upward Bound programs. The major findings of this study suggested that (a) the program

increased entry into postsecondary education for disadvantaged students (71% of Upward Bound participants as compared to 47% of the comparison group); (b) the length of time a student is in the program is directly related to the probability of postsecondary enrollment; and, (c) the study revealed that about 76% of Upward Bound students beginning postsecondary education entered four-year colleges and universities as compared with 45% of the control group.

Nevertheless, Wright as quoted in an article that appeared in the Christian Science Monitor (1977) believes that statistics of growth don't tell everything about blacks' enrollment in college and that, on the contrary, the lack of money is the most significant deterrent to black enrollment and retention in college. He urges more scholarships, fellowships, and assistantships be provided to black students on the professional and graduate levels. Wright further asserts that the improved status of black college students is largely the product of the student assistance program of the Higher Education Act of 1965. On this assumption special efforts were made to increase educational access and opportunity in the professions, efforts such as the enrollment of 150 students at the Harvard Law School. It is now one of the largest black law school enrollments in the nation. Dr. Abromowitz (1977), cited from the same newspaper article, states that four year public colleges have a high dropout rate -- 43% of white students and half the blacks -- based on the freshman class of 1971, compared to private colleges which have a lower dropout rate. They retain their students better because they are more selective and they provide

supportive services to keep their students in school. In support of his contention, Abromowitz cited recent studies which indicate that blacks comprise 13% of students 16-21 years old, but that they are 19% of dropouts in this age group.

There are not many reports of studies that address themselves to the educational level of parents. Astin, who has been studying colleges and college dropouts for thirteen years, demonstrated in 1975 that particularly for blacks in white colleges, the mother's educational level is an important variable affecting children's educational attainment. Better educated parents provide experiences which tend to raise both the level and realism of their children's aspirations.

Magarrell (1977) reported that higher education is offering bigger economic payoffs to blacks than to whites. Economic incentives reflect new job market conditions, largely in government. A report from the U.S. Census Bureau was cited indicating that a young black man with a college degree can expect to earn 9% more than his white counterpart. This writer believes that the Census Bureau may be exaggerating a bit.

Three recent studies similar to this one and conducted by individuals involved in the education of blacks in higher education are noteworthy. Jackson (1976) reported on the following:

Grade Point Averages Earned: Low-income underachievers who participate in a pre-college program earned higher grade point averages during five of six semesters of their enrollment when compared to low-income, underachievers who did not participate in a pre-college program.

Attrition: Pre-college college participants are less likely to leave college for poor academic performance when compared to their counterparts.

Buagh (1975) reported the following:

Low Socio-economic Status and Degree: The investigation revealed that low socio-economic status and degree of intelligence did not directly affect whether a college education was desired or planned.

College Environment: It was concluded that the students undergo a great deal of tension arising out of circumstances such as being the recipients of perceived demeaning statements or responses from white professors and white students. Moreover, the students' blackness and life-styles are unacceptable in certain areas of the community.

Copeland (1976) explored the causes of black attrition at predominantly white institutions of higher education:

Stayers vs. Dropouts: Dropouts went to college for "abstract" (nonspecific) reasons significantly more than stayers. There were no sex or financial aid differences between stayers and dropouts. Many black students had unpleasant experiences in predominantly white institutions. Consequently, it seems that discrimination causes most black attrition at white institutions.

Sex: Black females had a higher high school grade point average, but male retention was the same.

It appears from the research presented that changes in attitudes, along with the entire scope of the education curriculum at all levels is needed. Many colleges have committed themselves to special academically supportive programs. The effort must continue because these programs have had an influence in humanizing education on all levels. Vivio (1975) reported that a special services program provides opportunity for achieving academic success in an institution of higher education to students who formerly have been denied access to such institutions because of economic, cultural, educational or physical disadvantages.

This section of the literature review has supported the validity of the hypotheses and the assumptions made in the conduct

of this study. Briefly, these resources suggest that the college performance of minority students with a pre-college experience is not significantly different from regularly admissable students. Further, the variables and circumstances effecting college performance for all students appear to be similar. Income is not a major corollary for college success but does appear to be important, along with social factors, in determining aspiration and success motivation levels. The literature supports the hypotheses and demonstrates that a systematic pre-college program for low achievers and low-income minority students can reduce the negative effects of social, economic and cultural limitations such that these students perform adequately while in college, remain in the environment and obtain a college degree, an essential credential for economic stability and vitality.

#### Summary

This chapter has presented a review of the literature which focused upon three topics:

- (a) pre-college programs for low achievers from low income families of minority students resulted in increasing the number of students seeking and obtaining college entry;
- (b) admission to college became a fact for low achieving, low income minority students, only when the student is prepared to seek admission and the postsecondary institution is prepared to grant it; and,

- (c) performance in college revealed that college performance of minority students with a pre-college experience is not significantly different from regularly admissable students.

The next chapter will present the methods and procedures employed in the implementation of this study.

## Chapter III

### DESIGN AND PROCEDURES

The purpose of this chapter is to present a review of the problem and to provide descriptive data on Western Michigan University: a description of the population, a description of the sample, procedures for data collection and the methods of data analysis.

The purpose of this study was to determine if there were differences between Upward Bound and non-Upward Bound students with respect to persistence and academic achievement in higher education. In attempting to answer these questions, the investigator identified black low income achievers who had been admitted to Western Michigan University through the Martin Luther King Program and those students who were admitted as regularly admissible students. Because of the low number of students across all groups, the regularly admissible and MLK students were combined into one group and compared to black Upward Bound students who entered Western from 1971 through 1976. Hypotheses were generated to test for differences and their significance level between the two groups.

#### Western Michigan University Descriptive Data

Western Michigan University is a state supported, coeducational institution located in southwestern Michigan. Among Michigan's institutions of higher education, Western Michigan ranks fourth in

number of students and diversity, complexity, and level of programs. Under the 1963 Michigan state constitution, Western has autonomy with its own eight member board of trustees. Created for the purpose of preparing teachers, Western held its first classes in 1904 with one hundred and seventeen students and the faculty numbered 888. Its seven schools and colleges offer the bachelor's, master's, specialist and doctoral degrees through day and evening programs.

The original concept of Western as a teacher training institution has long been expanded into that of a multipurpose university. As part of this ongoing expansion, Western Michigan University has accepted responsibility for the preparation of teachers of disadvantaged youth, and in doing so, is experimenting with new techniques of teacher education in this area. It provided the first master's program in the teaching of the disadvantaged in Michigan. Western Michigan University has been the host institution for the Upward Bound Program since 1966. Its president, board of trustees, and staff are committed to the goals and objectives of this program.

#### Description of the Population

The Upward Bound Program at Western Michigan University serves students from schools in four counties in the southwestern portion of the state: (a) Calhoun (Battle Creek Central), (b) Van Buren (Covert), (c) Kalamazoo (Kalamazoo Central and Loy Norrix), and (d) Muskegon (Muskegon Heights). Kalamazoo Loy Norrix was not included in this study because it became a target

school in 1971 and did not have any UB graduates who are the population of interest in this study. The counties and schools were selected because they have a high concentration of students for which the Upward Bound Program was designed. The environmental conditions, educational preparation, and economic circumstances plague many students in our target areas and define them as being "disadvantaged." The demographic data of this target population along with the selected income criteria appear in Appendix C. (Descriptive data from the 1977-78 Upward Bound Proposal, HEW, U.S. Office of Education.)

These schools were selected because they have been the target population for Western Michigan University's Upward Bound Program since the program's inception in 1966. These schools were also selected because they have a high concentration of students for which the Upward Bound Program was designed.

The population consisted of 1,999 black students who graduated from the four high schools from 1971 to 1976. The years 1971 to 1976 were used in the study because the identification of students by race did not appear on Western's admission application until 1971. Table 1 displays a breakdown of the population by target schools and years.

Western also has a supportive service program, the Martin Luther King Program, that was specifically created to assist the Upward Bound bridge and low income college students with academic counseling, tutorial and other supportive services during their entire matriculation in this institution. Subsequently, additional

Table 1

## Black Student Population In Target Schools for 1971-1976

| Year   | Battle<br>Creek | Covert   | Kalamazoo | Muskegon<br>Heights | Totals       |
|--------|-----------------|----------|-----------|---------------------|--------------|
| 1971   | 103 (34%)       | 19 (6%)  | 51 (17%)  | 130 (43%)           | 303 (100%)   |
| 1972   | 107 (31%)       | 22 (6%)  | 67 (19%)  | 149 (43%)           | 345 (100%)   |
| 1973   | 104 (31%)       | 26 (8%)  | 82 (24%)  | 123 (37%)           | 335 (100%)   |
| 1974   | 128 (38%)       | 26 (8%)  | 44 (13%)  | 143 (42%)           | 341 (100%)   |
| 1975   | 123 (36%)       | 18 (5%)  | 48 (14%)  | 151 (44%)           | 340 (100%)   |
| 1976   | 125 (37%)       | 23 (7%)  | 50 (15%)  | 137 (41%)           | 335 (100%)   |
| Totals | 690 (35%)       | 134 (7%) | 342 (17%) | 833 (42%)           | 1,999 (100%) |

All percentages are based on row totals

recruitment efforts at Western have resulted in increasing its black student population from 4% in 1971 to 8% in the fall of 1976. (Dr. Jack Asher, Director of Institutional Research, WMU). Moreover, the hiring of blacks and other minorities as faculty members has also increased over the past six years. Curriculum changes and the addition of needed programs have been made to provide the "non-traditional" student with courses that will meet his/her academic needs and enrich academic experiences. A careful diagnosis is made of the student's academic strengths and weaknesses prior to their entry into college. After entry, an analysis is made to determine the areas where their basic skills are deficient. In this way, Western has demonstrated its commitment to servicing the needs of minority students as well as those of incoming students

who are experiencing needs similar to those of typical Upward Bound high school students.

The demographic data, cited in Appendix C, list the overall information for the entire student population. While all of the target schools are racially integrated, Covert and Muskegon Heights have a predominantly black student population and both have black principals. Muskegon Heights is the only target school system with a black superintendent of the school district. This investigator makes the assumption that some black students from the predominantly black target high schools will attend Western Michigan University. This rationale is based on the represented number of black WMU alumni who are employed as instructors and counselors in these high schools.

#### Description of the Sample

The sample used in this study was not a random. It was inclusive of the total number of black high school graduates from the target high schools who attended Western Michigan University. The study covers a six year span from 1971 to 1976. From a population of 1,999 black high school graduates, a total of 147 or 7.4% attended WMU and were subjects in this investigation. Eighty (80) of these subjects were Upward Bound participants. Sixty-seven (67) were non-Upward Bound college students who qualified for the study. A breakdown of this sample is revealed in Table 2.

Figure 2 provides information on the description of the students whose records provided the data for this study. The Upward Bound

Table 2

Number & Percentages of Study Participants  
By Target Schools & Years

| Year   | Battle Creek | Covert   | Kalamazoo | Muskegon Heights | Totals By Year |
|--------|--------------|----------|-----------|------------------|----------------|
| 1971   | 10 (34%)     | 4 (14%)  | 8 (28%)   | 7 (24%)          | 29 (100%)      |
| 1972   | 0 ( 0%)      | 3 (12%)  | 9 (36%)   | 13 (52%)         | 25 (100%)      |
| 1973   | 4 (19%)      | 4 (19%)  | 10 (48%)  | 3 (14%)          | 21 (100%)      |
| 1974   | 9 (32%)      | 2 ( 7%)  | 8 (29%)   | 9 (32%)          | 28 (100%)      |
| 1975   | 4 (16%)      | 3 (13%)  | 6 (25%)   | 11 (46%)         | 24 (100%)      |
| 1976   | 4 (20%)      | 2 (10%)  | 10 (10%)  | 4 (20%)          | 29 (100%)      |
| Totals | 31 (21%)     | 18 (12%) | 51 (35%)  | 47 (32%)         | 147 (100%)     |

All percentages are based on row totals

Program begins with students at grades 10 and/or 11 and works with them through a culminating summer bridge program which is an intensive six week summer program held on the WMU campus. The MLK Program does not work with students at either this age or grade level. The high school GPA reported is for entry into the Upward Bound Program at grades 10 or 11.

The non-Upward Bound students tend to have a slightly higher reported family income as cited in Figure 2 and Appendix F, Table 7, than the Upward Bound students. The literature on this population suggests that family income is not an important factor in college achievement though it is critical in college attendance.

Upward Bound students showed a very slight edge for GPA in high school and college than non-Upward Bound students, but it was not shown to be a significant difference between these groups.

Figure 2

## Descriptive Characteristics of the Sample

| <u>Upward Bound</u>                        |                      | <u>Non-Upward Bound</u> |
|--|----------------------|-------------------------|
| Mean Age at Program Entry                  |                      |                         |
| 15.5 Years                                 |                      | N/A*                    |
| Grade Level at Entry                       |                      |                         |
| 85% - 10th Graders                         |                      | N/A                     |
| 15% - 11th Graders                         |                      |                         |
| High School Grade Point Average at Entry*  |                      |                         |
| 4.00 = A 02%                               |                      | N/A                     |
| 3.00 - 3.99 = B 26%                        |                      |                         |
| 2.00 - 2.99 = C 61%                        |                      |                         |
| 1.00 - 1.99 = D 10%                        |                      |                         |
| GPA Below 1.00 01%                         |                      |                         |
| *GPA's based on 4.00 scale.                |                      |                         |
| Income Range                               |                      |                         |
| \$3,000 to \$6,000                         |                      | \$4,200 to \$8,000      |
| Mean Age at College Entry                  |                      |                         |
| 17.6 Years                                 |                      | 18.3 Years              |
| Mean Cumulative High School GPA            |                      |                         |
| 2.33                                       |                      | 2.26                    |
| Distribution of Subjects by Sex            |                      |                         |
| 49   | Female               | 48                      |
| <u>31</u>                                  | Male                 | <u>19</u>               |
| 80   | Total                | 67                      |
| Distribution of Subjects from High Schools |                      |                         |
| 9  | Battle Creek Central | 22                      |
| 15   | Covert               | 2                       |
| 26   | Kalamazoo Central    | 25                      |
| <u>30</u>                                  | Muskegon Heights     | <u>18</u>               |
| 80   | Totals               | 67                      |
| 147 Student Observations                   |                      |                         |

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\*N/A = Information not appropriate to program.

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The GPA's for high school and college for the two study groups is located in Appendix F, Tables 8, 9, 10 and 11.

The difference between female and male college enrollees is consistent with national and traditional findings among black students that more females than males enter college. Table 12 in Appendix F cites this information. The students for Upward Bound and non-Upward Bound were representative of the four target schools. Appendix F, Table 7 showed no significant difference as a function of high school attended. Therefore, the assumption of sample homogeneity was borne out in all of the major descriptive characteristics of the students.

The support produced by these additional analyses suggested that the major factor producing student behavior was then the type of academic and motivational support received by the students prior to and upon entry into college. They hypotheses were ready to be tested having provided some evidence for no difference in individual student characteristics. The results of the tests of the hypotheses are reported in Chapter IV.

#### Data Collection

All data were obtained from a record search of high school records and from the academic records office at Western Michigan University. Because human subjects were used in this study, the Privacy Rights of Students were observed. This investigator also followed the University's procedural policy for studying human subjects. Personal identification was prohibited, therefore,

numbers were assigned student participants in this study. Numbers as well as carefully devised coding system were utilized to protect the identity of human subjects. The Office of Institutional Research was contacted initially concerning previous research studies conducted at Western involving black students. There was very little information available for this investigator to use from that office.

A deliberate and consistent procedural plan was developed and implemented in the collection of data. Administrative protocol was followed in contacting high school officials for the purpose of informing them of this investigator's intentions of conducting a study on their former students. The initial plan was to write a letter to each principal of the four target high schools describing the purpose of the study. This investigator decided to contact the principals personally by telephone and arrange an interview with them. The letter (see Appendix D) was written to the principals with a sign off permission form and dissertation proposal included. The letter, permission sign off form and the dissertation proposal were presented to the principals at the interview. These interviews were arranged over the telephone, the letters were personally presented at each scheduled interview session. This personal contact established excellent rapport and allowed sufficient time to discuss the dissertation proposal. In three out of four cases, this investigator was referred by the principal to contact the school's superintendent or his immediate designate. The superintendent's designate was usually a school

administrator in charge of pupil personnel or a director of research and development. During the interview, the questions often centered on the privacy rights of students, the methods of data collection and whether the target schools would receive a completed copy of the study. There was considerable interest shown by administrators regarding this study. Prior to leaving each interview, an authorized school official assumed responsibility for drafting a letter permitting the study to proceed. These letters serve to document that permission was granted and that school administrators were knowledgeable that this study was being conducted.

Identification of the sample was eventually a test of patience and endurance. Prior to identifying the sample, a carbon copy of letters to the principals were sent to each high school personnel who has the assigned task of assisting the Upward Bound project director in coordinating the Upward Bound Program in the target schools. These individuals are referred to as resident coordinators. The resident coordinators were personally contacted along with counselors, secretaries, teachers, and other school personnel to devise the most reliable method of identifying black high school graduates from 1971 to 1976 who attended Western Michigan University. These students would comprise the sample. All black students who graduated from the same high schools during the period indicated would be labeled the population for this study. The sample was identified by using the following criteria:

1. Black high school graduates from 1971 to 1976.
2. Attended Western Michigan University.

The identification process was a laborious task, because the high schools did not possess a record on the racial breakdown of the graduation classes nor keep statistics of where their graduates attended college. Only a receipt, showing that a high school transcript was mailed to a college, is kept in the student's file. Two of the target high schools are predominantly white and two are predominantly black in terms of overall high school enrollment. It is not surprising to find that the identification of the black students in the predominantly black high schools was easier, because the white students were fewer in numbers than the black graduates. The opposite was the case in the predominantly white high schools.

Black high school graduates were identified by (a) monitoring high school graduation programs, (b) matching graduation program names with yearbook photographs for verification of racial identity and (c) utilizing former high school graduates from 1971 to 1976 in the identification process. Emphasis on these identification methods was necessary for the validity and reliability of procedural processes involved in collecting the data.

After identifying the black high school graduates from the target population, this investigator had to ascertain their college matriculation at Western Michigan University. This was accomplished by first determining if these students entered college through the Martin Luther King Program or whether they were "regularly admissable students." Verbal permission was granted by the director of the MLK Program to screen the records of students

from 1971 to 1976. Names obtained from the high schools along with miscellaneous information were instrumental in matching the names.

This investigator had an intuitive hunch that the students who remained unidentified might be identified through Western's academic records office. A list was compiled of known and questionable students who were alleged to have attended Western Michigan University during the time period indicated. A letter was written to the academic records office (see Appendix D) requesting permission to (a) identify the subjects in this study and (b) obtain the necessary data from student records. One hundred sixty-eight students had been identified by the target high school personnel as having attended Western Michigan University from 1971 to 1976. After two intensive months of analyzing student records, the list of 168 students was reduced to 147. This total number of black students who attended Western Michigan University from the target population (1971 - 1976) comprised the sample.

Recording data from the academic records offices was the next step, after verification of students matriculation was accomplished. To accomplish this task this investigator designed a master data sheet (see Appendix E) for recording the data. A coding system was also devised for certain notations. The data sheets evolved into a data book. After recording all pertinent data, it was translated into coding sheets that matched the form that eventually was used for analysis via the computer. Numerical values were used instead of student names (see Appendix E).

### Methods of Data Analyses

All data were extracted directly from the academic records office at Western Michigan University. Testing of the hypotheses for analyses utilized contingency tables.

When hypotheses of predicting no differences between groups was tested, a probability of .25 for committing Type I error was used while a probability of .05 for committing Type I error was used to test hypotheses predicting differences between groups.

A chi-square was used to test for independence of variables. The percentage of missing data was due to lack of information on the records. The data are reported specifically by tables.

### Summary

This chapter has presented a review of the problem with specific attention directed towards the procedures and methods used in conducting and reporting the study. The population, sample, data collection and analysis procedures were explained. Chapter IV will present the results of the study.

## Chapter IV

### THE RESULTS

The focus of this investigation concerned the participants of a pre-college program (Upward Bound) and non-Upward Bound college students with respect to persistence and the level of educational performance. Hypotheses were formulated to test for differences between the two groups.

In this chapter the four hypotheses are restated and the pertinent results are reported. Additional findings related to the research hypotheses are also reported.

The four hypotheses were as follows:

- H<sub>1</sub>: Upward Bound participants will stop out of college at the same rate as non-Upward Bound students.
- H<sub>2</sub>: Upward Bound students will stay out of college for a shorter time than non-Upward Bound students.
- H<sub>3</sub>: Upward Bound participants will complete college at the same rate as non-Upward Bound students.
- H<sub>4</sub>: Upward Bound graduates will select science majors at a higher rate than non-Upward Bound students.

### The Findings

The first hypothesis, that Upward Bound participants will stop out of college at the same rate as non-Upward Bound students was tested with a chi-square analysis. A stop-out was defined as a period of absence from the university for one or more consecutive semesters. Registration data for all students were

collected and recorded for the six years covered in this investigation.

The students who had no stop outs are not included in this analysis. It should be noted that in the chi square test two sets of frequencies are compared: observed frequencies and expected frequencies. The cell frequencies are illustrated in the tables. The numbers in parenthesis are the expected frequencies and are listed in all reported tables. The chi square was used to determine whether the differences between the expected and observed frequencies is statistically significant. The results of the analysis are shown in Table 3.

Table 3

Stop-Out Rates for Upward Bound and  
Non-Upward Bound Students by Number of Semesters

| Semesters                          | Upward Bound | Non-Upward Bound |    |
|------------------------------------|--------------|------------------|----|
| 1                                  | 10 (10.25)   | 6 ( 5.75)        | 16 |
| 2                                  | 9 ( 8.33)    | 4 ( 4.67)        | 13 |
| 3 - 5                              | 22 (22.43)   | 13 (12.58)       | 35 |
| Totals                             | 41           | 23               | 64 |
| $P > .25$ $df = 2$ $\chi^2 = 0.19$ |              |                  |    |

The chi-square analysis resulted in a value of 0.19 with two degrees of freedom producing no significant difference between groups. The hypothesis was supported.

The literature review showed that college completion and achievement level was more a function of motivation and aspiration

levels than financial status. If it is indeed true that motivation and aspiration are primary factors in persistence in college, then it is reasonable to hypothesize that Upward Bound students will persist in college at a higher rate than non-Upward Bound students. Even though the data do not support an assumption of higher retention rates for Upward Bound students it was felt that more of them will return to college and complete the degree than non-Upward Bound students. This line of reasoning led to the second hypothesis tested in this study.

The second hypothesis, that Upward Bound students will stay-out of college for a shorter time than non-Upward Bound students, was tested by comparing the two groups of students on two category responses: drop-out (6 or more semesters out of school), and current enrollment showing that the student is still pursuing a degree. The results of this analysis are shown in Table 4.

Table 4  
Persistence Rates for Upward Bound and  
Non-Upward Bound Students

|             | Upward Bound | Non-Upward Bound |                 |
|-------------|--------------|------------------|-----------------|
| In Progress | 42 (38.32)   | 30 (33.68)       | 72              |
| Dropout     | 24 (27.68)   | 28 (24.32)       | 52              |
| Totals      | <u>66</u>    | <u>58</u>        | <u>124</u>      |
| <hr/>       |              |                  |                 |
|             | P > .05      | df = 1           | $\chi^2 = 1.80$ |

The chi square analysis resulted in a value of 1.80 with one degree of freedom producing a non-significant difference between groups on the two category responses tested.

There is no evidence in this study that Upward Bound students stay out of college for a shorter time than do non-Upward Bound students. The hypothesis of predicting a difference between the two groups at the .05 level of significance was not supported.

The third hypothesis, that Upward Bound participants will complete college at the same rate as non-Upward Bound students, was tested with a chi square analysis. College completion as determined by the awarding of a degree was used to test differences in the groups over a period of time. Only students entering college in 1971 and 1972 were included in this analysis since those entering during 1973 would not have an opportunity to complete the normal eight (8) semesters or four (4) years usually required for degree completion. The results of the chi-square analysis are shown in Table 5.

Table 5  
College Completion for Upward Bound and  
Non-Upward Bound Students

| Completion                         | Upward Bound | Non-Upward Bound |    |
|------------------------------------|--------------|------------------|----|
| Yes                                | 14 (10.17)   | 9 (12.83)        | 23 |
| No                                 | 9 (12.83)    | 20 (16.17)       | 29 |
| Totals                             | 23           | 29               | 52 |
| <hr/>                              |              |                  |    |
| $P < .25$ $df = 1$ $\chi^2 = 4.64$ |              |                  |    |

The observed and expected frequencies were reported in each cell. The hypothesis of no difference in college completion rates

between the two groups was not possible to accept with a probability of .25 for committing a Type I error. However, since P is not only less than .25 but also less than .05, the differences tended to support that the Upward Bound students did complete college at a higher rate than non-Upward Bound students.

To explore the behavior of students in college even more thoroughly, the investigator hypothesized that one effect of the motivation and academic skills would be reflected in the choice of major made by Upward Bound students. The sciences are not a frequent choice of major for most students and the author assumed that it could possible be even less likely among low income under-achieving black students. Therefore, a hard test of the effectiveness of the Upward Bound Program could be made by looking at the increase of the number of black students electing a science major. Taking the risk, the author hypothesized that Upward Bound students would select science majors at a higher rate than non-Upward Bound students.

The final hypothesis of predicting a difference between the two groups at the .05 level of significance was not supported as can be seen in Table 6.

Table 6

Choice of Major by Upward Bound and  
Non-Upward Bound College Students

|  | Upward Bound | Non-Upward Bound |     |
|--|--------------|------------------|-----|
| Science                                    | 17 (14.69)   | 10 (12.31)       | 27  |
| Non-Science                                | 63 (65.31)   | 57 (54.69)       | 120 |
| Totals                                     | 80           | 67               | 147 |
| $P > .05 \quad df = 1 \quad \chi^2 = 0.98$ |              |                  |     |

In reviewing the data in this investigation, this investigator noted that many of the Upward Bound students selected a business major more than any other field. This trend is not uncommon. Students in the seventies saw and read of many blacks who had become successful in the business world. Upward Bound personnel also encouraged an exploration into various careers through the thrust of the Career Education Program.

In general the results of the present study are not very conclusive. However, none of the results are in favor of the non-Upward Bound students.

#### Summary

It was the purpose of this chapter to present the results of the analysis of data as they pertain to the four tested hypotheses. This chapter analyzed data collected for students of the two programs studied. A chi-square test for the independence of variables was used to test each of the hypotheses. The results of the chi-square test were displayed in contingency tables.

The first hypothesis, that Upward Bound participants would stop out of college at the same rate as non-Upward Bound participants was supported.

The second hypothesis, that Upward Bound students will stay out of college for a shorter time than non-Upward Bound students was not supported.

The third hypothesis, that Upward Bound participants will complete college at the same rate as non-Upward Bound students

was not supported. However, the Upward Bound students did complete college at a slightly higher rate than non-Upward Bound students.

The final hypothesis, that Upward Bound students would select science majors at a higher rate than non-Upward Bound students was not supported.

## Chapter V

### DISCUSSION, SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

In this chapter the study has been summarized and the results discussed under five major headings: (a) the discussion, (b) summary of the study, (c) conclusions, (d) implications and (e) recommendations.

#### The Discussion

The results reported in Chapter IV and the preceeding chapters were revealing. There are studies whose findings were similar to those of this study. The most recent was a national investigation completed in April, 1976 by Research Triangle Institute (RTI) of North Carolina. The findings revealed the following:

1. The Upward Bound Program increased entry into post-secondary education for 71% of the Upward Bound participants as compared to 47% of non-Upward Bound participants of similar background; and
2. Seventy six percent (76%) of Upward Bound students beginning college entered four year colleges and universities as compared to 45% of the control group.

The results of this study are favorable towards the Upward Bound Program with respect to the drop out rate. The most important finding reported in the RTI study which is not similar to the present investigation was in the area of college drop-out (stated in Hypothesis 2 and page 10 of this study).

A recent article in The New York Times (1977) stated that in the RTI study, there was no evidence that graduates of Upward Bound would be less likely to drop out of college than non-Upward Bound participants. The author of the article inferred that extensive counseling of Upward Bound participants for college survival has given students a realistic and thorough knowledge of what to expect from their college matriculation. The lower drop out rate was found also in this study of students at Western Michigan University.

Supporters of the Upward Bound Program have intuitively believed that the program was meeting its national mandate of motivating low income high school students to break the poverty cycle through education and aspire to achieve the college degree. President Johnson believed that through education many of the nation's major problems could be resolved. The job is still incomplete. Many Upward Bound and non-Upward Bound blacks are still confronting the problem of academic tracking in general and vocational areas rather than the college group. This practice simply reinforces feelings of inadequacy and failure, and in effect articulates the message to these individuals that they are not capable of attending college. Lack of opportunity and encouragement represent a turn-off for many blacks. More constructive efforts should be implemented at both the secondary and postsecondary level to foster the Upward Bound concept and salvage what has been implemented in some high schools and colleges. Many educators could learn how to teach black students labeled high risk and non-traditional by learning about the Upward Bound Program.

### Summary of the Study

This study was designed to research the question: Do black students who have been identified as low income, underachievers in high school and recruited into the Upward Bound Program, perform better academically in college when compared with black students who entered college through the Martin Luther King Program for marginal high school graduates or regularly admissable black students? A selected review of the literature was presented in Chapter II with special focus directed to pre-college programs, admission to college, and performance in college. The methods for obtaining the necessary data through the academic records office at Western Michigan University, and the analysis of the data were presented in Chapters III and IV.

The years from 1971 to 1976 were used in this study because racial identity was not listed on the application for admission prior to 1971. Although Western's Upward Bound Program services both white and black students, black students comprise the majority of program participants.

To insure that there did not exist great differences between Upward Bound college students and non-Upward Bound college students in terms of geographic location and characteristics, all participants in the study were graduated from the four Upward Bound target high schools. Students were similar in terms of income range, age and high school grade point average.

The study used retention in college as a key ingredient for testing Upward Bound and non-Upward Bound students. Persistence

was measured by the number of years in college compared with the attrition rate. To test the hypotheses formulated for this study, four key variables were used to compare the two groups. These variables were: (a) stop-outs, (b) stay-outs (drop-outs), (c) college completion and (d) undergraduate majors. One hundred forty-seven subjects were used in this study. Four high schools were designated as target schools. Eighty Upward Bound and 67 non-Upward Bound students served as the sample for this investigation.

The data analyses utilized contingency tables. A chi-square test for independence of variables were also used.

The first hypothesis was a hypothesis of no difference. It stated that Upward Bound participants would stop out of college at the same rate as non-Upward Bound participants. This hypothesis was supported. The second hypothesis was a directional hypothesis. It stated that Upward Bound students will stay out of college for a shorter time than non-Upward Bound students. This hypothesis was not supported. The third hypothesis was a hypothesis of no difference. It stated that Upward Bound participants would complete college at the same rate as non-Upward Bound students. This hypothesis was not supported. However, the results were in a direction suggesting that Upward Bound students complete college at a higher rate than non-Upward Bound students. The fourth hypothesis was a directional hypothesis. It stated that Upward Bound graduates would select science majors at a higher rate than non-Upward Bound students. This hypothesis was not supported.

The slight differences in the two groups seems to be in the amount of intensive pre-college preparation that is given to students

who participated in the Upward Bound Program for an average period of two years prior to college matriculation. The college completion hypothesis favored the Upward Bound group.

### Conclusions

Within the limitations of this study, and on the basis of the statistical test used, the following conclusions were based upon the data collected and reported in Chapter IV:

Stop-Outs -- Students who participated in the Upward Bound Program and attended Western Michigan University will stop out of college at the same rate when compared to students in the Martin Luther King Program.

Persistence Rates -- Students who participated in the Upward Bound Program and attended Western Michigan University did not show evidence that they stay out of college for a shorter time than do Martin Luther King students.

College Completion -- Students who participated in the Upward Bound Program and attended Western Michigan University are likely to complete college at a higher rate than Martin Luther King students.

Choice of Major -- Students who participated in the Upward Bound Program and attended Western Michigan University would not select science majors at a higher rate than Martin Luther King students.

### Implications of the Findings

The data supports the literature, that students follow a national pattern of stop-outs. Students also behave in the normative trend. They will enter college, stop-out, re-enter, and stop-out. Since emphasis is now on life long learning, students seemingly will continue this stop-out pattern.

The following plausible explanations are viewed as implications of the researcher's findings:

1. Western Michigan University is now doing better in dealing with non-Upward Bound black students than before and retaining them.
2. More Upward Bound high school graduates from the target schools are being admitted but fail to graduate.
3. By virtue of being in the Upward Bound Program, these students appear to be cognizant of their expectations to do well in college.
4. In viewing the percentages of college completions, 61% of 23 Upward Bound students completed college. Thirty-one percent of 29 non-Upward Bound students completed college. This may be due, in part, to sampling error.

Similar studies might be undertaken to study the population of Upward Bound students from Western Michigan University who attended other institutions within the State of Michigan. This researcher will conduct a study to ascertain what happened to each of the program participants who entered Western Michigan University's Upward Bound Program from 1966 to present.

The Upward Bound intervention, as supported by the literature and was to a slight degree supported in this study, might have an impact on students to remain in college and obtain the college degree. There is an historical pattern by minority persons in college to refrain from selecting science majors. Upward Bound has, through its intensive career education and counseling program, assisted students in becoming more knowledgeable about various science careers. This study did not provide evidence that the encouragement and assistance offered by the Upward Bound staff makes an impact on students selecting science majors at a higher rate than non-Upward Bound students. Special programs and workshops are needed if the rate of black students who select science majors is to increase.

Minority students continue to experience difficulty in college. Retention is a factor that needs a thorough investigation.

In obtaining the data from a record search of high school records, it was noted that high schools do not keep records stating where their graduates attend college or how many of their former students graduated from two or four year colleges. Only a record that a transcript was mailed to the college is recorded. The target high schools may wish to view this study to ascertain how their black graduates compare in enrollment and college attendance, to black students who participated in the study.

#### Recommendations

The data from this study revealed the lack of finding some differences expected between the two groups. This investigator hypothesized that some difference could be expected from the MLK students (non-Upward Bound) when compared to the Upward Bound students. The findings indicate that the MLK group may not be the right comparison. The data revealed that the two groups began with similar characteristics and ended up the same after the Upward Bound Program. Apparently, the two groups are more alike than different.

Based upon the results of this study, it is recommended that:

1. The study be altered to include black and white students from the target high schools conducted at the same institution. Rationale: To ascertain differences racially, economically, and retention variations.
2. This researcher's study be conducted at the eight Upward Bound host institutions in Michigan. Rationale: To observe whether the statistical test findings at other host institutions compare with those at Western Michigan

University. This researcher would be interested to note if significant differences will result from the statistical test that would be in contrast to Western's Upward Bound students.

The investigator believes that the previously mentioned recommendations, if implemented, will assist in making equal access and equal opportunity become a reality for many low-income blacks. Persistence in college should be increased if commitment to these recommendations is achieved.

The findings of this study suggest that there are implications for further research. The recommendations are that:

1. This study be followed with:
  - A. Increasing the sample size.
  - B. Include non-target schools.
  - C. Increase variable specificity.
  - D. Use a questionnaire instrument to record behavioral and affective data from students.
2. A study be conducted that examines the impact of pre-college experiences that would be studied by methods other than record search. Behavior in college, quality of life, value of the experience are important aspects to be studied.
3. A study be conducted on the impact of other family members upon entering college by one member.
4. A longitudinal study be conducted on students who entered Western's Upward Bound Program since 1966 to 1978. Ascertaining the program's impact could best be studied of all its program participants and the colleges attended.

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## Appendix A

### UPWARD BOUND PROGRAM FUNDING INFORMATION

## UPWARD BOUND PROGRAM

| FUNDING INFORMATION   |  | Program Year<br>1974-75          |  | Program Year<br>1975-76          |  |
|---|--|----------------------------------|--|----------------------------------|--|
| Funds Obligated   |  | \$38,331,000                     |  | \$38,327,532                     |  |
| Total Number of Grantees Funded   |  | 416                              |  | 403                              |  |
| (Number of Regular UB Projects)   |  | (359)                            |  | (355)                            |  |
| (Number of Special Veterans Projects)                                     |  | ( 57)                            |  | ( 48)                            |  |
| Grant Size:   |  |                                  |  |                                  |  |
| Average:  |  | \$ 92,141                        |  | \$ 95,105                        |  |
| High:   |  | 386,062                          |  | 360,000                          |  |
| Low:  |  | 12,050                           |  | 26,863                           |  |
| Geographic Area Served by Grantee:  |  | No. of<br>Grantees    Obligation |  | No. Of<br>Grantees    Obligation |  |
| Urban   |  | NA            NA                 |  | 218       \$21,806,143           |  |
| Rural   |  | NA            NA                 |  | 151       13,011,528             |  |
| Urban and Rural   |  | "            "                   |  | 38       3,509,861               |  |
| Type & Control of Grantee Institution<br>or Agency:                       |  |                                  |  |                                  |  |
| Secondary School  |  | NA            NA                 |  | 7           523,070              |  |
| Two-Year College/Public   |  | "            "                   |  | 52       3,723,999               |  |
| Two-Year College/Private  |  | "            "                   |  | 6           495,864              |  |
| Four-Year College or Univ/Public  |  | "            "                   |  | 236      22,365,708              |  |
| Four-Year College or Univ/Private   |  | "            "                   |  | 88      9,485,577                |  |
| Vocational-Technical School   |  | "            "                   |  | 5       348,613                  |  |
| Proprietary School  |  | "            "                   |  | 0           0                    |  |
| Agency/Public   |  | "            "                   |  | 6       452,500                  |  |
| Agency/Private  |  | "            "                   |  | 7       932,201                  |  |
| Prof. Scholar. Assn.  |  | "            "                   |  | 0           0                    |  |
| STUDENT DATA  |  |                                  |  |                                  |  |
| Total Number of Regular UB Students<br>Assisted                           |  | 35,993                           |  | 29,259 (est)                     |  |
| Total Number of Veterans Who Received<br>UB Services                      |  | 12,610                           |  | 13,688 (est)                     |  |
| Total Number of Veterans Who Received<br>Talent Search Type Services Only |  | 18,204 (est)                     |  | 10,506 (est)                     |  |
| Ethno-Racial Background:  |  |                                  |  |                                  |  |
| American Indian   |  | 5.1%                             |  | NA                               |  |
| Black   |  | 56.6%                            |  | NA                               |  |
| Oriental  |  | 0.7%                             |  | NA                               |  |
| Spanish Surnamed  |  | 9.3%                             |  | NA                               |  |
| White   |  | 26.0%                            |  | NA                               |  |
| Other/No Indication   |  | 2.3%                             |  | NA                               |  |
| Sex:  |  |                                  |  |                                  |  |
| Male  |  | 57.0%                            |  | NA                               |  |
| Female  |  | 43.0%                            |  | NA                               |  |

NA = Not Available

## UPWARD BOUND PROGRAM

| Upward Bound Program Services (cont.)  | Program Year<br>1974-75 | Program Year<br>1975-76 |
|--|-------------------------|-------------------------|
| Family Income Level:   |                         |                         |
| \$ 0 - 2,999   | 38.0%                   | NA                      |
| 3,000 - 5,999  | 41.0%                   | NA                      |
| 6,000 - 7,499  | 11.6%                   | NA                      |
| 7,500 - 8,999  | 4.3%                    | NA                      |
| 9,000 or more  | 5.1%                    | NA                      |
| Postsecondary Enrollment Status of UB<br>High School Graduates:                        | ALL YEARS (1965-1975)   |                         |
| Number of High School Graduates  | 77,516                  |                         |
| Number of High School Graduates<br>Planning College Enrollment                         | 53,137 (69%)            |                         |
| Number of High School Graduates<br>Planning other Postsecondary Edu.                   | 4,242 (5%)              |                         |
| Percent of High School Graduates<br>Planning Some Form of Post-<br>Secondary Education | (74%)                   |                         |
| Number of High School Graduates<br>Actually Enrolled In College                        | 47,866 (62%)            |                         |
| Number of 2 year College Graduates   | 295                     |                         |
| Number of 4 Year Graduates   | 3,707                   |                         |
| Overall Retention Rate   | (49%) (est)             |                         |

Source: Mr. David Johnson, Director  
Division of Student Services and Veterans Programs  
Department of HEW/Office of Education  
Bureau of Postsecondary Education  
Washington, DC 20202

## Appendix B

### INCOME CRITERIA

## 1970-71 Income Criteria

Students who meet the selection criteria above and are to be financed by OE must be from families whose annual incomes meet the poverty criteria set forth as follows:

1. The following income levels must be met by at least 90 percent, repeat 90 percent, of the OE financed UPWARD BOUND students:

(a)

| <u>Family Size</u> | <u>Nonfarm</u> | <u>Farm</u> |
|--------------------|----------------|-------------|
| 1                  | \$1,800        | \$1,500     |
| 2                  | 2,400          | 2,000       |
| 3                  | 3,000          | 2,500       |
| 4                  | 3,600          | 3,000       |
| 5                  | 4,200          | 3,500       |
| 6                  | 4,800          | 4,000       |
| 7                  | 5,400          | 4,500       |
| 8                  | 6,000          | 5,000       |
| 9                  | 6,600          | 5,500       |
| 10                 | *7,200         | **6,000     |

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\*Above 10 -- Add \$600 for each additional member.

\*\*Above 10 -- Add \$500 for each additional member.

2. Up to 10 percent of the OE financed UPWARD BOUND students may come from families with the following incomes:

(b)

| <u>Family Size</u> | <u>Nonfarm</u> | <u>Farm</u> |
|--------------------|----------------|-------------|
| 1                  | \$2,500        | \$2,000     |
| 2                  | 3,500          | 2,500       |
| 3                  | 4,100          | 3,000       |
| 4                  | 4,700          | 3,500       |
| 5                  | 5,300          | 4,000       |
| 6                  | 5,800          | 4,500       |
| 7                  | 6,400          | 5,000       |
| 8                  | 7,000          | 5,500       |
| 9                  | 7,600          | 6,000       |
| 10                 | *8,200         | **6,500     |

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\* Above 10 -- Add \$600 for each additional member.

\*\* Above 10 -- Add \$500 for each additional member.

3. The OE income requirement is satisfied if the prospective student lives in federally supported public housing.

4. Students may be selected for UPWARD BOUND whose family income is higher than those in items 1 and 2, if there is serious mismanagement of family income and little if any of such income accrues to the benefit of the student. In such cases, the Project Director must obtain written testimony from a reliable third party that serious mismanagement of a family's income does exist and works a significant hardship on the prospective UPWARD BOUND student.
5. Students from families on State or federally funded types of welfare are deemed to have met the Office of Education's income criteria.

In exceptional cases, institutions wishing to enroll students whose family income levels do not meet these criteria must find funds to support these students from other public and private sources.

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Source: 1970-71 Guidelines, An Office of Education Program Administration Manual, November, 1969, U.S. Department of Health, Education and Welfare.

## 1976-77 Income Criteria

## MAXIMUM ALLOWABLE INCOME:

1. (a) Eighty percent (80%) of the students served by a Talent Search, Upward Bound, and/or Special Services for Disadvantaged Students project must meet the income criteria in the following table.

Table A

| <u>No. of<br/>Family Members</u> | <u>Non-Farm</u> | <u>Farm</u> |
|----------------------------------|-----------------|-------------|
| 1                                | \$2,395         | \$2,035     |
| 2                                | 3,999           | 3,546       |
| 3                                | 3,565           | 3,015       |
| 4                                | 4,542           | 8,872       |
| 5                                | 5,364           | 4,560       |
| 6                                | 6,034           | 5,144       |
| 7                                | 7,455           | 6,357**     |

\*Add \$700 for each additional member.

\*\*Add \$600 for each additional member.

- (b) Students from families (as defined by the appropriate State Welfare Agency) receiving public assistance automatically qualify under the criteria described above.
2. (a) Discretion is granted to the project director to admit up to twenty percent (20%) of the students into the project whose Adjusted Gross Family Income meet the income criteria in the following table.

Table B

| <u>No. of<br/>Family Members</u> | <u>Non-Farm</u> | <u>Farm</u> |
|----------------------------------|-----------------|-------------|
| 1                                | \$3,000         | \$2,500     |
| 2                                | 3,700           | 3,200       |
| 3                                | 4,500           | 3,800       |
| 4                                | 5,700           | 4,800       |
| 5                                | 6,700           | 5,700       |
| 6                                | 7,700           | 6,400       |
| 7                                | 8,300*          | 7,900**     |

\*Add \$800 for each additional member.

\*\*Add \$700 for each additional member.

- (b) A participant is also considered eligible under this part if he or she is part of a family where there is serious mismanagement of income so that little, if any, of such income accrues to the benefit of the student. In such cases, the project director must obtain documented testimony from a reliable third party that serious mismanagement of a family's income exists and works a significant hardship on the prospective participant.

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Source: 1976-77 Guidelines. Bureau of the Census, Current Population Reports; Series p-60, No. 94.

## Appendix C

### DEMOGRAPHIC DATA

## DEMOGRAPHIC DATA

LIST OF SCHOOLS

1. Battle Creek
2. Covert
3. Kalamazoo Central
4. Kalamazoo Loy Norrix
5. Muskegon Heights

LOW INCOME ENROLLMENT

Unavailable  
75%  
24%  
26%  
78%

POSTSECONDARY ATTENDANCE

1. Battle Creek Central - 50%
2. Covert - 55%
3. Kalamazoo Central - 50 59 55%
4. Kalamazoo Loy Norrix - 55%
5. Muskegon Heights - 50%

STUDENT/COUNSELOR RATIO

300/1  
200/1  
250/1  
241/1  
310/1

ELIGIBLE AS PROJECT PARTICIPANTS

1. Battle Creek Central -  
Unavailable
2. Covert - 45%
3. Kalamazoo Central - 24%
4. Kalamazoo Loy Norrix - 26%
5. Muskegon Heights - 78%

PARTICIPANTS BY GRADE LEVEL

26 10th Graders  
20 11th Graders  
29 12th Graders  
25 Bridge  
100 Total

DROPOUT RATE

1. Battle Creek Central - 4%
2. Covert - 9%
3. Kalamazoo Central - 5%
4. Kalamazoo Loy Norrix - 5.6%
5. Muskegon Heights - 6%

DEFINITION OF MICHIGAN HIGH SCHOOLS ACCORDING TO ENROLLMENT\*

Class A Enrollment of 1480 plus students  
Class B Enrollment from 716 to 1479 students  
Class C Enrollment from 371 to 715 students  
Class D Enrollment less than 371 students

There are 174 Class A high schools in Michigan, 183 Class B, 185 Class C, and 182 Class D.

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\*Source: Michigan High School Athletic Bulletin Directory, 1976-77.

Source for the rest of the Demographic Data from the 1976-77  
Upward Bound Proposal from Western Michigan University.

Appendix D

LETTER REQUESTING AUTHORIZATION

**WESTERN MICHIGAN UNIVERSITY**

UPWARD BOUND PROGRAM

February 2, 1977

KALAMAZOO, MICHIGAN  
49001

(Name & Title)  
(High School Name)  
(Address)

Dear Mr./Mrs. (Name):

I am a doctoral candidate at Western Michigan University with the Department of Educational Leadership and Director of the Upward Bound Program. My dissertation is entitled: An Analysis of the Characteristics and Achievements of Black Students in the Western Michigan University Upward Bound Program (1971-1976).

My research proposes to study three (3) groups of students from our Upward Bound target high school population. Since (Name of School) is one of our target schools, it will be included in the study.

Your written authorization is needed to permit me to obtain the following data:

1. Identify black students who graduated from your high school from 1971 to 1976 and attended a post-secondary institution.
  - a. The post-secondary institution is to be identified.
  - b. GPA at graduation is needed.
2. ACT or SAT scores are also requested.

Enclosed is a copy of my dissertation proposal for you to read. It will give you a concrete idea of my intentions. Names of students will not be used in the study.

To expedite time, I have prepared a sign-off form for you to sign. It grants your permission for me to do research on your former students.

Please inform me if there are other procedures that I need to comply with prior to your approval.

Your cooperation in this matter will be greatly appreciated.

Sincerely yours,

Luther R. Dease, Director  
UPWARD BOUND

LRD;dp

This letter was sent to:

Dr. Vernon R. Potts  
Assistant Superintendent  
Junior High Education & Research  
Battle Creek Public Schools

Mr. John L. Young, Principal  
Covert High Schools

Charles E. Townsend, Director  
Department of Research and Development  
Kalamazoo Public Schools

Carl L. Western, Principal  
Muskegon Heights Public Schools

**WESTERN MICHIGAN UNIVERSITY**

UPWARD BOUND PROGRAM

KALAMAZOO, MICHIGAN  
49001

March 8, 1977

Mr. Charles Carson, Director  
Records Office  
Western Michigan University  
Kalamazoo, MI 49008

Dear Mr. Carson:

Enclosed is a listing of one hundred and sixty-eight (168) students who comprise my dissertation sample population. These students have been identified by high school counselors, secretaries and teachers as having attended this institution from 1971 to 1976.

The following four (4) high schools are the target schools: (1) Battle Creek Central; (2) Covert; (3) Kalamazoo Central and (4) Muskegon Heights.

As we discussed earlier, I would need transcripts of each of the students listed on the enclosure sheet to record the following specific data:

1. High school g.p.a.
2. College g.p.a.
3. College completion.
4. Socio-economic status (if listed).
5. Undergraduate major.
6. Graduate entry.
7. Graduate major.
8. Time of completion from college.
9. Academic status.
10. Occupational entry level.
11. Mother's educational level.

Mr. Charles Carson  
Page 2  
March 8, 1977

12. Pre-college experience (if listed).
13. Stop-out (# of semesters out of school).
14. Year of initial entry.

Names of students are only necessary at this point to identify each one. After collection of the data, numbers will be used in place of the names. Confidentiality will be utilized throughout the study. Your cooperation is always appreciated.

I will be on campus again on Thursday and Friday of this week and can come to your office and record the data needed. Please let me know when it will be feasible for me to come to your office.

Sincerely,

Luther R. Dease, Director  
UPWARD BOUND

LRD:dp

Enclosures

## Appendix E

### DATA CODE BOOK AND RECORD SHEET



## Appendix F

### ADDITIONAL DATA ANALYSES

Table 7

The Socio-Economic Status of Parents of  
Study Participants by Numbers and Percentages

| Program          | Professional | Technical | Laborer   | Total      |
|------------------|--------------|-----------|-----------|------------|
| Upward Bound     | 0 ( 0%)      | 6 ( 7%)   | 74 (93%)  | 80 (54%)   |
| Non-Upward Bound | 9 (13%)      | 11 (16%)  | 47 (70%)  | 67 (46%)   |
| Total            | 9 ( 6%)      | 17 (12%)  | 121 (82%) | 147 (100%) |

The socio-economic status is defined, in this study, as the occupational status of the mother. The indicators in this definition are limited to three occupational levels instead of denoting a monetary scale: (a) professional, (b) technical and (c) laborer.

This data was gathered from the record's search of the study participants.

Table 8

The Mean High School Grade Point Average  
Of Upward Bound Students From 1971 to 1976

|                          | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | Totals |
|--------------------------|------|------|------|------|------|------|--------|
| Number of Students       | 7    | 18   | 13   | 15   | 19   | 8    | 80     |
| Mean Grade Point Average | 2.16 | 2.42 | 2.45 | 2.33 | 2.30 | 2.30 | 2.33   |

Table 9

The Mean High School Grade Point Average  
Of Non-Upward Bound Students From 1971 to 1976

|                          | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | Totals |
|--------------------------|------|------|------|------|------|------|--------|
| Number of Students       | 22   | 7    | 8    | 13   | 5    | 12   | 67     |
| Mean Grade Point Average | 2.32 | 2.24 | 2.28 | 2.24 | 2.35 | 2.11 | 2.26   |

Table 10

The Mean College Grade Point Average of  
Upward Bound Students from 1971 to 1976

|                          | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | Totals |
|--------------------------|------|------|------|------|------|------|--------|
| Number of Students       | 7    | 18   | 13   | 15   | 19   | 8    | 80     |
| Mean Grade Point Average | 2.76 | 2.32 | 2.09 | 2.00 | 2.05 | 1.66 | 2.15   |

Table 11

The Mean College Grade Point Average of  
Non-Upward Bound Students from 1971 to 1976

|                          | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | Totals |
|--------------------------|------|------|------|------|------|------|--------|
| Number of Students       | 22   | 7    | 8    | 13   | 5    | 12   | 67     |
| Mean Grade Point Average | 2.24 | 1.63 | 2.29 | 2.16 | 2.41 | 1.66 | 2.07   |

Table 12

Number and Percentages of Study Participants by Sex

| Program          | Females  | Males    | Totals     |
|------------------|----------|----------|------------|
| Upward Bound     | 49 (61%) | 31 (39%) | 80 (54%)   |
| Non-Upward Bound | 48 (72%) | 19 (28%) | 67 (46%)   |
| Totals           | 97 (66%) | 50 (34%) | 147 (100%) |

Table 13  
Number and Percentages of Study Participants  
By Program Target Schools

| Program          | Battle<br>Creek | Covert   | Kalamazoo | Muskegon<br>Heights | Totals     |
|------------------|-----------------|----------|-----------|---------------------|------------|
| Upward Bound     | 9 (11%)         | 15 (19%) | 26 (32%)  | 30 (38%)            | 80 (54%)   |
| Non-Upward Bound | 22 (33%)        | 2 ( 3%)  | 25 (37%)  | 18 (27%)            | 67 (46%)   |
| Totals           | 31 (21%)        | 17 (12%) | 51 (35%)  | 48 (33%)            | 147 (100%) |