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# A follow-up study of Iowa State University's Minority Graduate Recruitment/Advising Program 1979-1985

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*Iowa State University*

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**A follow-up study of Iowa State University's Minority Graduate  
Recruitment/Advising Program, 1979-1985**

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Iowa State University, 1987

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A follow-up study of Iowa State University's Minority  
Graduate Recruitment/Advising Program 1979-1985

by

Charles A. Ramsey, II

A Dissertation Submitted to the  
Graduate Faculty in Partial Fulfillment of the  
Requirements for the Degree of  
DOCTOR OF PHILOSOPHY

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Iowa State University  
Ames, Iowa

1987



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## CHAPTER 1. INTRODUCTION

Minority is a universal term often used to describe certain groups in society. Characterization of a group as minority usually is predicated on both numerical composition and uniqueness to majority society. For the purpose of this study, the term minority is used to describe the subjects who participated in this research effort. The participants were black students who earned graduate degrees at Iowa State University during the period 1979 through 1985.

They were asked to respond to a mailed questionnaire which requested the submission of demographic information, an estimation of their satisfaction with the services provided by Iowa State University's Minority Graduate Recruitment/Advising Program during their period of matriculation, their perceptions of the program's strengths and weaknesses, and suggestions for improving the program. The data submitted by these subjects will be utilized by the researcher in this study for the purpose of evaluating the program.

## Background of the Study

The extent to which blacks have attained graduate degrees in the last 25 years constitutes a significant change in higher education from the past. To better understand why it took so long historically for this change to occur, one must look at social values and norms of the majority society and examine their impact.

Prior to the 1960s, prevailing federal-state-local laws, social customs, and categorical discrimination directed at blacks greatly

affected their overall participation in the nation's graduate and professional schools (hereafter referred to as GPS). B. A. Thresher (1966) posited that access to higher education is primarily a "social process" that is deeply embedded in society's (cultural) patterns and value system. Thus, the relationship between GPS and the majority society must be kept in mind (Thomas, 1986).

The following chronology of race relations reflects the evolving degrees of access blacks have experienced in higher education, starting with the institution of slavery which prescribed the nation's education and social policy towards blacks until the Civil War. During this period, blacks generally were not allowed to read and write (Thomas, 1986). Occasionally, a few institutions such as Berea College in Kentucky and Oberlin College in Ohio admitted blacks on a selected basis. However, persistent protest on the part of Northern free blacks and white Northern missionaries who comprised the Abolitionist Movement resulted in the establishment of the first three black colleges by the end of the Civil War. These were Cheney College and Lincoln University in Pennsylvania and Wilberforce University in Ohio (Bowles and DeCosta, 1971). Between 1854 and 1952, some 123 colleges were established to serve black students who did not have access to "white institutions" because of de jure and de facto discrimination (Bailey and Hafner, 1978).

The enactment of Federal laws including the 14th and 15th Amendments, the establishment of the Freedman's Bureau, the Civil Rights Bills of 1866 and 1875 along with assistance from Northern white philanthropists and religious organizations fostered the founding of a

number of these black colleges during the Reconstruction Period (1868-1877) (Turner and Mitchell, 1978).

Seventeen of the current public black universities were established as a result of the 1890 Land-Grant Act. This act paved the way for the development of legally separated black and white land-grant public institutions in each of the Southern and border states, between 1890 and 1899. They, unlike their white counterparts, generally could not award baccalaureate degrees until much later (Bowles and DeCosta, 1971). Through the combined efforts of both private and public black colleges, between 1865 and 1895, more than 1,100 blacks received college degrees in education (Blackwell, 1975). Unfortunately, the literature search revealed no information about blacks who may have earned degrees in areas other than education. These first graduates and many that followed served as educators and provided leadership in the segregated black communities throughout the United States, even until today.

This dual system of education for blacks and whites was constitutionally upheld in the 1896 U.S. Supreme Court ruling in the case Plessy vs. Ferguson (Fleming, 1981). This decision established the doctrine of "separate-but-equal" in all facets of American life. States contributed to further segregation of society by erecting separate facilities for blacks and whites. According to Fleming (1981), these facilities were never equal. The overwhelming sentiment among whites was that segregated education was "the key to peace and harmony between the races and that blacks should devote themselves to learning agriculture, mechanics and domestic services" (Fleming, 1981). White privilege



prevailed in every aspect of American life and notably in higher education (Blackwell, 1981).

Black migration from rural areas to urban areas coupled with expanding black efforts to abate racial injustice made blacks realize that a liberal education was just as important as a vocational education. Advocates for liberal education such as W. E. B. DuBois and W. M. Trotter saw the doctrine of "separate but equal" as an impediment to the future educational progress of the blacks. Some black colleges had master's degree programs, but none offered the doctoral degree before 1954. A few institutions outside of the South allowed a small number of blacks the opportunity to acquire graduate degrees in liberal education. This lack of opportunity resulted in the small number of blacks who received doctoral and professional degrees before 1970 (Blackwell, 1981).

Between 1935 and 1954, the National Association for the Advancement of Colored People (NAACP) in six cases before the Supreme Court challenged the "separate but equal" doctrine. These were cases involving black plaintiffs who were trying to gain admission to segregated white schools. The first five were: Maryland vs. Murray, 1935; Missouri ex rel. Gaines vs. Canada, 1938; Sipuels vs. Board of Regents of the University of Oklahoma, 1948; Sweatt vs. Painter, 1950; and McLauren vs. Oklahoma Regents, 1950 (Haynes, 1978). In winning all five cases, the NAACP established precedence for the landmark Brown vs. Board of Education of Topeka, Kansas, 1954 decision (Fleming, 1976). The decision in the Brown case invalidated the Plessy decision. It mandated the desegregation of the nation's public elementary and secondary schools.

However, the Supreme Court did not provide a specific plan for implementing this change. Nearly 20 years later (1973), the court ruled in Adams vs. Richardson that segregation in public colleges and universities must be dismantled (Aptheker, 1973). Some states still have not met the requirements set down in the Adams decision.

The Civil Rights Movement of the 1960s, the Higher Education Act of 1965, and the Adams decision gave further impetus to black efforts to enter segregated white GPS. According to Astin (1982), "In the 1960s and early 1970s, these efforts were manifested in the form of racial protests on the campuses and in the communities. In turn, GPS accepted changes. Some of the changes brought about were minority recruitment, ethnic studies, summer enrichment programs, and the adoption of black colleges by white colleges as sister institutions for the purpose of faculty exchange" (p. 8).

Black graduate students on GPS campuses across the United States began to clamor for the implementation of some, if not all, of the aforementioned changes. Iowa State University's Graduate College implemented a program to recruit black graduate students in the spring of 1973.

During the early 1970's Black graduate students and faculty felt the need to organize as a collective group [Organization of Black Concerns--OBC]. They felt there existed a need to increase the Black graduate student and faculty population on the Iowa State University Campus in Ames, Iowa. OBC members dedicated themselves to become the impetus for change, the support of the successful student completion of their program of study at ISU and sought strength in unity. A change in attitudes and perspectives toward Black students was needed. . . (OBC Newsletter, 1979).

Iowa State University has maintained a policy of admitting students

without regard to race, color or national origin for many years. An example was George Washington Carver, the world-acclaimed black scientist, who earned both the bachelor's and master's degrees from ISU in the 1890s (Iowa State University Alumni Records). Although this admissions policy had been adhered to, Alumni Office records revealed that few blacks had received graduate degrees from ISU prior to the 1970s.

Organization for Black Concerns opined that in order for the black graduate student population to increase, the university would have to actively recruit black graduate students. Exploration of ways to realistically develop this idea led to discussions initially between OBC and Dr. Wilber Layton, Vice President for Student Services, and members of his staff that interacted with black students, and later with Dr. Daniel Zaffarano, Dean of the Graduate College. From these deliberations evolved the Graduate Program for Students with Special Educational Needs (see Appendix A). The title of the program was later changed to Minority Graduate Recruitment/Advising Program.

This program was implemented by the Graduate College in 1973. In addition to the aforementioned discussions, OBC further stated, "This change was accomplished by (OBC) and community members through television forums and community meetings; in addition to the creation (at ISU) of a graduate . . . advisor position" (OBC Newsletter, 1979). The investigator found no validation of how this position actually came into being. The persons who have been responsible for the day-to-day administration of the program are listed below in Table 1. Apparently,

both the program title and program administrator title changed periodically. No records were found that documented when and why these changes occurred.

Table 1. MGR/AP--Program administrators

Period	Person	Title	Frequency
1973-74	Annabel Liu	GSA <sup>a</sup>	Half-time
1974-76	Larry R. Shannon	A.D.-GSA <sup>b</sup>	Full-time
1976-77	Worth Haynes	A.D.-GSA	Full-time
1977-86	Charles A. Ramsey, II	GSA-Coord. <sup>c</sup>	Full-time

<sup>a</sup>Graduate student advisor.

<sup>b</sup>Assistant to the Dean and graduate student advisor.

<sup>c</sup>Graduate student advisor changed to coordinator.

#### Program Changes<sup>1</sup>

The program remained basically intact as described previously until spring of 1978. At that time, the person (Graduate Advisor, later changed to Coordinator of Minority Recruitment and Advising Program) directly responsible for administering this program began to institute the following changes:

- 1) Plan and coordinate all university recruitment of minority graduate students (initiated spring, 1980).
- 2) Conduct a preliminary screening of all applicants recruited by the program (initiated spring, 1979).
- 3) Serve as a "primary resource person" in the admissions process

<sup>1</sup>C. A. Ramsey, II (personal recollections, March 24, 1987).

(initiated fall, 1980).

- 4) Make sure the financial needs of all minority graduate students (who were in good academic standing--making normal progress toward satisfying degree requirements) are met throughout the entire period of study (initiated fall, 1978).
- 5) Assist in securing housing for new students (initiated fall, 1978).
- 6) Plan and coordinate minority graduate student orientation activities (initiated fall, 1978).
- 7) Maintain a complete file on all applicants that were admitted from the point of initial contact through graduation (initiated spring, 1979).
- 8) Serve as a primary counselor for students in the following areas: admissions, financial, academic, personal (when consulted), and employment procurement after graduation (initiated spring, 1979).
- 9) Maintain a file consisting of names and addresses of minority graduates (initiated summer, 1982).
- 10) Begin annual campus visitation weekend for prospective minority graduate students (initiated spring, 1982).

#### Statement of the Problem

A critical factor in the design and implementation of an effective recruitment and retention program is its placement within the organizational structure of the institution. Specifically, the program

should be housed under the aegis of a top administrator. This placement enhances the program by investing it with institutional and administrative legitimacy (Boone, Young & Associates, 1984). Perhaps, the optimum arrangement is a cooperative arrangement between the graduate school and departments with the principal initiatives and coordination stemming from the graduate school itself. Hamilton (1973) supported this approach when he advised that once a policy has been adopted, recruiting, special admissions, and student services must be actively coordinated above the department level. Program design by itself will not guarantee a successful minority recruitment-retention effort.

According to Boone, Young and Associates (1984),

Effective recruiters of minorities must have the capability to operate in an organizational environment which requires differential responses. That is, they must have the skill to perform in a role which is defined by such varying and sometimes conflicting, characteristics as:

- 1) being a staunch faculty and administration supporter, while also being a strong minority student advocate;
- 2) working continuously to establish and maintain both internal and external recruitment networks, while developing and maintaining an active candidate pool;
- 3) having the realism of a practitioner and the discipline of an academic;
- 4) being knowledgeable about institutional policies, regulations, resources, environment and status, although, in many instances, having insufficient power to make changes relative to these factors;
- 5) having the ability to negotiate, and authority to make institutional commitments;
- 6) being able to generate enthusiasm with respect to institutional marketing;
- 7) having ability to interact effectively with candidates;
- 8) being able to identify candidates with potential in spite of results from traditional assessment instruments and to convince chairpersons and faculty to accept and nurture such students;
- 9) possessing ability to develop and maintain an effective retention program (pp. 47-48).

They state that,

In order to ensure, insofar as possible, the continued enrollment of minority graduate students and ultimately their successful graduation, special assistance must be provided for them. This assistance must respond in particular to their non-academic, as well as any special academic needs . . . such as the following:

- 1) minority orientation activities;
- 2) a minority graduate student monitoring and tracking system;
- 3) financial support opportunities;
- 4) "buddy system";
- 5) faculty advisor system;
- 6) opportunities and encouragement to become involved in campus activities;
- 7) personal counseling (individual and family);
- 8) career counseling;
- 9) faculty/staff sensitivity (pp. 57-58).

The purpose of this study was to evaluate the Minority Graduate Recruitment/Advising Program in the Graduate College at ISU by collecting data from black students who graduated between 1979 and 1985. They were asked the following questions:

1. How satisfied were you with the following services provided by the program:
  - a. recruitment procedures;
  - b. admissions assistance;
  - c. orientation to the university;
  - d. financial assistance;
  - e. quality of academic advising;
  - f. quality of personal advising;
  - g. availability of minority graduate recruiter/advisor?
2. What were the strengths of the program?
3. What were the weaknesses of the program?

4. What changes would you suggest for the program?

Cameron (1981) concluded that student satisfaction levels are important aspects of organizational effectiveness in colleges and universities.

Purpose of the Study

The purpose of this study was to evaluate the Iowa State University's Minority Graduate Recruitment/Advising Program, from 1979 through 1985, utilizing student satisfaction with the program as the principal determinant. This was accomplished by surveying minority graduate degree recipients. Also, this investigation was conducted to aid in developing recommendations for program revisions.

Null Hypotheses of the Study

The following null hypotheses were tested:

- 1) There is no significant difference between graduates' level of satisfaction with the program and gender.
- 2) There is no significant difference in the level of satisfaction between graduates who were awarded assistantships prior to beginning graduate study and those that were not.
- 3) There is no significant difference in the level of satisfaction between graduates who held assistantships for the entire period of study and those who received assistantships for only a portion of that period.
- 4) There are no significant differences between graduates' level of satisfaction with the program and age classification.
- 5) There are no significant differences between graduates' level of



satisfaction with the program and employment classification.

- 6) There are no significant differences between graduates' level of satisfaction with the program and skills and competencies gained during graduate study that are being utilized in present job.
- 7) There are no significant differences between graduates' level of satisfaction with the program and the years in which graduate degrees were completed.
- 8) There are no significant differences between graduates' level of satisfaction and the types of degrees earned.
- 9) There are no significant differences between programs of study completed and graduates' level of satisfaction with the program.
- 10) There is no significant relationship between graduates' level of satisfaction with the program and their cumulative grade point average at Iowa State University.

#### Assumptions

The assumptions attested to in this study are:

- 1) The questions in the "Program Evaluation Questionnaire" were appropriate for measuring satisfaction with the Minority Graduate Recruitment/Advising Program.
- 2) Student satisfaction with the MGR/AP can be measured independently of departmental teaching and advising faculty, academic program, and fellow-student variables.
- 3) The instrument and methods of data collection used by the Minority Graduate Recruitment/Advising Program at Iowa State

University are reliable and valid.

#### Definitions of Terms

The following definitions were used for the purpose of this study:

- 1) Minority describes four multicultural groups at Iowa State University: (1) Asian Americans; (2) Native Americans; (3) Hispanic Americans; and (4) Black Americans. The minority group referred to in this study was Black Americans.
- 2) Program used in this study was defined as a set of related activities developed to accomplish some purpose. More specifically, program is "the product resulting from all programming activities in which professional educators and learners are involved" (Boyle, 1981, p. 5).
- 3) Evaluation is defined as "a study that is designed and conducted to assist some audience to judge and improve the worth of some educational object" (Stufflebeam & Webster, 1980, p. 6).

#### Limitations of the Study

- 1) The research population was limited to black graduate students who received M.A., M.S. and Ph.D. degrees from Iowa State University between 1979 and 1985 inclusively.
- 2) The research data were limited to measuring student satisfaction with the MGR/AP component of the total graduate experience at ISU.
- 3) It should not be assumed that the data collected and analyzed in this study represented the entire minority graduate population

during the period in question.

- 4) No attempt was made to evaluate any other university effort to recruit and advise minority graduate students.
- 5) This study was undertaken because of a personal interest by the investigator (who served as the program administrator during the period in question), and the literature was devoid of previous studies that evaluated minority recruitment and retention efforts at the graduate level. Special care was taken to insure that the data collection and analysis were carried out objectively so as to insure fairness throughout the evaluation procedure.

## CHAPTER 2. A REVIEW OF RELATED LITERATURE

A review of the literature discloses a paucity of research on the evaluation of ethnic programs but numerous studies on the evaluation of more traditional educational programs. This review of literature consisted of an examination of ISU alumni records, Graduate College MGR/AP records, journal articles, books, dissertations, and an ERIC literature search using the ISU Library CD-ROM system. This examination of the related literature will provide a basis for developing an evaluation procedure which will be utilized in this study to assess student satisfaction with the MGR/AP and to request suggestions for program revisions.

This chapter is divided into three sections. The first section reviews the evolutionary changes that have taken place in educational evaluation, both historically and analytically. The second section reviews literature pertaining to student input in the evaluation process. The third section examines why minority programs should be evaluated.

## An Overview of Literature on Program Evaluation

Historically, the different schools of thought associated with evaluation are based upon educators' differences regarding how evaluation should be conducted in relationship to the purpose, the program, the personnel and the program goals. Initially, evaluation was defined as educational measurement (Stufflebeam et al., 1971; Hanson, 1978). This can be attributed to educators of the 1920s and 1930s measurement movement who began to relate evaluation to what they were assessing and

why. Thorndike and Hagen (1969) define evaluation as being closely related and/or synonymous with measurement.

Many educators subscribed to this synonymy, but there was some disagreement. For example, Guba (1969) and Nevo (1974) observed that defining evaluation as measurement, results in an evaluation which is too narrow in focus and too mechanistic in its approach. They believed that this approach limited evaluation to instrument development and avoided the consideration of other components involved in evaluation such as value judgment, criteria, purpose and influence. Ebel (1965) concluded that evaluation is "a judgment of merit, sometimes based solely on measurements such as those provided by test scores but more frequently involving the synthesis of various measurements, critical incidents, subjective impressions, and other kinds of evidence" (p. 450).

In the 1950s, critics began to voice a dissatisfaction with public education. They concluded that the public schools were ineffectual because too much emphasis was being placed on "progressive" education. Their cause was further aided by the launching of Sputnik. As a result, the federal government moved in with an infusion of federal dollars. Both of these factors gave impetus to the evaluation process (Popham, 1975). They stimulated interest in program worth.

The few early subscribers to the evaluation process concerned themselves primarily with program worth. From this group, Ralph W. Tyler emerged as the most salient educator who attempted to further formalize the conceptual nature of evaluation. He was an early proponent of behaviorally stated objectives (Madaus, Scriven & Stufflebeam, 1983).

Tyler (1950) defined evaluation as "the process of determining to what extent the educational objectives are actually being realized" (p. 69). His approach was to look at evaluation as a process of comparing performance data with clearly defined program goals.

The fallacies of this approach are failure to include a decision-making component for program planning and improvement and a primary reliance on student performance to determine program worth (Nevo, 1983). Adams (1972) concludes that the advantage of the Tylerian approach is that it integrates evaluation with the instructional process, possible feedback, and has defined criteria. This determination of the degree to which instructional program goals were achieved resulted in the Tylerian approach becoming known as a goal-attainment model and/or behavioral objectives model.

The shrinking financial support for education which began during the late 1960s and early 1970s ushered in an era of educational accountability. Popham (1975) stated that "this stepped-up demand for accountability naturally led to a stepped-up need for educational evaluation" (p. 6). Clearly a change in the pattern of evaluation was needed to cope with this new demand for accountability. In addition to determining program worth, evaluators needed to provide information for decision-making as well.

To meet this need, evaluation theorists put forth two judgmental models, one emphasizing intrinsic criteria and the other extrinsic criteria. With the exception of the accreditation model, intrinsic criteria are seldom used by evaluators because they tend to place more

credence in product criteria than in process criteria (Popham, 1975).

The most significant judgmental models based upon use of extrinsic criteria were put forth by Michael Scriven and Robert E. Stake. Scriven (1967) describes evaluation as an assessment of merit. He focused on the effects of a program. To insure that intrinsic evaluation was kept in perspective, he advocated goal-free evaluation. This allowed the evaluator to be concerned with program results consonant with program goals, and to look at a wider range of program results than he or she might otherwise do. Stake (1967), in his Countenance model, proposed an evaluation procedure based upon description and judgment. This approach is advantageous because it distinguishes between descriptive and judgmental acts of the evaluator. The most prominent evaluation theorist to disagree with these views was Lee J. Cronbach. Cronbach et al. (1980) rejected the judgment aspect of evaluation which views the evaluator as "an educator whose success is to be judged by what others learn" (p. 11).

According to Popham (1975), yet another educational change (decentralization of school districts in the late 1960s and early 1970s) has impacted upon evaluation. Decentralization gave local school boards and citizen advisory groups more control of their schools. This, in turn, brought on a greater demand for evaluation of school programs. These local determiners of school policy often lacked expertise in evaluation. Nevertheless, they viewed program evaluation as vital to the decision-making process.

This change motivated educational evaluators to examine the role of evaluation in the decision-making process. Patton (1978) suggested that

the first step in the decision-making approach is "identification and organization of relevant decision makers for and information users of the evaluation" (p. 61). House (1980) concluded that the decision-making approach in evaluation draws primarily from survey methodology such as questionnaires and interviews, and the evaluator works more with variation in program settings rather than trying to arrange experiments. He further states that the questions answered are those of the decision makers, and these questions usually are centered around program effectiveness, more specifically which parts of the program are most effective. Barak (1982) concludes that the vast majority of the recommendations coming out of institutional reviews focus on program improvement (p. 46). Stake and Denny (1969) stated that the evaluation process should be concerned with gathering information about the nature and worth of educational programs in order to improve decisions about the management of these programs. Proponents of this school of thought became known as decision-facilitation evaluators.

Perhaps the best-known decision-facilitation model is the CIPP model. This model was designed by Ego Guba and Daniel Stufflebeam to evaluate projects that had been funded through the Elementary and Secondary Education Act (ESEA) of 1965. It is based upon a definition of evaluation put forth by Stufflebeam et al. (1971) which states that "educational evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 40).

This model was designed to enable decision-makers to make decisions regarding program planning, structuring, implementing, and recycling. It



is a three-step evaluation process (delineating, obtaining, and providing); and may be used to conduct four types of evaluation (context, input, process, and product) (Madaus, Scriven & Stufflebeam, 1983). Since this study is based upon the CIPP model, it will be discussed further.

#### CIPP (types of evaluation)

Context evaluation      Context evaluation defines the relevant environment, identifies unmet needs and provides the basis for developing them (Randall, 1969; Nevo, 1974; Stufflebeam, 1973; Stufflebeam et al., 1971). It attempts to isolate the strengths and weaknesses in an educational setting such as an institution or a program. The methodology is basically descriptive and comparative. According to Popham (1975), context evaluation is characteristically the identification of a set of specific objectives for which an instructional program can be designed.

Input evaluation      Input evaluation provides information regarding how to employ resources to achieve program objectives (Popham, 1975). The overall intent of an input evaluation is to help the clients consider alternatives in the context of their needs and environmental circumstances and to evolve a plan that will work for them (Stufflebeam, 1983). The data from this type of evaluation are utilized to assist in achieving the objectives identified as a result of context evaluation.

Process evaluation      Process evaluation detects defects in the implementation stages, provides information for programmed decisions and maintains a record of the process to be used later to aid in the

interpretation of the outcomes (Stufflebeam et al., 1971; Nevo, 1974). This type of evaluation is required once the program is operational "to monitor the actual instructional procedures in order to help the instructional decision-makers anticipate and overcome procedural difficulties" (Popham, 1975).

Product evaluation Product evaluation endeavors to measure and interpret the attainment of program goals at intervals during the program's existence and at its conclusion. Stufflebeam (1983) states that feedback about what is being achieved is important during a program cycle and at its conclusion. Information gathered from this type of evaluation is used by decision-makers to decide to continue, terminate, or modify a particular program.

#### CIPP model usage and limitations

Most educators agree that some form of evaluation is essential to the improvement of institutions and their programs. The CIPP model has served as a theoretical foundation for many of the research methodologies espoused by educational evaluators in different areas (Worthen & Sanders, 1973). Wide usage of some variation of the CIPP model by educational evaluators attests to its applicability.

This extensive applicability of the CIPP model resulted from its embodiment of the first full-blown framework for guiding evaluators primarily concerned with getting the best information to decision makers within a certain period of time (Popham, 1975). He also stated that, in some instances, evaluators encounter problems while performing this task.

House (1980) noted some of these problems in his critique of this model. He concludes that one such problem arises because the evaluator is usually an administrator of the program. This could cause ethical questions to be asked regarding the fairness of the evaluation procedure. Barak (1983) proposes, "When the review extends beyond internal program improvement, consideration should be given to introducing greater degrees of objectivity by adding outside persons" (p. 73). Secondly, problems develop when the evaluator attempts to define specific decision alternatives. It is difficult to specify and anticipate decisions to be utilized before the evaluation is completed. Therefore, the decision alternatives established at the outset of an evaluation may only be tentative. Finally, because evaluators usually serve at the discretion of program administrators, data given to the decision-makers often give the evaluation a strong management slant.

#### Minority Student Involvement in the Evaluation Process

In recent times, particularly in higher education, student opinions have been receiving an increasing amount of attention (Pace, 1985). A review of literature shows that program evaluators in general have just recently begun to utilize student information systems in the evaluation process. Morstain and Gaff (1977) and Pace (1985) stated that until recently many programs progressed without student involvement. Further examination of the literature reveals that this has been the case with regard to evaluation of minority programs, as well. The investigator found no literature on the subject that included student input.

If colleges and universities are to realize their full potential in providing high quality programs for minority students, it seems apparent that these students should be more systematically involved at each stage of program development. McAlduff (1975) believes that students' opinions and perceptions are unbiased and a valuable source of information. He further states that "students are frank and sincere in their assessments . . . and give praise where praise is due" (p. 29). "The significance of student participation depends largely on the internal characteristics of the particular institution. Exceptions apart, the most frequent role of current students, graduates, and former students is as participants in surveys" (Barak, 1983, p. 41). Nevertheless, Gaff (1978) stressed that attention should be paid to what students think about their college programs and activities.

Students can make valuable contributions, both in improving program quality and determining the program's image (Kauffman, 1984). According to Cooley and Lohnes (1976), the program image can be determined by assessing the perceptions and satisfactions of the students and graduates concerning the depth and width of the program, rapport of instructors with students, and the extent to which students encounter learning experiences that they value.

#### Why Minority Programs Should Be Evaluated

To maintain and improve the quality of existing programs for minority students, systematic evaluation should be required (Boone, Young & Associates, 1984). Specific program strengths and weaknesses need

periodic identification. The investigation instruments should measure for satisfaction in instruction, interaction of the environment and students, curriculum offered, social activities, and the recognition given to the student as an individual (McAlduff, 1975; Cooley & Lohnes, 1976). The literature search revealed a number of studies relating to evaluation of more traditional programs in higher education based on solicitation and analysis of student opinions. They generally utilized a survey procedure in which questionnaires were developed based upon what was to be measured and submitted to selected groups. Responses were analyzed with the results being published and/or conveyed to decision-makers for their consideration (Startup, 1972; Wood & Wood, 1979; Braskamp, Wise & Hengstler, 1981; Pace, 1985). While it appears that these efforts are expanding, seemingly little progress has been made to apply similar evaluation procedures to existing programs for minority students. Even with their diversity in purpose, these programs share a common goal with more traditional programs--that of improving quality for students. According to the Commission on Higher Education of Minorities (1982), such programs must have:

reporting and evaluation systems incorporated into their designs. These systems provide visibility of the program's accomplishments to the institution's administration and departmental chairpersons and faculty. It concludes that program evaluation is critical in the maintenance of an effective program for two reasons: it provides critical feedback to guide both program personnel and funding agencies; and provides objective evidence of program efficacy which can serve to protect the most effective programs in times of budgeting crisis (p. 36).

There are a number of studies on minority student involvement in higher education at the graduate level. Listed here are several prominent

scholars who have written extensively on this subject, followed by several agencies that promote research on blacks in higher education:

Astin, Alexander W.

Blackwell, James E.

Copeland, Elaine J.

Deskens, Donald

Fleming, Jacqueline

Fleming, John E.

Hale, Frank

Morris, Lorenzo

Pruitt, Anne

Thomas, Gail E.

Trent, William

American Council on Education

Commission on Higher Education of Minorities

Council of Graduate Schools in the U.S.: Committee on Minority  
Graduate Education

National Advisory Committee on Black Higher Education and Black  
Colleges and Universities.

These studies most often focus on the kinds of services provided by minority programs on predominantly white college and university campuses. Nothing was found that even adumbrated minorities' satisfaction with these efforts. This chapter reviewed the related literature and described how existing research can be utilized to develop a format for this study.

## CHAPTER 3. METHODOLOGY

This chapter describes the methods utilized in this study. The six major sections are: Description of the Sample and Population, Research Procedures, Instrumentation, Treatment of the Data, Method of Analysis and Human Subjects Approval.

## Description of the Sample and Population

The subjects that participated in this study were recruited by the Minority Graduate Recruitment/Advising Program. They completed either master's or doctoral degrees between 1979 and 1985. Approximately 189 black students received degrees during this period. Addresses were secured from academic departments, ISU Alumni office, beginning in 1982 the Minority Graduate Recruitment/Advising office alumni file, and other graduates, for 153 of the 189 graduates. A total of 153 degree recipients were surveyed by means of a mail questionnaire. Thirty-six were not sent questionnaires because no addresses could be obtained for them. Of the 153 graduates surveyed, 89 returned completed questionnaires for a 58 percent rate of return; six were incomplete and these were deleted. Seven questionnaires were received after the data were analyzed. In Table 2, the population was described according to the following demographic characteristics: (1) personal, and (2) occupational (job classification). The majority of the graduates were females (71 percent), 55 percent were between the age category of 21 to 24, and 33 percent were employed in 4-year colleges and universities. When asked about present employment, 55 percent indicated that to "a

Table 2. Demographic characteristics about minority graduates from 1979-85

Characteristics	Number	Relative (PCT)	Adjusted <sup>a</sup> (PCT)
<u>PERSONAL</u>			
Gender:			
Female	63	70.8	70.8
Male	26	29.2	29.2
Total	89	100.0	100.0
Age Group:			
21-24	49	55.1	55.1
25-30	27	30.3	30.3
31-35	9	10.1	10.1
36 and over	4	4.5	4.5
Total	89	100.0	100.0
<u>OCCUPATIONAL</u>			
Employment Classification:			
Federal Government	10	11.2	11.2
State Government	8	9.0	9.0
Industry/Business	17	19.1	19.1
4-Year College/ University	29	32.6	32.6
2-Year College	1	1.1	1.1
School District	8	9.0	9.0
Self-Employment	1	1.1	1.1
Other	15	16.9	16.9
Total	89	100.0	100.0
Utilization of Skills on Job:			
A Great Deal	49	55.1	55.1
Somewhat	26	29.2	29.2
Very Little	10	11.2	11.2
Not At All	4	4.5	4.5
Total	89	100.0	100.0

<sup>a</sup>The percentages in the "Adjusted PCT" column have been calculated based on the number of respondents remaining after eliminating missing answers (including "Not specified" and "Not applicable").



great deal," they were able to utilize the skills and competencies gained from graduate study (degree) at Iowa State University.

An analysis of financial support data revealed that 90 percent of the graduates were awarded assistantships shortly after being admitted to a graduate program and prior to beginning graduate study at Iowa State University. Eighty-four percent indicated that they were awarded assistantships throughout the "entire period" of their graduate pursuit. A summary of the financial support data is presented below, in Table 3.

Table 3. Financial support data pertaining to minority graduates from 1979-85

Characteristics	Number	Relative (PCT)	Adjusted (PCT)
<u>PROGRAM (Financial)</u>			
Offered an Assistantship:			
Yes	80	89.9	89.9
No	<u>9</u>	<u>10.1</u>	<u>10.1</u>
Total	89	100.00	100.0
Period of Assistantship:			
Entire Period	65	73.0	84.4
Part of Period	12	13.5	15.6
Not Applicable	6	6.7	---
Not Specified	<u>6</u>	<u>6.7</u>	<u>---</u>
Total	89	100.0	100.0

Data in Table 4 show that all 89 subjects used in this study received their first graduate degrees from ISU between 1979 and 1985.

Table 4. Academic information about minority graduates from 1979-85

Characteristics	Number	Relative (PCT)	Adjusted (PCT)
<b>Year First Degree Completed</b>			
at ISU:			
1979	6	6.7	6.7
1980	12	13.5	13.5
1981	14	15.7	15.7
1982	9	10.1	10.1
1983	13	14.6	14.6
1984	26	29.2	29.2
1985	<u>9</u>	<u>10.1</u>	<u>10.1</u>
Total	89	100.0	100.0
<b>First Degree Completed</b>			
at ISU:			
M.S.	56	62.9	62.9
M.A.	10	11.2	11.2
M.ED.	1	1.1	1.1
Ph.D.	<u>22</u>	<u>24.7</u>	<u>24.7</u>
Total	89	100.0	100.0
<b>GPA Earned at ISU:</b>			
3.70 through 3.83	8	9.0	9.6
3.52 through 3.69	13	14.6	15.7
3.31 through 3.50	23	25.8	27.7
3.01 through 3.30	32	35.0	38.6
2.89 through 3.00	7	7.9	8.4
Not Specified	<u>6</u>	<u>6.7</u>	<u>--</u>
Total	89	100.0	100.0
<b>Degree Requirement:</b>			
Thesis	46	51.7	51.7
Dissertation	22	24.7	24.7
Creative Component	<u>21</u>	<u>23.6</u>	<u>23.6</u>
Total	89	100.0	100.0

The frequency analysis disclosed that 75 percent received master's degrees and 25 percent received doctoral degrees. Thirty-nine percent graduated with cumulative grade point averages between 3.01 and 3.30. Ten percent graduated with cumulative grade point averages between 3.70 and 3.83. According to self-reported data, eight percent graduated with less than 3.00.

#### Research Procedures

The research methodology employed in this study is known as survey research. This type of research is defined by Borg and Gall (1979), as ". . . a method of collecting information . . . to explore relationships between different variables" (p. 282). Surveying is one of the most widely used methods of collecting data in the field of education.

The data were collected by means of a "Program Evaluation Questionnaire" (see Appendix C). Subjects were asked to submit various demographic (academic, age, occupational, and financial aid) information, and estimation of their satisfaction with the services provided by MGR/AP and their academic department during their period of matriculation, their perceptions of the strengths and weaknesses of the program and their respective academic departments, and suggestions for improving the program and their respective academic department. Data collected about academic departments were not used in this study because they were not relevant to the primary focus of this research. The questionnaire, with a cover letter, was mailed to 153 minority graduates on July 14, 1986. The cover letter is included in Appendix C. A check-off procedure was

used in order to determine who had returned questionnaires and those who had not. A follow-up phone call was made after two weeks to all of the subjects who had not yet returned questionnaires. If the instrument had not been received, another was forwarded. If subjects did not respond to the second mailing, it was assumed that the questionnaire would not be returned.

#### Instrumentation

The "Program Evaluation Questionnaire" is a two-part survey instrument, adapted by Beavers and Photisuvan (1985), for alumni from Braskamp, Wise and Hengstler (1981). It was revised by the investigator with assistance and approval from the program of study committee. Some items were deleted and others were reworded. The revised questionnaire was used to measure student satisfaction with the Minority Graduate Recruitment/Advising Program and their academic department. Part I of the instrument consisted of 24 items and was designed to gather demographic (academic, occupational, and financial) support information.

Part II of the survey was divided into two sections. Section I was comprised of 21 items that related to levels of satisfaction with Minority Graduate Recruitment/Advising Program and their academic department. A breakdown of the 21 items revealed that 9 pertained to the Minority Graduate Recruitment/Advising Program and 11 items related to the academic department. A final item in this section asked the subjects to rate their overall experience "treatment" as a graduate student at Iowa State University. A Likert Scale ranging from "1" (Highly

Dissatisfied), "2" (Dissatisfied), "3" (Undecided), "4" (Satisfied) to "5" (Highly Satisfied) was used to measure the satisfaction items. Section II had six open-ended questions: 1) graduates were asked to state at least 3 weaknesses and 3 strengths of both the Minority Graduate Recruitment/Advising Program and their academic department; and 2) graduates were asked to suggest at least three changes that would improve the Minority Graduate Recruitment/Advising Program and their department.

#### Treatment of the Data

Three steps were used in the treatment of the data: 1) a coding scheme was devised from the "Program Evaluation Questionnaire" which described the variable names, description of the variables, column format, and numerical codes; 2) the responses from the 89 questionnaires were coded numerically; and 3) the data were keypunched at the Key Entry and Unit Record (Computer Center) at Iowa State University. Any errors found in coding were corrected and retyped through the Wylbur terminal.

#### Method of Analysis

The data were analyzed using the Statistical Package for Social Science (Nie et al., 1983). In this study, the data were analyzed in two major phases: 1) measurement analysis; and 2) hypotheses testing. The measurement analysis included frequency counts, percentages, factor analysis and reliability. In phase two, t-test (independent samples) was used to test hypotheses 1, 2 and 3. One-way analysis of variance was used to test hypotheses 4 through 9. Pearson product moment correlation

was used to test hypothesis 10 (see Chapters 1 and 4).

A single asterisk (\*) was used in the tables to denote significant difference at the 0.05 level, and double asterisks (\*\*) were used to denote significant differences at the 0.01 level.

#### Human Subjects

The Iowa State University Committee on the Use of Human Subjects in Research reviewed the study and concluded that the rights and welfare of the human subjects were adequately protected, that risks were outweighed by the potential benefits and expected value of the knowledge sought, that confidentiality of data was assured, and that informed consent was obtained by appropriate procedures (see Appendix D for a copy of the form--Information on the Use of Human Subjects in Research).

## CHAPTER 4. FINDINGS AND INTERPRETATIONS

## Introduction

Data used in this chapter were analyzed in two phases: 1) measurement analysis, and 2) hypothesis testing. The measurement analysis included factor analysis and reliability. Phase 2, hypothesis testing, employed the following procedures: t-test, one-way analysis of variance, and Pearson product moment correlation. The findings and interpretations which resulted from utilization of the aforementioned statistical procedures are discussed in sequence.

## Measurement Analysis--Factor Analysis

Step 2 of the measurement analysis used in this study was factor analysis. The extraction techniques used in factor analysis were PA2 and varimax rotation from the SPSS<sup>X</sup> package. A factor analysis was carried out on twenty-one program evaluation items. These twenty-one items described characteristics pertaining to both the Minority Graduate Recruitment/Advising Program and academic departments. The factor analysis procedure was used to explore the interrelationship among these twenty-one items. As a result of the analysis, the twenty-one program evaluation items converged into three factors. In Table 5 on the next page, the rotated factor matrix on the twenty-one program evaluation items is presented. Based on the analysis, factors were formed by including those items with loadings .50 or greater, or items with loadings between .40 and .50 if they seemed similar in content with other items and load uniquely on the factor.

Table 5. Rotated factor matrix on program evaluation items (EVA)

Item No.	Factor 1	Factor 2	Factor 3
Student Satisfaction with the Program			
EVA 3	.85 <sup>a</sup>	.03	-.00
EVA 7	.81 <sup>a</sup>	.12	.18
EVA 1	.80 <sup>a</sup>	-.09	.10
EVA 5	.78 <sup>a</sup>	.17	.07
EVA 15	.77 <sup>a</sup>	.18	.21
EVA 21	.77 <sup>a</sup>	.17	.22
EVA 19	.74 <sup>a</sup>	.20	.12
EVA 10	.67 <sup>a</sup>	.14	.12
EVA 13	.66 <sup>a</sup>	.21	.17
Department (Advising) Student Relationship			
EVA 14	.13	.89 <sup>a</sup>	.19
EVA 9	.08	.85 <sup>a</sup>	.16
EVA 11	.16	.80 <sup>a</sup>	.20
EVA 16	.12	.80 <sup>a</sup>	.17
EVA 8	.16	.66 <sup>a</sup>	.39
EVA 6	.20	.64 <sup>a</sup>	.48
Department/Faculty - Student Relations			
EVA 18	.18	.24	.78 <sup>a</sup>
EVA 17 <sup>b</sup>	.07	.48	.74 <sup>a</sup>
EVA 20 <sup>b</sup>	.22	.54	.54 <sup>a</sup>
EVA 12	.08	.34	.53 <sup>a</sup>
EVA 4	.39	.30	.51 <sup>a</sup>
EVA 2	.46	-.00	.47 <sup>a</sup>

<sup>a</sup>Items loading on factors.

<sup>b</sup>EVA 20 treated as a single item.

For the purpose of this study, the analysis from factor 1 (in Table 5) was used. The analyses for factors 2 and 3 (in Table 5), which described data relative to academic departments including item EVA 20 (overall treatment as a graduate student at Iowa State University), will



not be utilized in this study. Factor 1 consisted of nine items that related specifically to graduates' satisfaction with the services provided by the MGR/AP.

A description of the nine program evaluation items for Table 5 factor 1 can be seen in Table 6. As a result of the analysis derived

Table 6. Description of program evaluation items that comprise factor 1

Factor name	Variable No.	Description of variables
Defined as satisfaction with the program	EVA 1	Recruitment procedures utilized by Minority Graduate Recruiter.
	EVA 3	Admissions assistance provided by Minority Graduate Recruiter.
	EVA 5	Orientation by Minority Graduate Recruitment/Advising Program.
	EVA 7	The overall quality of advising you received from the Minority Graduate Recruiter-Advisor.
	EVA 10	Minority Graduate Recruiter-Advisor's ability to guide graduate students in their academic programs.
	EVA 13	Availability of Minority Graduate Recruiter-Advisor to Student.
	EVA 15	The quality of personal advising from Minority Graduate Recruiter-Advisor.
	EVA 19	Relationship between you and Minority Graduate Recruiter-Advisor.
	EVA 21	Overall satisfaction with the Minority Recruitment/Advising Program.

from the procedural use of factor analysis, the nine items that comprise factor 1 were used to define the dependent variable, graduates' levels of satisfaction with the Minority Graduate Recruitment/Advising Program. A Likert Scale ranging from "1" (Highly Dissatisfied), "2" (Dissatisfied), "3" (Undecided), "4" (Satisfied) to "5" (Highly Satisfied) was used to measure these nine satisfaction related items.

#### Measurement Analysis--Reliability

The final step in the measurement analysis involved reliability testing. Cronbach's Alpha technique was the procedure employed to estimate reliability on the nine program evaluation items which made up factor 1 in Table 5. This procedure was utilized to further test factor 1. In Table 7 below, the computed coefficient alpha was .93 for factor 1. The reported coefficient alpha indicated that there was a high inter-item correlation. Therefore, the results from the reliability test tended to be consistent with the factor analysis finding. Moreover, the statistical results from the reliability test run on factor 1 justified its usage as the dependent variable (Satisfaction with the Program).

Table 7. Reliability analysis on factor 1

Factor name	Number of items	Inter-item correlations mean	Coefficient alpha
Defined as satisfaction with the program	9	.6133	.93 <sup>a</sup>

<sup>a</sup>Unstandardize coefficient alpha from final analysis.

### Hypotheses Testing

The remainder of this chapter is organized into three sections, one for each statistical procedure utilized in testing all 10 hypotheses incorporated in this study. At the beginning of each section, the statistical procedure is restated. Next, all hypotheses tested by the use of each statistical procedure are stated. This is followed by a discussion of the results, along with a table summarizing the results of each hypothesis tested by that procedure.

### t-test Analyses

A t-test procedure was used to test mean differences between the dependent variable--graduates' level of satisfaction with the program--and selected independent variables stated in hypotheses 1, 2 and 3. The employed level of significance upon which the research decision was based in the testing of the three null hypotheses was .05.

#### Null hypothesis 1

There is no significant difference between graduates' level of satisfaction with the program and gender.

Results As can be seen in Table 8, the t-test results failed to show a significant difference between graduates' level of satisfaction with the program according to gender ( $t=.47$ ,  $P = .641$ ). The mean for females was 4.34, whereas the mean for males was 4.27. Also, the test of homogeneity for population variance failed to show a significant difference in the two groups (calculated  $F = 1.21$ ,  $P = .545$ ). Therefore,

hypothesis 1 was not rejected.

Table 8. Analysis of the level of satisfaction with the program by gender

Variable	Group	Number	Mean	Standard deviation	t-value	2-tailed probability
Gender	Female	59	4.34	.57	.47	.641
	Male	24	4.27	.63		

#### Null hypothesis 2

There is no significant difference in the level of satisfaction between graduates who were awarded assistantships prior to beginning graduate study and those who were not.

Results Hypothesis 2 was rejected at the .05 level of significance. This rejection indicated a significant difference in the level of satisfaction between graduates who were awarded assistantships prior to enrolling in graduate school and those who were not ( $t = 2.35$ ,  $P < .05$ ). The mean for those who were awarded assistantships prior to their initial enrollment was 4.36 and those that were not was 3.84. Findings from the t-test showed that those graduates who were awarded assistantships before actually enrolling in graduate school sustained a higher level of satisfaction towards the program than those who were not awarded assistantships. There was no significant difference in variance for the two groups (calculated  $F = 1.03$ ,  $P = 1.00$ ). See Table 9 for

results.

Table 9. Analysis of graduates' level of satisfaction with the program and assistantships awarded prior to beginning graduate program

Variable	Group	Number	Mean	Standard deviation	t-value	2-tailed probability
Assistant-ship awarded prior to graduate study	Yes	76	4.36	.57	2.35*	.050
	No	7	3.84	.56		

\*Significant at the .05 level of significance.

### Null hypothesis 3

There is no significant difference in the level of satisfaction between graduates who held assistantships for the entire period of study and those who received assistantships for only a portion of that period.

Results The hypothesis (3) was rejected at the .05 level of significance ( $t = 2.27$ ,  $P < .05$ ), indicating a significant difference in the level of satisfaction between those graduates who were given assistantships throughout the entire period (Mean = 4.41), and those that were given assistantships for a part of the period (Mean = 3.99).

It was found that those graduates that were granted assistantships

throughout the entire period of their study showed a higher level of satisfaction toward the Minority Graduate/Recruitment Program than those graduates that were awarded assistantships for only part of the time. The results of this analysis are contained in Table 10. A test for homogeneity of population variance failed to show a significant difference in the two groups (calculated  $F = 1.32$ ,  $P = .481$ ).

Table 10. Analysis of graduates' level of satisfaction with the program and assistantships granted throughout period of graduate study

Variable	Group	Number	Mean	Standard deviation	t-value	2-tailed probability
Assistant-ship granted throughout period of graduate study	Entire period	61	4.41	.55	2.27*	.026
	Part of period	11	3.99	.63		

\*Significant at the .05 level of significance.

#### One-Way Analysis of Variance

The one-way analysis of variance procedure was used to test the next 6 null hypotheses. Each of the null hypotheses was tested at the .05 level of significance. In addition, Duncan Multiple Range Test (SPSS<sup>x</sup> package) was employed to determine where the differences in means occurred, as indicated by the ANOVA.

Null hypotheses 4, 5 and 6

HO.4: There are no significant differences between graduates' level of satisfaction with the program and age classification.

HO.5: There are no significant differences between graduates' level of satisfaction with the program and employment classification.

HO.6: There are no significant differences between graduates' level of satisfaction with the program and skills and competencies gained during graduate study, that are being utilized in present job.

Results Based on the findings from the one-way analyses of variance, hypotheses 4, 5 and 6 were not found significant. Therefore, these three hypotheses were not rejected. Evidence in Table 11 failed to show significant differences between graduates' level of satisfaction (dependent variable) and the following independent variables: 1) age classification ( $F(2,80) = 1.44, P = .24$ ); 2) employment classification ( $F(3,79) = .637, P = .59$ ); and 3) the degree to which skills and competencies gained through graduate study are being utilized in present job ( $F(2,80) = .108, P = .90$ ). The age group listed under age classification with the highest mean was (21-24) 4.39. For the four categories of employment, the highest mean was 4.46, and the lowest mean was 4.23. Of the three categories measuring the degree to which training skills are utilized in present job, the highest mean was 4.39.

Table 11. Analysis of graduates' level of satisfaction with program by age classification, employment classification and the degree to which training skills are being utilized in present job

Variable	Number	Mean	Standard deviation	F-value	2-tailed probability
<u>Age Classification</u>					
21-24	48	4.39	.53	1.44	.242
25-30	24	4.15	.67		
31 and over	11	4.37	.62		
<u>Employment Classification</u>					
Federal government	18	4.23	.58	.637	.593
Industry/business	15	4.36	.61		
4-year college/university	29	4.25	.63		
Other	21	4.46	.52		
<u>Degree Skills Utilized in Present Job</u>					
A great deal	45	4.30	.57	.108	.90
Somewhat	26	4.32	.65		
Very little	12	4.39	.55		

Null hypothesis 7

There are no significant differences in graduates' level of satisfaction with the program and years in which graduate degrees were completed.



Results Hypothesis 7 was rejected at the .05 level of significance. There were significant differences in graduates' level of satisfaction with the program from year to year ( $F(5,77) = 2.36, P < .05$ ). Analysis from the Duncan Multiple Range Test revealed that the satisfaction scores pertaining to the program for those graduates that completed degrees in 1982 (Mean = 4.74) and those that completed degrees in 1985 (Mean = 4.62) were different from those graduates that completed degrees in 1981 (Mean = 4.06). Further, the analysis indicated that the satisfaction scores for those graduates that completed degrees in 1982 (Mean = 4.74) was different from those that completed degrees in 1984 (Mean = 4.19). As indicated by the analysis, those graduates that completed degrees in 1982 tended to show the highest satisfaction toward the Minority Graduate Recruitment/Advising Program. A description of the findings is incorporated in Table 12.

Table 12. Analysis of graduates' level of satisfaction by years graduate degrees were completed

Variable	Number	Mean	Standard deviation	F-value	2-tailed probability
1979-1980	16	4.27	.49	2.36*	.048
1981	13	4.06	.62		
1982	8	4.74	.35		
1983	11	4.46	.54		
1984	26	4.19	.69		
1985	9	4.62	.28		

\*Significant at the .05 level of significance.

Null hypotheses 8 and 9

HO.8: There are no significant differences between graduates' level of satisfaction with the program and the types of degrees earned.

HO.9: There are no significant differences between programs of study completed and graduates' level of satisfaction with the program.

Results According to the findings from the one-way analysis of variance, hypotheses 8 and 9 were not found significant. These two hypotheses were not rejected. The analysis provided no significant differences between graduates' level of satisfaction with the program and the following independent variables: 1) types of graduate degrees completed ( $F(2,80) = 1.54, P = .221$ ); and 2) requirements completed for graduate degree ( $F(2,80) = .713, P = .493$ ). Of the three types of graduate degrees completed, the highest mean was 4.40 for the fifty-four master of science recipients, and among the requirements necessary for degree completion, the highest mean was 4.38 for those that completed theses. A summary of the means and standard deviation is presented in Table 13.

Pearson-Product Moment Correlation Analysis

The Pearson correlation procedure was used in testing hypothesis 10 to determine the bivariate relationship between graduates' level of satisfaction with the program and grade point average (which is interval data).

Table 13. Analyses of graduates' level of satisfaction with types of graduate degrees earned and programs of study completed

Variable	Number	Mean	Standard deviation	F-value	2-tailed probability
<u>Types of Degrees Completed</u>					
Master of Science	54	4.40	.54	1.54	.221
Master of Arts	11	4.14	.59		
Doctor of Philosophy	18	4.19	.70		
<u>Requirements Completed for Degree</u>					
Theses	45	4.38	.53	.713	.493
Dissertation	18	4.19	.70		
Creative Component	20	4.31	.60		

#### Null hypothesis 10

There is no significant relationship between graduates' level of satisfaction with the program and their cumulative grade point average at Iowa State University.

Results An examination of the correlation analysis failed to show a significant relationship. The computed correlation coefficient revealed a negative ( $r = -.06$ ,  $P = .296$ ) bivariate relationship between the dependent and independent variables in hypothesis 10. Therefore,

hypothesis 10 was not rejected. See Table 14 for veracity of the results.

Table 14. Correlation analysis of graduates' level of satisfaction with the program and their cumulative grade point average at Iowa State University

Variable	Number	Correlation coefficient	Probability
Cumulative grade point average at Iowa State University	77	-.06	.296

CHAPTER 5. SUMMARY, DISCUSSION OF ADDITIONAL  
FINDINGS AND RECOMMENDATIONS

Summary

The purpose of this study was to evaluate Iowa State University's Minority Graduate Recruitment/Advising Program utilizing student satisfaction with the program as the principal determinant. This investigation was conducted to solicit input from program graduates for two reasons: 1) to request their assessment of the services Minority Graduate Recruitment/Advising Program provided during their periods of matriculation; and 2) to canvass their recommendations for program revisions. Minority graduates that graduated during the period 1979 through 1985 were surveyed by means of a survey questionnaire. Questionnaires were mailed to 153 graduates and 58 percent responded. Their assessment of services provided and recommendations for change should be given serious consideration when charting the future of Minority Graduate Recruitment/Advising Program.

Table 15 on the next page provides a summary of the results of the ten null hypotheses tested in Chapter 4. The findings indicated that three null hypotheses (2, 3 and 7) were rejected in this study.

HO:2 There is no significant difference in the level of satisfaction between graduates who were awarded assistantships prior to beginning graduate study and those that were not.

HO:3 There is no significant difference in the level of

Table 15. A summary of the null hypotheses tested in Chapter 4

Null hypotheses no.	Computed probability <sup>a</sup>	Research decisions
HO:1	Not significant	Failed to reject
HO:2	Significant	Rejected
HO:3	Significant	Rejected
HO:4	Not significant	Failed to reject
HO:5	Not significant	Failed to reject
HO:6	Not significant	Failed to reject
HO:7	Significant	Rejected
HO:8	Not significant	Failed to reject
HO:9	Not significant	Failed to reject
HO:10	Not significant	Failed to reject

<sup>a</sup>The computed probability is an interpretation of the significant t probability and F probability from printout.

satisfaction between graduates who held assistantships for the entire period of study and those who received assistantships for only a portion of that period.

HO:7 There are no significant differences between graduates' level of satisfaction with the program and the years in which graduate degrees were completed.

### Discussion of results

Subjects' responses stated that being tendered assistantships shortly after being admitted strongly influenced their final decision to pursue graduate study at Iowa State University. Findings from a t-test used to test hypothesis 2 showed that graduates awarded assistantships prior to beginning graduate study were more satisfied with their graduate

experience at Iowa State University than those that were not. Early assistantship recipients had a mean of 4.36, and those that did not fall in this category had a mean of 3.84 (see Table 9 in Chapter 4).

When the investigator examined hypothesis 3 (There was no significant difference in the level of satisfaction between graduates who held assistantships for the entire period of study and those who received assistantships for only a portion of that period), by administering a t-test, it was found that the former were much more satisfied with their sojourn at Iowa State University than the latter. Respondents conveyed the importance of having had adequate assurance of financial support for their periods of study at Iowa State University. This can be substantiated by looking at the mean differential in Table 10, Chapter 4.

An analysis of graduates' responses to item 17 in the survey instrument indicated varying levels of satisfaction with the program from year to year. This can be attributed to the unequal number of respondents for each year. A clear observation in Table 12, Chapter 4, was that years with the fewest respondents had the highest mean scores. When hypothesis 7 was analyzed by use of Duncan's Multiple Range Test, it revealed that those respondents who completed degrees in 1982 and 1985 had the highest levels of satisfaction with the program.

## Discussion of Additional Findings

### Discussion of auxiliary analyses--multiple responses

The Multiple Response procedure in SPSS<sup>x</sup> package was used to evaluate data collected on three multiple response items described in Part II of the "Program Evaluation Questionnaire." In Part II of the questionnaire, the minority graduates were asked to provide, based on their recollections, three strengths and three weaknesses of the Minority Graduate Recruitment/Advising Program. Also, they were asked to suggest three changes that would improve the program.

### Program strengths

Results of the Multiple Response Analysis revealed three program strengths that had high frequency counts as shown in Table 16: 1) Program Coordinator's availability for students (N = 17); 2) Program Coordinator's ability to advise and guide graduate students (N = 31); and 3) Program coordinator's understanding of and sensitivity to students' needs (N = 31). The frequency count on program strengths ranged from "1" to "31".

### Program weaknesses

Application of the Multiple Response procedure to graduates' responses pertaining to program weaknesses displayed substantial reprobation. The overwhelming majority (N = 72) of the graduates responded to this item (49) by stating that they were very satisfied with the services provided to them, by the program, during their periods of matriculation and suggested no changes. This apparently unusual response



Table 16. Strengths of Minority Graduate Recruitment/<sup>a</sup>Advising Program (Program Coordinator) reported by graduates

Strengths	Number	PCT of responses <sup>b</sup>	PCT of cases <sup>c</sup>
Availability	17	9.4	21.5
Ability to advise, and guide graduate students	31	17.2	39.2
Understanding of and sensitivity to students' needs, friendly, and sincere	31	17.2	39.2

<sup>a</sup>Respondents provided multiple answers.

<sup>b</sup>PCT of responses column contains the percent of total responses falling in a particular category.

<sup>c</sup>The PCT of cases column contains the percent of respondents who expressed a particular characteristic.

from a majority of the subjects displayed an absence of dissatisfaction on their part with the program. The next largest number of respondents (N = 5) listed the lack of programs and social activities as a weakness. Finally, a small number (N = 4) echoed their sentiments to this item (4) by indicating that the Program Coordinator displayed insensitivity in relating to students. The frequency count on the program's weaknesses ranged from "1" to "5". A percentage of responses and cases is presented in Table 17.

#### Program changes that would improve the program

The frequency counts pertaining to program changes had a range of "1" to "38". According to the results of the analysis, there were three

Table 17. Weaknesses of Minority Graduate Recruitment/Advising Program reported by graduates

Weaknesses	Number	PCT of responses	PCT of cases
Satisfied with program/No change	72	55.0	118.0
Lack programs and social activities for students	5	3.8	8.2
Insensitivity in relating to students	4	3.1	6.6

recommendations for program change that had high frequency counts. They were: 1) hire more full-time professional staff; 2) increase budget/financial resources; and 3) monitor students' progress throughout period of graduate matriculation. Again, the largest number (N=38) responded to this multiple response item (51) by affirming their overall satisfaction with the program. The respondents specified that the program should basically continue to function as it has been with the aforementioned changes. Results of Analysis on Program Changes is incorporated in Table 18.

#### Recommendations

The following are specific recommendations for Iowa State University's Minority Graduate Recruitment/Advising Program derived from this study:

1. The findings of this study should be summarized for distribution

Table 18. Suggested changes that would improve the Minority Graduate Recruitment/Advising Program reported by graduates

Changes	Number	PCT of responses	PCT of cases
Satisfied with overall program/No changes	38	29.7	62.3
Hire more full-time professional staff	10	7.8	16.4
Increase budget/ Financial resources	9	7.0	14.8
Monitor students' progress throughout periods of graduate study	8	6.3	13.1

to the President, Dean of Graduate College, College Deans, Program Coordinator, and other key administrators at Iowa State University.

2. The investigated research strongly supports placing programs of this type under the palladium of a top administrator (Vice-President for Academic Affairs or Dean of Graduate School). This placement enhances the program by investing it with institutional and administrative legitimacy (Boone, Young & Associates, 1984).
3. To be effective in this position, the program administrator should have an in-depth knowledge of predominantly black colleges and universities (for recruitment purposes), an intimate knowledge of graduate programs (to be proficient at

academic advising) as well as have a familiarity with the graduate admissions process and financial resources available to graduate students.

4. In order for a program of this type to be effective, turnover at the program administrator level must be minimal because it takes time to become acquainted with the various interworkings of the university and to develop the necessary rapport with key personnel such as department heads, departmental graduate admissions officers, and major professors.
5. Failure to look at the Program Coordinator position as a full-time entity contributes to the lack of success for such programs because of the many services programs of this nature are expected to provide its constituents.
6. The timing of proffering assistantships (prior to enrolling) and awarding financial support for the entire period of study are vital to the recruitment and retention of quality minority graduate students to Iowa State University.

#### General Recommendations for Future Research

1. A national study should be replicated using an expanded sample comprised of minority graduate degree recipients who were recruited by and graduated from colleges and universities with similar graduate minority recruitment and retention components.
2. Graduate schools should adopt the instrument developed for this study to assess similar programs on their respective campuses in

order to measure minority graduates' satisfaction with these programs and develop recommendations for revising their respective program if findings reflect such a need.

3. In addition to the items on the "Program Evaluation Questionnaire" utilized in this study, it is suggested that the following indicators may be embodied in instruments to be used for evaluating similar types of programs:
  - a. family status (socioeconomic);
  - b. student's marital status;
  - c. on-campus vs. off-campus living;
  - d. departmental and faculty attitudes toward minority graduate students;
  - e. predominantly black colleges' and universities' placement directors' assessments of working relationships with majority universities' graduate schools (recruitment programs, departments, etc.);
  - f. quality of the graduate program and its influence on the minority student's decision to apply to and attend a particular institution;
  - g. impact of geographical location on the student's final decision to attend an institution;
  - h. reaction to social environment (cultural activities/community, etc.).
4. Research on majority graduate students' attitudes toward minority graduate students should be undertaken to determine

the degree of acceptance and interaction between these two groups.

## BIBLIOGRAPHY

- Adams, J. A. (1972). A study of status, scope and nature of educational evaluation in Michigan public K-12 school districts. Unpublished doctoral dissertation, Ohio State University, Columbus, Ohio.
- Aptheker, H. (1973). The education of black people: Ten critiques, 1906-1960. Amherst: The University of Massachusetts Press.
- Astin, A. W. (1982). Minorities in American higher education. San Francisco: Jossey-Bass.
- Bailey, R. L., & Hafner, A. L. (1978). Minority admissions. Lexington, Mass.: D. C. Heath Co.
- Barak, R. J. (1983). Program review in higher education: Within and without. Boulder, CO: NCHEMS.
- Beavers, I., & Photisuvan, C. (1985). Questionnaire for evaluation of professional study program by alumni. Unpublished questionnaire, Professional Studies Department, Iowa State University, Ames, Iowa.
- Blackwell, J. E. (1975). The black community: Diversity and unity. New York: Harper & Row.
- Blackwell, J. E. (1981). Mainstreaming outsiders: The production of black professionals. Bayside, New York: General Hall, Inc.
- Boone, Young & Associates. (1984). Minority enrollment in graduate and professional schools. Washington, D.C.: U.S. Government Printing Office.
- Borg, W. R., & Gall, M. D. (1979). Education research: An introduction (3rd ed.). New York: Longman.
- Bowles, F., & DeCosta, F. A. (1971). Between two worlds: A profile of negro higher education. New York: McGraw-Hill Co.
- Boyle, P. G. (1981). Planning better programs. New York: McGraw-Hill Co.
- Braskamp, L. A., Wise, S. L., & Hengstler, D. D. (1981). Alumni rating as indicator of departmental quality. Journal of Educational Psychology, 73 (1), 71-77.
- Cameron, K. (1981). Domains of organizational effectiveness in colleges and universities. Academy of Management Journal, 24 (1), 25-47.

- Commission on the Higher Education of Minorities. (1982). Final Report. Los Angeles: Higher Education Research Institute, Inc.
- Cooley, W. W., & Lohnes, P. R. (1976). Evaluation research in education. New York: Irvington Press.
- Cronbach, L. C., Ambron, S. R., Dornbusch, S. M., Hess, R. D., Hornik, R. C., Phillips, D. C., Walker, D. F., & Weiner, S. S. (1980). Toward reform of program evaluation. San Francisco: Jossey-Bass.
- Ebel, R. L. (1965). Measuring educational achievement. Englewood Cliffs, New Jersey: Prentice-Hall.
- Fleming, J. E. (1976). The lengthening shadow of slavery: An historical justification for affirmative action for blacks in higher education. Washington, D.C.: Howard University Press.
- Fleming, J. E. (1981). Blacks in higher education to 1954: An historical overview. In G. E. Thomas (Ed.), Black students in higher education: Conditions and experiences in the 1970s. Westport, Connecticut: Greenwood Press.
- Gaff, J. G. (1978). Involving students in faculty development. New Directions for Higher Education, 24, 58-71.
- Guba, E. G. (1969). The failure of educational evaluation. Educational Technology, 9 (5), 29-38.
- Hamilton, B. (1973). Graduate school programs for minority and disadvantaged students. Princeton, New Jersey: Educational Testing Service.
- Hanson, G. R. J.(Ed.). (1978). Evaluating program effectiveness: New directions for students services. San Francisco: Jossey-Bass.
- Haynes, L., III. (1978). A critical examination of the Adams Case: A source book. Washington, D.C.: Institute for Services to Education.
- House, E. R. (1980). Evaluating with validity. Beverly Hills, CA: Sage Publications.
- Kauffman, J. F. (1984). Assessing the quality of student services. New Direction for Institutional Research: Determining the Effectiveness of Campus Services, 41 (March), 23-36.



- McAlduff, J. L. (1975). An evaluation study of how alumni and students in the Department of Health Education at Teachers College, Columbia University, view their programs. Unpublished doctoral dissertation, Columbia University.
- Madaus, G. F., Scriven, M., & Stufflebeam, D. L. (1983). Evaluation models: Viewpoints on education and human services evaluation. Boston: KNP.
- Morstain, B. R., & Gaff, J. G. (1977). Student views of teaching improvements. Educational Record, 29, 299-311.
- Nevo, D. (1974). Evaluation priorities of students, teachers and principals. Unpublished doctoral dissertation, Ohio State University, Columbus, Ohio.
- Nevo, D. (1983). The conceptualization of educational evaluation: An analytical review of the literature. Review of Educational Research, 53 (1), 117-128.
- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. (1983). SPSSx: Statistical package for Social Sciences. Chicago, IL: McGraw-Hill.
- OBC Newsletter. (1979). Organization for Black Concerns, Ames, Iowa.
- Face, C. R. (1985). Perspectives and problems in student outcomes research. New Direction for Institutional Research: Assessing Educational Outcomes, 47 (September), 7-18.
- Patton, M. Q. (1978). Utilization--for used evaluation. Beverly Hills, CA: Sage Publications.
- Popham, W. J. (1975). Educational evaluation. Englewood Cliffs, New Jersey: Prentice-Hall.
- Randall, R. S. (1969). An operational application of the CIPP model of evaluation. Educational Technology, 9 (7), 40-44.
- Scriven, M. (1967). The methodology of evaluation. In R. E. Stake (Ed.), Curriculum evaluation. American Educational Research Association Monograph Series on Evaluation. 1. Chicago: Rand McNally.
- Stake, R. E. (1967). The countenance of educational evaluation. Teachers College Record, 68, 523-40.

- Stake, R. E., & Denny, T. (1969). Needed concepts and techniques for utilizing more fully the potential of evaluation. In R. Tyler (Ed.), Educational Evaluation New Roles: New Means. The Sixty-eighth Yearbook of the National Society for the Study of Education, Part II. Chicago: The University of Chicago Press.
- Startup, R. (1972). Student satisfaction with academic services. Educational Research, 14, 135-140.
- Stufflebeam, D. L. (1973). An introduction to the PDK book. In B. Worthen & R. Sanders (Eds.), Educational Evaluation: Theory and practice. Worthington, Ohio: Charles A. Jones Publishing.
- Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In G. F. Madaus, M. S. Scriven, & D. L. Stufflebeam (Eds.), Evaluation models--Viewpoints on educational and human services evaluation. Boston: Martinus Nijhoff Publisher.
- Stufflebeam, D. L., Foley, W. J., Gephart, W. J., Guba, E. G., Hammon, R. L., Merriman, H. O., & Provus, M. M. (1971). Educational evaluation and decision-making. Itasca, IL: F. E. Peacock.
- Stufflebeam, D. L., & Webster, W. J. (1980). An analysis of alternative approaches to evaluation. Educational Evaluation and Policy Analysis, 2 (2), 5-20.
- Thomas, G. E. (1986). The access and success of blacks and Hispanics in U.S. graduate and professional education: A working paper. National Research Council. Washington, D.C.: National Academy Press.
- Thorndike, R. L., & Hagen, E. (1969). Measurement and evaluation in psychology and education. New York: Wiley.
- Thresher, B. A. (1966). College admissions and the public interest. New York: College Entrance Examination Board.
- Turner, W. H., & Mitchell, J. A. (1978). Traditional black institutions of higher education: Their identification and selected characteristics. Washington, D.C.: National Center for Educational Statistics, DHEW.
- Tyler, R. W. (1950). Basic principles of curriculum and instruction. Chicago: The University of Chicago Press.
- Wood, P. H., & Wood, J. H. (1979). Student attitudes toward academic achievement. AAHE-ERIC/Higher Education Research Report 012 583. (ERIC Ed 187 183).

Worthen, B. R., & Sanders, J. R. (1973). Educational evaluation: Theory and practice. Worthington, Ohio: Charles A. Jones Publishing.

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APPENDIX A. GRADUATE PROGRAM FOR STUDENTS WITH  
SPECIAL EDUCATIONAL NEEDS

GRADUATE PROGRAM FOR STUDENTS WITH SPECIAL EDUCATIONAL NEEDS \*

Iowa State University offers special encouragement to students with special educational needs to apply for admission to our Graduate College, provided they are already academically qualified or that they can take and pass approximately one year of undergraduate work that will enable them to qualify for continuing study toward an advanced degree. We are committed to providing scholastically able and well motivated students with the facilities and faculty assistance needed to advance their education. Unusual efforts will be made at the department level to offer financial assistance to needy students coming to Iowa State with a bachelor's degree. It is expected that some undergraduate make-up work will be necessary in most cases. Generally, graduate credit can be given for part or all of such make-up work, at the discretion of the student's advisory committee.

This program originated in a proposal made by a group of graduate students at Iowa State who suggested that a way of contacting and interesting minority group students at smaller universities in the facilities and special competencies at Iowa State would be to send some of our present graduate students back to their home institutions to interview juniors, seniors, and faculty. These interviewers would provide an unusual relationship based on trust and understanding with prospective students and might stimulate undergraduates with special aptitude to continue their education. The interviewer would not have authority to authorize admission or to offer financial assistance, but would solicit applications from possible graduate students and would provide first-hand knowledge of the academic and cultural environment of Ames.

PROCEDURE TO BE FOLLOWED

1. Each graduate student who is willing to devote his or her time to this enterprise will write out a tentative itinerary for a visit, including proposed dates, places to be considered and travel plan. If possible, visits to two or more neighboring schools during the same trip is encouraged for economy.
2. The travel plan will be approved by the Graduate Dean.
3. Department Heads at Iowa State University and faculty members in correlating departments at I.S.U. will be asked to send departmental brochures and other descriptive information to the schools to be visited in advance of the interviewer. The Office of Student Affairs will write or telephone a placement officer or Dean of Students at each prospective school and will try to arrange for transportation for our interviewer, as well as sleeping room facilities in a dormitory or Union building.
4. A travel request will be filled out by the student and approved through normal University channels.

5. A round-trip ticket will be purchased by the Graduate Office for the student. If the student chooses to drive a personal car, this will be reimbursed at the rate of \$.15 per mile or the equivalent roundtrip tourist airfare, whichever is the lesser.
6. The interviewer will receive packets of descriptive information concerning I.S.U. to carry on the trip.
7. Travel arrangements will be in accordance with accepted I.S.U. procedures. These include:
  - a) Travel to Des Moines will be reimbursed at the rate of \$.10 per mile not to exceed \$8 for a round trip. This may be charged by the interviewing student on his expense account which will be completed at the termination of the trip.
  - b) Food expenses are reported in detail for each meal. However, the suggested maximum reimbursement is \$10 per day.
  - c) Hotel or other sleeping accommodations are to be reimbursed at actual cost.
  - d) Commercial limousine should be used when possible for travel from airports, and taxis should be used when necessary. A receipt is requested for taxi fares over \$5.
  - e) All travellers are expected to use good judgment in limiting expenditures to necessary items.
8. Upon arrival at the designated university, interviewers should check in with department heads in their own field of study. Hopefully, appointments will be made with interested students, and suggestions will be available on other departments to be contacted. The interviewer is not expected to be completely knowledgeable in all fields of work at Iowa State, of course, but can simply serve as a resource person if there are questions which may be conveyed to other people at Ames.

Interviewers are requested to meet all interested students and to bring home with them the following information.

- a) Name and mailing address of student.
- b) Field(s) of interest.
- c) Statement on the interviewer's appraisal of the student's academic potential and motivation.
- d) The estimated financial need status of the student.
- e) Special considerations needed.

Interviewers must not assure students of certainty of either admission to graduate study or financial support at I.S.U. All applications will need three letters of recommendation, and will be handled no differently from all other graduate student applications. However, those students given particular endorsement by interviewers will be given special consideration in departmental offices, the Office of the Dean of Students and the Graduate Office.



9. When an interviewer returns to Ames and submits names of persons interviewed, departments at I.S.U. will be contacted immediately and personal letters will be sent to each student, including application forms, descriptions of departments and the university, and special bulletins which may be prepared. It is possible that the \$10 application fee normally required to accompany application forms may be waived when financial hardship exists. The counsel of the interviewers will be used in such decisions.
10. Students coming to Iowa State as a result of this project will be expected to complete all established requirements for advanced degrees and will not be separately identified in any way for academic purposes. Seminars will be held for the interviewers in late spring and early fall, 1973, for program assessment and analysis. An effort will be made to prepare literature especially appropriate for this purpose. Major efforts will be directed toward obtaining funds for fellowships in future years from industrial sources or foundations. Interviewers will form a continuing counseling group who will keep in touch with the progress of graduate students involved on an individual basis.

\*This is an exact copy of the original document on file in The Graduate College.

APPENDIX B. POSITION DESCRIPTION QUESTIONNAIRE

POSITION DESCRIPTION QUESTIONNAIRE  
PROFESSIONAL AND SCIENTIFIC PERSONNEL



**INSTRUCTIONS:** The purpose of this questionnaire is to gather information to be used in determining a specific title and pay range for the position. Please relate the information you give to the position itself--*NOT TO THE INDIVIDUAL WHO IS CURRENTLY HOLDING THE POSITION*. Someone thoroughly familiar with the position should complete this form. This information may be supplemented by personal interviews and observation. Please call Personnel (294-8914) if you have questions.

- CURRENT POSITION DESCRIPTION - Informational Purposes Only**      DATE 1-15-85
- REQUEST FOR RECLASSIFICATION OF CURRENT POSITION**      DATE \_\_\_\_\_  
(This form should be completed by the incumbent and must be approved for content by appropriate supervisor, department head, dean or director.)
- REQUEST FOR CLASSIFICATION OF NEW POSITION**      DATE \_\_\_\_\_  
(To be completed by unit head or supervisor)

Incumbent's Name Mr. Charles A. Ramsey, II      Telephone 232-9390

Proposed Title \_\_\_\_\_ Proposed Appointment Base \_\_\_\_\_

Current Title Graduate Student Advisor      Current Appointment Base P6

If Applicable, position was formerly held by \_\_\_\_\_

Budget Position: Account # \_\_\_\_\_ Budget Page \_\_\_\_\_ Position # \_\_\_\_\_

Department \_\_\_\_\_

College or Division Graduate College

Department Location 201 Beardshear Hall      Telephone 294-4531

Department Head \_\_\_\_\_

Supervisor's Name Dr. Daniel J. Zaffarano      Title Dean of Graduate College

Point Count

Level								
Points								

Total Points      Pay Grade

\_\_\_\_\_

ORGANIZATION CHART (Briefly illustrate supervision given/received by drawing a chart of the organizational structure and including appropriate pay grade).

I am supervised by both the Vice President for Research and Dean of the Graduate College/ the Associate Vice President of Research and Associate Dean of the Graduate College.

My pay grade is P6.

I. JOB CONTENT

List the four major responsibilities of the position and give the percentage of time that is devoted to each. The percentage need not total 100. Underneath each major responsibility, list the specific job duties performed, giving emphasis to the important and difficult aspects of the work. Attempt to write the duties so that a person outside the department will be able to understand the job. (Additional duties may be listed on supplementary sheet).

MAJOR RESPONSIBILITY I:

% OF TIME  
DEVOTED

Coordinate minority<sup>graduate</sup> student recruitment program for all university departments offering graduate programs. 40%

SPECIFIC JOB DUTIES RELATED TO MAJOR RESPONSIBILITY I: (Put each duty on a separate line.)

- 1. Identify minority students who have the interest and potential for graduate studies.
- 2. Enhance such individuals awareness of program offerings and career opportunities at Iowa State University.
- 3. Assist applicants and departments in the admissions process.
- 4. Secure financial support for students.
- 5. Help students to find housing.

MAJOR RESPONSIBILITY II:

% OF TIME  
DEVOTED

Serve as advisor to graduate students. 40%

SPECIFIC JOB DUTIES RELATED TO MAJOR RESPONSIBILITY II: (Put each duty on a separate line.)

- 1. Conduct orientation sessions for minority graduate students.
- 2. Assist minority graduate students in course selection and course load.
- 3. Suggest major and minor combinations.
- 4. Seek solutions to problems between students and departments.

MAJOR RESPONSIBILITY III:

72

% OF TIME  
DEVOTED

Submit periodic reports on retention and attrition of Iowa State University's black graduate students to the Dean of the Graduate College.

2%

SPECIFIC JOB DUTIES RELATED TO MAJOR RESPONSIBILITY III: (Put each duty on a separate line).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MAJOR RESPONSIBILITY IV:

% OF TIME  
DEVOTED

Assist minority graduates in securing employment.

8%

SPECIFIC JOB DUTIES RELATED TO MAJOR RESPONSIBILITY IV: (Put each duty on a separate line).

1. Canvass colleges and universities (especially black institutions) regarding faculty and staff needs.
2. Make referrals from Library of Congress federal job opening lists, the Chronicle of Higher Education, and the Affirmative Action Registrar.
3. Maintain up-to-date employment data on degree recipients.

II. If a reclassification, please state what duties have changed, and/or have been added to or deleted from the position.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

III. Tell how the action taken by the person in this position and results of the person's work impact on the division, department and/or the University as a whole.

1. 152 minority students have earned graduate degrees in the past five years.

2. At least 95% of our graduates are employed and making meaningful contributions to society.

\_\_\_\_\_

- IV. Most jobs have guidelines which are either internally or externally imposed. Select and circle the statement that best describes how guidelines constrain the independence of action within this position.

NOTE: Policies and procedures, task guides, established rules or instructions or precedents are defined as specific operating guidelines developed by one's own department, recommended by one's own department but approved by others, or the guidelines can be broader operating policies and procedures. Included within the definition of guidelines are the Board of Regents Policy, State Budget Office Guidelines, Purchasing Policies and Procedures, etc.

- a) Assigned extended multiple work assignments or projects within framework of prescribed procedures. May be checked for proper procedure at intervals, but accuracy is usually assumed.
- b) Administers policies and procedures, usually within a functional area of the University. Has latitude for independent action and is evaluated on intermediate-term results of actions.
- c) Assigned specific projects, with specific administrative guidance concerning procedures to be used. Usually checked for progress toward completion.
- d) Develops administrative, research or educational procedures, usually for a functional area of the University, and recommends University policy if appropriate. Has considerable latitude for independent action and is evaluated on long-term results of actions.
- V. How often does this position typically require collecting and analyzing information from several sources in order to solve problems?

NOTE: For purposes of this question, "frequently" is defined as 2/3 or more of the decision-making effort; "occasionally" as 1/3 to 2/3 of the decision-making effort; and "rarely" as less than 1/3 of the decision-making effort.

- a) frequently
- b) occasionally
- c) rarely
- d) not a job requirement
- VI. How often does this position typically involve the application of pre-determined procedures in solving problems and making recommendations?
- a) frequently
- b) occasionally
- c) rarely
- d) not a job requirement
- VII. In what manner is the position given direction in carrying out the major responsibilities?
- NOTE: Select the answer that most nearly fits your situation.
- a) Task by task, daily, weekly, or monthly
- b) Several tasks at a time requiring from one-to-six months duration
- c) Significant block of work and/or projects which can be accomplished in less than 1 y
- d) Projects and/or blocks of work which can be accomplished in a year or more
- VIII. At what interval is the work checked?

- a) daily
- b) weekly
- c) monthly
- d) quarterly
- e) semi-annually
- f) annually

IX. The majority of time in most positions will be spent dealing with problems that have been identified and for which solutions are known through precedent, policy or experience.

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Please indicate the percent of time spent in each of the following situations and give examples of each. If additional space is needed, go to subsequent pages.

JOB SITUATION	PLEASE GIVE EXAMPLES OF THE WORK THAT SUPPORT THIS ANSWER
<p>a) Multiple but similar tasks are performed; work may be directed by supervisor but in absence of supervision the results of the tasks may be guided by precedent or policy.</p> <p>% of time spent <u>40%</u></p>	<p>a1. <u>Advising graduate students</u></p> <p><u>2. Securing employment data on graduates</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>b) Problems and/or projects that require an innovative approach; solutions require the assimilation of a variety of techniques, information, or models.</p> <p>% of time spent <u>40%</u></p>	<p>b) <u>Recruitment of minority graduate students</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>c) Problems and/or projects of an abstract, unformulated nature which require imaginative approaches and require the development of new or novel applications of current knowledge. Guidance and counsel are seldom available within the University and precedent is usually lacking.</p> <p>% of time spent <u>10%</u></p> <p>Total <u>100%</u></p>	<p>c) <u>Seeking solutions to problems that arise between students and departments</u></p> <p><u>Developing rapport with placement directors</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

X. NUMBER OF EMPLOYEES IN DEPARTMENT

Please indicate the total number of employees in the department. 2 to 3

NOTE: Please complete the columns below by indicating the number of employees supervised.

	DIRECT		INDIRECT	
	FULL TIME	PART TIME	FULL TIME	PART TIME
P & S				
Merit				
Student		2		

XI. INTERNAL AND EXTERNAL RELATIONSHIPS

Describe the level, purpose, and frequency of personal contacts this position requires the person to have with those outside of the immediate office. Indicate frequency as either "daily," "weekly," "monthly," or "infrequently."

Contact Within The University	Purpose	Frequency
President; Vice Presidents; Deans	Discuss and seek approval for procedures and approaches to be utilized.	periodically
Department Heads and Directors	1. Admission of students 2. Student status reports 3. Assistantship support	periodically
Faculty, Staff, and Students	Advising and resolving problems	When need arises

Contacts Outside the University such as State and Federal Agencies, Alumni and Donors, Business and Industry, and Other Publics including Parents, Applicants, etc.

Contact	Purpose	Frequency
University and College Placement Directors	To recruit students	
University and College Deans and Personnel Officers	To find employment for graduates	Upon graduation of students
Other employing agencies in public and private sector	To find employment for graduates	Upon graduation of students



## XII. FINANCIAL/QUALITATIVE RESPONSIBILITY

1. Express, in monetary or quantitative terms, the level of responsibility involved in this position. (Examples: manages the operation of facilities valued at \$1,500,000; directs a research budget of \$300,000; schedules 100 alumni meetings a year, etc.).

Recruitment/student support budget ----- \$250,000

2. Circle the best response to the following question: Does the position provide a) consultative assistance; b) interpretive information; or c) factual information to individuals? (Circle only one.)

## XIII. MINIMUM QUALIFICATIONS (To be completed by Department Head)

Please indicate the minimum qualifications which are necessary in filling this position should it become vacant. Please keep in mind the position duties/responsibilities rather than the qualifications of the current employee.

1. Minimum educational level required for a person to successfully carry out the duties and responsibilities of the position. (Specify appropriate field, if any, and/or equivalency.)

Masters Degree

2. Indicate the minimum type and amount of work experience, in addition to the above required education, necessary for a person entering this position.

Type of Experience

Minimum Amount of Time Necessary

University or college teaching and advising 3 years

3. Does this position require specific licensing or certification as an entry requirement? (Examples are Professional Engineers, Lawyers, Registered Nurses, Medical Technologists or Certified Public Accountants.)

NOTE: Certification means an individual has successfully met a series of well-defined requirements as promulgated by a federal or state agency or professional and trade organization.

Yes

No

If you answered yes, please describe requirement briefly:

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XIV. GENERAL COMMENTS

List any additional comments to describe the position further.

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XV. SIGNATURES

ALL signatures are needed before the Position Description Questionnaire (PDQ) will be processed.

I certify the above PDQ accurately reflects the duties and responsibilities of the position.

Completed by: \_\_\_\_\_ Date \_\_\_\_\_

Please indicate the individual who initiated the request for classification or reclassification (Dean, Dept. Head, Supervisor, Employee).

--	--

(Name)

(Title)

Approved for classification review:

Immediate Supervisor: \_\_\_\_\_ Date \_\_\_\_\_

Department Head: \_\_\_\_\_ Date \_\_\_\_\_

Dean/Director: \_\_\_\_\_ Date \_\_\_\_\_

This approval is for review of classification only. Once the review has been completed, the Dean or Director will review budgetary and organizational implications before final authorization to fill the position is given.

APPENDIX C. PROGRAM EVALUATION QUESTIONNAIRE  
AND COVER LETTER.

Vice President for Research  
Dean, The Graduate College  
201 Beardshear Hall  
Ames, Iowa 50011

IOWA STATE  
UNIVERSITY

Telephone (515) 294-4531

Dear Alum:

The Graduate College would like your help in evaluating the Minority Graduate Recruitment/Advising Program in relationship with the department in which you completed your degree. You have been selected to participate in this evaluation because you earned your M.A., M.S. and/or Ph.D. some time during the period of 1979-85.

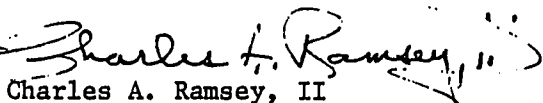
This questionnaire has been reviewed by several ISU graduate faculty members and has been revised to obtain the necessary data while requiring a minimal amount of your time. It should take you less than 20 minutes to complete this survey.

Your response is of vital importance in gauging prior satisfaction with this program. The results of the survey are of significant interest to the Graduate College. Data generated from this survey will be used to develop recommendations for program revisions.

Thank you for participating in the study. The data you provide will be kept confidential. The questionnaire has been numbered for follow-up purposes only. Please return your questionnaire in the enclosed stamped envelope before August 14, 1986.

We will be pleased to send you a summary of the survey results if you desire. Again thank you for your cooperation.

Sincerely,



Charles A. Ramsey, II  
Coordinator of Minority  
Graduate Recruitment  
and Advising Program



Larry Ebbers  
Chairperson  
Professional-Studies in Education

CAR/brm

A Follow-up Study of Iowa State University  
Minority Graduate Recruitment Program  
1979 - 1985

Part I

General Information

Directions: Please read each of the following questions carefully before responding. For each question, place a circle around the response that is correct for you.

1. What is your sex?
  - a. Female
  - b. Male
2. What was your age group when you entered ISU?
  - a. 21-24
  - b. 25-30
  - c. 31-35
  - d. 36 or above
3. What is the title of your present position? \_\_\_\_\_
4. Where are you presently employed? \_\_\_\_\_
5. How long in present position? \_\_\_\_\_
6. How would you classify your employment?
  - a. Federal Government
  - b. State Government
  - c. Industry/Business
  - d. 4-year College
  - e. 2-year College
  - f. School district
  - g. Self-employed
  - h. Other (specify) \_\_\_\_\_
7. In your present job to what extent do you utilize the skills and competencies gained from graduate degree(s) you received at ISU?
  - a. A great deal
  - b. Somewhat
  - c. Very little
  - d. Not at all
8. Where did you complete your undergraduate degree? \_\_\_\_\_
9. What was your cumulative undergraduate grade point average? \_\_\_\_\_
10. Before completing a graduate degree at ISU, if you completed a graduate degree at another institution, please indicate degree and institution.
  - a. \_\_\_\_\_ Degree \_\_\_\_\_ Institution
  - b. \_\_\_\_\_ No other graduate degree

11. If you completed a graduate degree prior to enrolling in a graduate program at ISU, what was your grade point average for that degree? \_\_\_\_\_
12. What was your primary source of information in finding out about graduate programs at ISU? (Circle one)
- Friend/Relative
  - Graduate of ISU
  - ISU recruiter
  - ISU Faculty member
  - Undergraduate professor
  - Other (please specify) \_\_\_\_\_
13. What year did you begin your graduate program at ISU? \_\_\_\_\_
14. Were you offered an assistantship prior to beginning graduate study at ISU?
- Yes
  - No
- If yes, identify source.
- Academic department
  - Graduate College (Minority Recruitment Program)
  - Student Affairs
15. Did the University provide you with an assistantship throughout your period of study?
- Yes
    - For entire period \_\_\_\_\_
    - For part of period \_\_\_\_\_
  - No
16. In addition to receiving an assistantship did you receive any other financial assistance while at ISU? If so, what type?
- PACE Award
  - Graduate Tuition Award Award
  - Fellowship/Scholarships (specify) \_\_\_\_\_
  - Other (specify) \_\_\_\_\_
17. When did you receive your degree(s) from ISU?
- |         |         |
|---------|---------|
| a. 1979 | e. 1983 |
| b. 1980 | f. 1984 |
| c. 1981 | g. 1985 |
| d. 1982 |         |
18. Which graduate degree(s) did you complete at ISU?
- M.S.
  - M.A.
  - M.Ed.
  - Ph.D.
19. What was your cumulative grade point average for graduate degree(s) earned at ISU? \_\_\_\_\_
20. From which academic department(s) did you receive your degree(s)?  
\_\_\_\_\_



Part II

Directions: The purpose of this section of the questionnaire is to provide a way for you to evaluate the Minority Graduate Recruitment/Advising Program and the department in which you completed your degree. Respond to each statement in terms of your satisfaction with both this program and your department at ISU by listing one number in front of each question. Use the following scale:

Scale: 5                      4                      3                      2                      1  
 Highly Satisfied              Satisfied              Undecided              Dissatisfied              Highly Dissatisfied

## All Respondents

- \_\_\_ 25. Recruitment procedures utilized by Minority Graduate Recruiter.
- \_\_\_ 26. Admission procedures in department.
- \_\_\_ 27. Admissions assistance provided by Minority Graduate Recruiter.
- \_\_\_ 28. Orientation of minority graduate students to your department.
- \_\_\_ 29. Orientation of minority graduate students by Minority Graduate Recruitment/Advising Program.
- \_\_\_ 30. The overall quality of advising you received from your department.
- \_\_\_ 31. The overall quality of advising you received from the Minority Graduate Recruiter-Advisor.
- \_\_\_ 32. The quality of academic advising from your department.
- \_\_\_ 33. The quality of academic advising from your major professor.
- \_\_\_ 34. Minority Graduate Recruiter-Advisor's ability to guide graduate students in their academic programs.
- \_\_\_ 35. Availability of major professor to student.
- \_\_\_ 36. Contact with faculty outside the classroom in your department.
- \_\_\_ 37. Availability of Minority Graduate Recruiter-Advisor to student.
- \_\_\_ 38. The quality of personal advising from major professor.
- \_\_\_ 39. The quality of personal advising from Minority Graduate Recruiter-Advisor.
- \_\_\_ 40. Relationship between you and major professor.
- \_\_\_ 41. Opportunity to communicate with faculty and students within the classroom, regarding student needs, concerns and suggestions in your department.



- \_\_\_ 42. Departmental sensitivity to people of different racial and ethnic backgrounds.
- \_\_\_ 43. Relationship between you and Minority Graduate Recruiter-Advisor.
- \_\_\_ 44. Overall treatment as a graduate student at ISU.
- \_\_\_ 45. Overall satisfaction with the Minority Graduate Recruitment/Advising Program.
46. What were the strengths of your department? (Write in)
- a.
  - b.
  - c.
47. What were the strengths of the Minority Graduate Recruitment/Advising Program? (Write in)
- a.
  - b.
  - c.
48. What were the weaknesses of your department? (Write in)
- a.
  - b.
  - c.
49. What were the weaknesses of the Minority Graduate Recruitment/Advising Program? (Write in)
- a.
  - b.
  - c.
50. What changes would you suggest for your department? (Write in)
- a.
  - b.
  - c.
51. What changes would you suggest for the Minority Graduate Recruitment/Advising Program? (Write in)
- a.
  - b.
  - c.

APPENDIX D. USE OF HUMAN SUBJECTS IN RESEARCH

APPROVAL FORM

INFORMATION ON THE USE OF HUMAN SUBJECTS IN RESEARCH  
IOWA STATE UNIVERSITY

(Please follow the accompanying instructions for completing this form.)

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1. Title of project (please type): A Follow-up Study of Iowa State University  
Minority Graduate Recruitment Program 1979-1985

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are properly protected. Additions to or changes in procedures affecting the subjects after the project has been approved will be submitted to the committee for review.

Charles A. Ramsey, II  
Typed Name of Principal Investigator

6/30/86  
Date

Charles A. Ramsey II  
Signature of Principal Investigator

201 Beardshear Hall  
Campus Address

294-4531  
Campus Telephone

3. Signatures of others (if any) Date Relationship to Principal Investigator  
[Signature] \_\_\_\_\_ Chairperson Program of Study

4. ATTACH an additional page(s) (A) describing your proposed research and (B) the subjects to be used, (C) indicating any risks or discomforts to the subjects, and (D) covering any topics checked below. CHECK all boxes applicable. (SEE ATTACHED)

- Medical clearance necessary before subjects can participate
- Samples (blood, tissue, etc.) from subjects
- Administration of substances (foods, drugs, etc.) to subjects
- Physical exercise or conditioning for subjects
- Deception of subjects
- Subjects under 14 years of age and(or)  Subjects 14-17 years of age
- Subjects in institutions
- Research must be approved by another institution or agency

5. ATTACH an example of the material to be used to obtain informed consent and CHECK which type will be used. (SEE ATTACHED)

- Signed informed consent will be obtained.
- Modified informed consent will be obtained.

6. Anticipated date on which subjects will be first contacted: 7 14 86  
Anticipated date for last contact with subjects: 8 14 86

7. If Applicable: Anticipated date on which audio or visual tapes will be erased and(or) identifiers will be removed from completed survey instruments: NA NA NA  
Month Day Year

8. Signature of Head or Chairperson Date Department or Administrative Unit  
[Signature] 6/30/86 Professional Studies in Education

9. Decision of the University Committee on the Use of Human Subjects in Research:

- Project Approved
- Project not approved
- No action required

George G. Karas  
Name of Committee Chairperson

\_\_\_\_\_ Date

\_\_\_\_\_ Signature of Committee Chairperson

Information on The Use of Human  
Subjects in Research

4. The purpose of this study is to evaluate the Iowa State University Graduate Recruitment/Advising Program. A sample of 154 known (Iowa State University) minority graduate degree recipients will be surveyed by means of a mail questionnaire to gauge student satisfaction with this program. Data generated from this survey will also be used to develop recommendations for program revisions. The subjects will not experience any risks or discomfort.

In addition, my survey instrument is attached. I will follow up with a phone call two weeks after sending out the cover letter and questionnaire. Another cover letter and questionnaire will be sent after the phone call if needed.

5. Instructions for completing the questionnaire will be given on the questionnaire. The cover letter contains instructions for returning the questionnaire and states that the data obtained from individual graduates will be kept confidential.