

1989

Evaluation of the department of professional studies in education by students and 1986-1988 graduates

Shirley L. Henry
Iowa State University

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**Evaluation of the Department of Professional Studies in
Education by students and 1986-1988 graduates**

Henry, Shirley L., Ph.D.

Iowa State University, 1989

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Ann Arbor, MI 48106

**Evaluation of the department of professional studies in
education by students and 1986-1988 graduates**

by

Shirley L. Henry

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

**Department: Professional Studies in Education
Major: Education (Higher Education)**

Approved:

Signature was redacted for privacy.

In Charge of Major Work

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For the Major Department

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For the Graduate College

**Iowa State University
Ames, Iowa**

1989

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CHAPTER 1. INTRODUCTION

Background

Evaluation of educational programming came into prominence with the Elementary and Secondary Education Act of 1965 which required it as a condition for funding new educational programs (Anderson, Ball, Murphy, & Associates, 1975). Evaluation and accountability have become common terms in the literature as educational leaders now recognize the importance of evaluating program effectiveness to direct decision-making for program enrichment (Astin, 1982; Madaus, Scriven, & Stufflebeam, 1983; Brady, 1986).

National attention on American education has resulted in increased efforts for accountability on the part of institutions of higher education. The emphasis on accountability has required these institutions to focus on more comprehensive methods of evaluation. Students, accrediting bodies, professional communities, and employers are demanding greater participation in decision-making while legislators and institutional governing bodies are requiring evidence of cost effectiveness (Kasten, 1986; Keller, 1983). The National Council For Accreditation of Teacher Education (1987) redesigned the standards, procedures, and policies for accreditation of professional education units. The new standards require documentation of evaluation efforts which involve current students as well as follow-up studies of graduates.

Evaluative information has become a key component in addressing issues of quality service, accountability, societal demands for relevant

education, and budgetary concerns during periods of declining enrollment. Data obtained through longitudinal studies are an integral part of departmental long-range planning. Decisions for program growth and enrichment rely heavily on this information (Freeman & Loadman, 1985; Fincher, 1983; Williford & Moden, 1987; Washington State Higher Education Coordinating Board, 1987).

Student assessment of programs, program evaluation, graduate follow-up, marketing, and enrollment, has become the lifeblood for both individual programs and the institutions of higher education that house them (Olson, 1985; Braskamp, Wise, & Hengstler, 1979). Evaluation efforts are no longer viewed as peripheral to the central mission of higher education, but are considered essential in providing information which is vital to it.

Department of Professional Studies Organization

The Department of Professional Studies consists of seven areas of specialization each of which is designated as a section with its own staff and curriculum. The sections are: Adult and Extension Education; Counselor Education; Curriculum and Instructional Technology; Educational Administration; Higher Education; Historical, Philosophical, and Comparative Studies; Research and Evaluation. Graduate degrees are awarded through the Department of Professional Studies in Elementary Education, Special Education, and Vocational Education. These are designated as affiliate programs and not considered as sections in the department (Iowa State University, 1982).

General Goals of the Department

The general goals of the Department, each section, and affiliate programs as stated by the Governance of the Department of Professional Studies (Iowa State University, 1982) are to:

1. Conduct high quality graduate education programs, both on-campus and off-campus, for students seeking graduate degrees in a major in education and/or seeking professional certification as school service personnel.
2. Establish appropriate conditions, opportunities, and resources with which both faculty and graduate students can engage in research and scholarly activities of excellence.
3. Assist the educational enterprise of Iowa in solution of its problems by utilizing, when appropriate, the talents and expertise of the faculty and graduate student body in such activities as workshops, conferences, and consultation in small groups, both on and off-campus (p. 1).

Statement of the Problem

The literature clearly indicates a strong movement toward longitudinal self-studies conducted by university departments in order to maintain accountability (Kasten, 1986; Braskamp et al. 1979; Wise, Hengstler, & Braskamp, 1981). In response to demands for information concerning consumer program satisfaction, institutions of higher education must extend the dimensions of assessment and evaluation (Olson, 1985). It is important that these studies also provide longitudinal information.

The goals of the Department of Professional Studies in Education, Iowa State University, are to meet societal demands for relevant education and quality service. Departmental goals are not static; they adapt to the changing demands of the society which the institution serves. Therefore, it is imperative that the department continuously assess and update graduate program offerings. Graduate students and alumnae/alumni are key to providing valuable information in the continued effort to improve programs within the department.

Two survey studies have been conducted to evaluate the departments' graduate programs. Subah (1986) surveyed students enrolled, spring 1986, to determine their level of satisfaction with programs. A concurrent, companion study (Photisuvan, 1987) surveyed 1981-85 alumnae/alumni for the same purpose. Both authors found data significant for program development and recommended that a follow-up study be conducted.

There has been no replication of the studies conducted of the Subah (1986) and Photisuvan (1987). In preparation for the NCATE review it is in the best interest of each program, and the department as a whole, to have evidence of a comprehensive assessment and efforts to strengthen and/or improve programming.

More importantly, it is necessary for departments in institutions of higher education to be responsive to the consumer. This study will produce data relating to consumer satisfaction with the Department of Professional Studies. Information will be available to decision makers for the development of programming which better satisfies constituents

and/or strengthens those endeavors which appear to be of most importance for continued quality service.

Purpose of the Study

The purpose of this study was to determine student and alumnae/alumni level of satisfaction with the Iowa State University Department of Professional Studies in Education. Data were collected to: 1) determine level of satisfaction with departmental programs, 2) identify perceived strengths and weaknesses of the department, 3) compare findings with those as reported in the previous studies.

Objectives of the Study

1. Identify level of satisfaction of (a) students (b) alumnae/alumni by demographic data.
2. Identify strengths and weaknesses of the department and the degree to which expectations of (a) current students (b) alumnae/alumni have been met.
3. Compare current findings with those as reported in the previous departmental studies.
4. Make recommendations for revision of the department.

Hypotheses to be Tested

The following null hypotheses were tested to achieve the purpose of this study:

1. There is no relationship between (a) student or (b) alumnae/alumni level of satisfaction with the department and the

following variables: age, graduate assistantship, use of degree preparation, and recommendation of specialization.

2. There is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by gender.
3. There is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by writing option.
4. There is no significant difference in level of satisfaction between (a) students who have or (b) alumnae/alumni who had assistantships and those who did not.
5. There is no significant difference in level of satisfaction with the department when students are grouped by age.
6. There is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by area of specialization.
7. There is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by employment type.
8. There is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by ethnic background.
9. There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by highest degree in Department of Professional Studies.

Assumptions

1. The names and addresses of the current students, obtained from the Graduate Student Office, were accurate and up-to-date.
2. The list of alumnae/alumni names and addresses, obtained from the Alumni Development Office, was accurate and up-to-date.
3. The current students answered the questionnaire accurately and the information was valid for departmental evaluation.
4. The alumnae/alumni answered the questionnaire accurately and the information was valid for departmental evaluation.
5. The previous studies were conducted as presented and the data reported accurately.

Limitations

The scope of this study is limited to those students enrolled in a graduate degree program, spring 1989; the 1986-88 alumnae/alumni; and data as reported for similar populations in previous studies, Department of Professional Studies in Education, Iowa State University. Data used for this study are only applicable to the department where they were obtained. Inferences cannot be made for any other population.

Definition of Terms

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

Current student study will refer to study of graduates students enrolled for the spring semester, 1989.

Students will refer to those students enrolled spring, 1989.

Previous study of graduate students will refer to the study conducted by Subah, spring 1986.

Current alumnae/alumni study will refer to the study of 1986-88 Department of Professional Studies alumnae/alumni.

Alumnae/alumni will refer to the 1986-88 alumnae/alumni.

Previous alumnae/alumni study will refer to the 1987 study conducted by Photisuwan.

Department will refer to the Department of Professional Studies in Education, Iowa State University.

Evaluation: "The practice of evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programs, personnel, and products for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what those programs, personnel, or products are doing and affecting" (Patton, 1988, p. 303).

Significance of the Study

Implication

The study of graduate students, spring 1989 and 1986-88 alumnae/alumni provides information for decision making, program review, and possible department revision.

This study serves to document evaluation efforts which include current students and graduates. This is an area of compliance required by the National Council for Accreditation of Teacher Education (1987).

Data on student and alumnae/alumni satisfaction with the department, which correlate positively with the Subah (1986) and Photisuvan (1987) findings, provide further documentation for adjustment considerations.

Application

The findings of this study provide direction for long-range planning within the Department of Professional Studies. They are applicable to an in-depth study of individual programs. Significant items can serve to guide decisions for program enrichment and/or improvement and, therefore, contribute to the over-all health of the department.

This study serves as a data source to determine the success of departmental changes which have been implemented since the previous studies were conducted. Items which were found to be in high correlation with the previous studies provide direction for future program efforts.

CHAPTER 2. REVIEW OF LITERATURE

In this chapter, literature is reviewed which relates to the field of program evaluation in general as well as program evaluation specific to institutions of higher education. The chapter is divided into four subsections: definition of evaluation, student evaluation of programs, alumnae/alumni evaluation of programs, the role of evaluation in accreditation, and multidimensional program evaluation.

Definition of Evaluation

Numerous definitions of evaluation are found in the literature. The diversity of concepts, practices, and methods dictate how educators address evaluation. What is being assessed and why the assessment is being conducted often determines the definition. Patton (1988) suggests that the definition of evaluation is purposefully broad in order to promote the concept that it can be used in a variety of ways.

The classic definition, developed by Tyler (1949), views evaluation as a process used to determine if the goals and objectives of a program have been achieved. Evaluation defined as a process of comparing costs and benefits of two or more programs grew out of a reaction to the narrowness of measuring the attainment of single program goals as prescribed by Tyler (Alkin & Ellett, 1984).

Social scientists perceive evaluation as involving the application of rigorous methods to study programs (Bernstein & Freeman, 1975; Rossi, Freeman, & Wright, 1979). This definition emphasizes experimental design and quantitative measure. Another perspective defines evaluation as the

process of judging a program's value. In this context the purpose of evaluation is to reach a final judgment on the relative merit or worth of a program as it currently exists (Stake, 1967; Worthen & Sanders, 1973; Popham, 1975; Guba & Lincoln, 1981).

While supporting the concept that the goal of evaluation was to judge value, Scriven (1967) went further with the definition to insist that the informed judgment of value was not an end in itself. In defining evaluation, Scriven identified the need to distinguish between evaluation's goal of judging value and the role of evaluation which he viewed as the constructive use of evaluative data. Stufflebeam (1968) agreed that evaluation for the sake of evaluation was pointless and, also, stressed the use of evaluative data in the development of constructive plans for program improvement and revision. This expanded definition of evaluation, therefore, goes beyond judgment or determining value to include an action process as the primary emphasis. It is a process for problem solving or an information gathering process for decision-making (Stufflebeam, Foley, Gephart, Guba, Hammon, Merriman, & Provus, 1971; Scriven, 1974; Stufflebeam & Webster 1980; Stufflebeam, 1983).

The broad definition of evaluation proposed by Patton (1988) appears to be most applicable to this study. Patton states:

"The practice of evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programs, personnel, and products for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what those programs, personnel or products are doing and affecting" (p. 303).

Student Evaluation of Programs

The view of current students is critical to the modification, enrichment, and/or revision of programs to meet their needs (Morstain, 1977). "Student satisfactions represent a unique perception of programs and should not be overlooked in assessing program quality", (Braskamp et al. 1979, p. 498).

Research indicates that student satisfaction with departments reflects information concerning the public image of the college, student attitudes toward college, and factors which influence choice of programs of study (Neumann & Neumann, 1981; van Rooijen, 1986; Field & Giles, 1980). Student satisfaction with department organization and quality may be a positive indicator of department excellence (Braskamp et al. 1979; Cooley, 1983).

To determine the degree of satisfaction with major departments, Braskamp et al. (1979) surveyed 7,801 undergraduates and graduates from 38 departments, at the University of Illinois at Urbana-Champaign. This study identified two highly related dimensions of student satisfaction for both undergraduate and graduates. The dimensions were: General Satisfaction with Major (area of specialization) and Satisfaction with Mentorship.

An analysis of the social-psychological dimensions of graduate and professional school environments was conducted by Katz and Hartnett (1976). The data, gathered from hundreds of graduate schools, indicated that five critical dimensions of departmental environment most influenced student perceptions. The environmental dimensions were: the nature and

quality of student relations with the faculty, the extent to which the department can be regarded as a true "community", the degree of faculty attention to and concern for teaching, procedures and philosophy related to the evaluation of graduate student performance, and the rigidity and/or flexibility of the formal curricular requirements.

A longitudinal study of a large sample of students, in five graduate departments, examined how departmental environments differed. This study indicated that specialized requirements of disciplines create unique expectations and pressures that affect students' academic and personal well-being. Each department creates a unique environment and a graduate school is a set of learning environments rather than a unit. Therefore, the researcher (Baird, 1974) concluded the department was the correct unit of analysis at the graduate level.

Satisfaction with aspects of the academic environment, for 1,370 graduate students in three graduate colleges, was summarized in a 1976 study conducted by Reagan. No correlation of student satisfaction with sex, marital status, or area of study was reported. Two dimensions, faculty acceptance of opinions held by students and the quality of advising, were found to correlate significantly with graduate student satisfaction. At a mid-western school, Gregg (1972) studied several factors affecting graduate student satisfaction. This study was supported by the findings of Reagan (1976) and Katz and Hartnett (1976) that more collegial faculty-student relationships produce higher levels of graduate student satisfaction.

In a 1985 survey of 758 graduating seniors, Hearn attempted to identify the determinants of specific and overall satisfaction with academic programs. He reported findings which indicated stimulating course work and good teaching were more important than opportunities for faculty/student interaction or perceived faculty knowledge. Significant field (area of specialization) and gender differences were found. A study of 172 graduate students, conducted by Subah (1986), also found significant differences in student satisfaction by gender and area of specialization, as well as by age and employment type.

An examination of demographic factors which were characteristic of persisters and nonpersisters in a graduate level, nontraditional liberal education program found five significant factors. The factors were: age, type of Bachelor's degree held, years since completion of the Bachelor's program, distance from the Master's degree program site, and the social science score on the Undergraduate Assessment Program Test (Langenbach & Korhonen, 1988).

Data obtained from 3,929 respondents to the 1971 and 1980 Cooperative Institutional Research Program (CIRP) surveys, conducted by Astin (1982), were analyzed by Smart (1987). The purpose of this study was to determine if relative similarity in student undergraduate and graduate environments was related to satisfaction with graduate programs. Smart found that students with similar undergraduate and graduate major fields of study experienced a higher level of satisfaction in relationships with faculty and peers.

Research, strategic planning, communications, and evaluation are essential to a sound marketing effort (Olson, 1985). Evaluation for graduate recruitment receives the least attention primarily because, "few departments or institutions have developed baseline data sophisticated enough to allow much evaluation" (p. 24). According to Olson, "academic departments have undertaken no organized effort to determine factors which influence enrollment decisions. Most departments focus their energies on the product (curriculum) rather than on the client" (p. 23).

"Desirable qualities in graduate programs are not mysterious. One need only ask the students to understand the attractiveness of various advanced learning environments" (Hill, 1981, p. 9). In preparing for the 1990s, it appears to be critically important that those who plan and implement educational programs carefully consider the views of the student consumer.

Alumnae/alumni Evaluation of Programs

A companion source of information, vital to department program evaluation and improvement, are the opinions of the alumnae/alumni of that department (Wise et al. 1981; Duval, 1985). Colleges and universities have used alumnae/alumni surveys for a variety of reasons, and it has been recommended that this data be used in assessing quality or excellence (Pace, 1979; Study Group on the Conditions of Excellence in Higher Education, 1984). Alumnae/alumni surveys provide administrators with crucial information about judgments concerning the college experience, and

are increasingly being used in multidimensional assessment programs (Harris, 1985; Hartel, 1985).

Alumnae/alumni can provide insights into the utility of course requirements and useful information for curriculum or environmental changes (Centra, 1977; Braskamp, Brandenburg, & Ory, 1984). Recent alumnae/alumni may have a better perspective about requirements, procedures, and content, especially as they relate to employment (Clark, Hartnett, & Baird, 1976; Braskamp et al. 1984). Alumnae/alumni survey outcomes are used for accreditation review, self-study, marketing, recruiting, career planning/placement, and public relations efforts (Williford & Moden, 1987).

Earlier studies, which compared alumnae/alumni and current student ratings, found correlations ranging from .40 to .75 (Centra, 1974; Drucker & Remmers, 1951; Overall, Marsh, Hughes, & Unterbrink, 1978). Unfortunately, these studies assessed only individual teaching which is one dimension of departmental quality. To determine the usefulness of alumnae/alumni ratings in assessing overall departmental quality, Wise et al. (1981) surveyed 4,573 enrolled students from 22 academic departments. One year later 1,228 graduates from the same departments completed the alumnae/alumni survey. Data obtained from the two groups were virtually identical and included two major factors: General Satisfaction With Major and Satisfaction With Mentorship. Alumnae/alumni ratings were found to be relatively uninfluenced by job-related variables. The study suggested that former students continue to evaluate their major programs along the same dimensions after graduation. The authors concluded that it appeared

reasonable to make comparisons between groups of enrolled students and alumnae/alumni.

In 1976 Clark et al. conducted a study of 25 graduate departments. Data, obtained from both students and alumnae/alumni, correlated highly (.70, .80) on the ability of the faculty and overall excellence of the program. These authors suggested that alumnae/alumni have a better perspective about the requirements and contents of a program than do enrolled students and more objectivity than faculty members. Therefore, the most productive use of alumnae/alumni ratings appeared to lie with program and department review.

The 1983 report of the self-assessment study of doctoral programs in higher education at the University of Georgia indicates data which support the findings of Clark et al. (1976) of high correlations between ratings of students and alumnae/alumni. These data reflect an extensive agreement among students, alumni, and faculty (Fincher, 1983).

Analysis of follow-up studies of graduates of College of Education doctoral programs at Ohio State and Michigan State universities considered alumnae/alumni perceptions of doctoral guidance committee activities in planning course work, preparing and administering comprehensive evaluations, and guiding dissertation research. Recommendations of 676 graduates from both programs include: encouraging students to take meaningful course work outside the college of education, ensuring that students obtain sufficient background in research methodology, providing a clear sense of the content that will be tested in examinations, maintaining high standards, offering constructive feedback to students

when evaluating performance, and adding members to the committee to ensure expertise in research methodology and theory (Freeman & Loadman, 1985).

The literature clearly indicates a need to include evaluative information from alumnae/alumni in a comprehensive departmental program review.

The Role of Evaluation in Accreditation

Accreditation, a process unique to the United States, is concerned with the integrity and educational quality of member institutions. The process of accreditation may be described as having four major purposes: accountability, a legal standard by which to measure the quality of education, a way to raise educational standards, and a means of institutional self-knowledge (Zoffer, 1987). Accreditation, as defined by the National Council for Accreditation of Teacher Education (1987), is the "primary means for voluntary peer regulation and serves as a significant mechanism for assessing and enhancing academic and educational quality" (p. 44).

The National Council for Accreditation of Teacher Education (NCATE) is supported by professional associations representing teacher education institutions, state and local policy makers, and professional associations. NCATE is authorized, by the Council on Postsecondary Accreditation (COPA), to grant accreditation to institutions which meet standards for excellence. NCATE accreditation is not granted to individual departments, but to universities or colleges as a total unit (Christiansen, 1985; Brady, 1986).

In the early 1970s NCATE shifted the emphasis for accreditation from the educational unit's facilities, research materials, faculty qualifications, and entrance requirements to include performance of program graduates and educational outcomes (Floden, 1980). Efforts in evaluation of graduates were reported to have been NCATE's major concern with programs in 1972 (Fritschel, 1975).

Departments were expected to document efforts to design and implement plans for evaluation of graduates and use of data as a resource in program review. However, more than one-half (58%) of the programs, reviewed by NCATE in 1979, were cited for violations of the standard calling for follow-up studies. In 1980 the standards for evaluating program graduates and use of data in program review were first and third among identified weaknesses (Wheeler, 1980).

The standards and criteria for NCATE accreditation were redesigned in 1987. Formerly, evaluation procedures were summative and focused on the decision to accredit, grant provisional accreditation, or to deny accreditation. The more formative, new evaluation establishes eleven preconditions and requires annual reports on selected variables. The standard which places graduate evaluation as a precondition for accreditation states:

Standard II.B: Relationships with Graduates

The unit maintains relationships with graduates from its professional education programs that include follow-up studies and assistance to beginning professionals.

Criteria for Compliance:

The unit keeps abreast of emerging evaluation techniques and engages in regular and systematic evaluations, including follow-up

studies, to determine the success and quality of graduates in the professional education roles for which they were prepared.

The results of evaluation efforts, including follow-up studies of graduates, are used by the unit to modify and improve programs (NCATE, 1987, p. 42).

Qualifying documentation of these efforts include: policies for conducting evaluation; summary reports of internal program reviews within the last five years; summary reports of external program reviews conducted within the last three years, including follow-up studies of graduates and employers; and a summary of program changes based on evaluation results.

Multidimensional Program Evaluation

In evaluating department quality it is important to use as many relevant sources of data as possible (Wise et al. 1981). Thus, efforts in evaluation which incorporate a multidimensional approach provide departments with the strongest evidence to support decision-making for program change and improvement (Brandenburg & Gray, 1983). Such data provide information pertaining to the current status of existing programs (Lillie, Lubker, Rhodes, & Wyne, 1986) and identify common factors relating to student and alumnae/alumni concerns (Braskamp et al. 1979).

The literature indicates a strong movement toward longitudinal self-studies, conducted by university departments, in order to maintain accountability. The value of information from current students and alumnae/alumni, as a resource for assessing program quality, is clearly supported by research.

CHAPTER 3. METHODOLOGY

Methods followed in conducting the survey study are discussed in this chapter. Chapter 3 is divided into the following sections: Instruments, subjects, survey procedures, and data analysis.

Instruments

A revision of the evaluation instrument developed by Braskamp et al. (1979) was used in this study. A modified version of this instrument was used by both Photseuvan (1987) and Subah (1986) in the previous studies of the department.

The questionnaire consisted of two parts. Part One contained items relating to demographic information, employment classification, and job satisfaction. Part Two was divided into 3 sections: 1) satisfaction with area of specialization (section), 2) satisfaction with courses taken outside section as a part of the program of study, and 3) overall satisfaction with the department.

Subjects

The subjects for this study were master and doctoral students enrolled in the Department of Professional Studies, Iowa State University, spring semester, 1989. For the purposes of this study the three affiliate programs, Elementary Education, Special Education, and Vocational Education, were included as sections within the department in data collection and analysis. Therefore, the subjects were majoring in one of the following graduate degree programs: Adult and Extension Education;

Counselor Education; Curriculum and Instructional Technology; Educational Administration; Elementary Education; Higher Education; Historical, Philosophical, and Comparative Studies; Research and Evaluation; Special Education; Vocational Education. The other segment of the population were 1986-1988 graduates from the same areas of specialization within the department.

A list of graduate students, spring 1989, was obtained from the Iowa State University Graduate Student Office. Responses from all of the current graduate students in the Department of Professional Studies were recruited for the study. The names and addresses of the 1986-88 Department of Professional Studies alumnae/alumni were obtained from the Iowa State University Alumni Division Office. Responses from all of the graduates were recruited.

Student subjects

A total of 238 students, from all major areas of specialization, participated in the survey. This was 69.4% of the 342 degree seeking students enrolled spring, 1989. Of the 238 respondents, 60.5% were female, 39.1% male. The majority (64.3%) were married, 25.6% single, and 8.0% divorced.

The largest percent (42.9%) of the students were 31 through 40 years of age. The next largest percentages (27.3%, 23.9%) were 20 to 30, and 41 to 50, respectively. Five percent (5.5%) were over 50 years of age.

The majority (78.6%) were White American, 8.4% were African/Black American, 8.0% were international students, 1.7% were Native American, 1.3% Asian American, and .8% were Hispanic American.

Over one-half (58.8%) of the students reported having no graduate degree before attending Iowa State University; 36.5% had a M.S., M.A., or M.Ed.; and 3.8% a Ph.D. or Ed.D.

Eighty-six percent (86%) of the responses indicated the subjects had no degree from the Department of Professional Studies; 13.0% had received a M.S., M.A., or M.Ed.; and .8% a Ph.D. Few listed the date of enrollment, for the last degree, or the date it was received. A majority felt this question was not applicable (97.9% and 98%, respectively).

Eighteen individuals responded from the section Adult and Extension Education. Of these respondents 55.6% are female and 44.4% male; 22.2% are 20 to 30 years of age, 61.1% 31 to 40, and 5.6% are over 50; 38.9% are writing a thesis, 38.9% a creative component, and 22.2% a dissertation.

Sixty-two of the student respondents are specializing in Counselor Education. Of these, 82.3% are female, 17.7% male; 22.6% are 20 to 30 years of age, 45.2% are 31 to 40, 27.4% are 41 to 50 and 4.8% are over 50 years of age; 17.2% are choosing the thesis writing option, 75.9% the creative component, and 6.9% the dissertation.

Of the 25 individuals from Curriculum and Instructional Technology, 52.0% are female, 48.0% male; 48.0% are 20 to 30 years of age, 20.0% are 31 to 40, 28.0% are 41 to 50, and 4.0% are over 50 years of age; 56.0% are writing a thesis, 4.0% a creative component, and 40.0% a dissertation.

Forty-three students are studying in the area of Educational Administration. Of this group 35.4% are female and 64.6% male; 10.4% are 20 to 30 years of age, 54.2% are 31 to 40, 31.3% are 41 to 50, and 4.2% are over 50 years of age; 7.0% are choosing the thesis writing option, 23.3% the creative component, and 69.8% the dissertation.

Four females and 1 male responded from Elementary Education. One is 20 to 30 years of age, 3 are 31 to 40, 1 is 41 to 50, and none are over 50 years of age; 2 are writing a creative component and 3 a dissertation.

Of the 61 respondents from Higher Education, 63.9% are female, 36.1% male; 39.3% are 20 to 30 years of age, 36.1% are 31 to 40, 18.0% are 41 to 50, and 6.6% are over 50 years of age; 21.3% are writing a thesis, 21.3% a creative component, and 57.4% a dissertation.

Six individuals responded from Historical, Philosophical, and Comparative Studies. Of these 3 were female and 3 male; 1 is 20 to 30 years of age, 2 are 31 to 40, 3 are 41 to 50, and none are over 50 years of age; 3 students are writing a thesis, and 3 a dissertation, none are choosing to write a creative component.

Eight students (4 female, 4 male) responded that they are studying in the area of Research and Evaluation. Two students are 20 to 30 years of age, 4 are 31 to 40, 1 is 41 to 50, and 1 is over 50 years of age; 2 are writing a thesis and 5 a dissertation. None reported choosing to write a creative component.

One, 31 to 40 year old female student, who is writing a dissertation, responded from the area of Special Education. Two students specializing in Vocational Education responded to the survey. Of these one is 20 to 30

years of age and one over 50; 1 reported choosing the thesis writing option.

Alumnae/alumni subjects

A total of 179 alumnae/alumni participated in the survey. This was 49.3% of the 363 graduates from 1986-1988. Of the 179 participants, 69.3% were female, 29.6% male. A majority (72.1%) were married, 19.0% were single, and 8.4% divorced.

The largest percent of respondents (41.9%) were 31 to 40 years of age, 29.6% were 41 to 50, and 23.5% were 20 to 30. Five percent (5.0%) were over 50. Over ninety percent (92.7), of those reporting, were White American, followed by African/Black American (5.0%), Internationals (1.7%), and Native American (.6%).

Seventy percent (70.9%) had no graduate degree before attending Iowa State University, 18.4% had obtained the M.S. or M.A. degree, 8.9% the M.Ed., and 1.1% the Ph.D. The highest degree obtained in the Department of Professional Studies was reported by 69.3% as M.S., M.A., or M.Ed; 30.7% completed the Ph.D. Three respondents (1.8%) have completed another graduate degree since attending I.S.U., 98.3% have not.

Less than twenty percent (19.6%) of the alumnae/alumni enrolled for their last degree before 1983; 28.4% enrolled in 1983 or 1984; 41.9% in 1985 or 1986; and 7.8% in 1987 through 1989. The last graduate degree was received by 26.3% of the respondents in 1985 or 1986; 70.9% completed a graduate degree in 1987 or 1988; and 1.7% in 1989.

Thirteen individuals responded from the section Adult and Extension Education. Of these respondents 84.6% are female and 15.4% male; 50.0% had received a M.Ed. degree, 21.4% a M.S. or M.A., and 28.6% a Ph.D.; 14.3% had chosen to write a thesis, 57.1% a creative component, and 28.6% a dissertation.

Twenty-five respondents had specialized in Counselor Education. Of these, 84.0% are female, 16.0% male; 76.9% had received a M.S. or M.A. degree, 23.1% a Ph.D., none reported having received a M.Ed.; 16.0% had chosen to write a thesis, 64.0% a creative component, and 20.0% a dissertation.

Of the 15 individuals from Curriculum and Instructional Technology, 66.7% are female, 33.3% male; 13.3% had received a M.Ed. degree, 60.0% a M.S. or M.A., and 26.7% a Ph.D.; 66.7% wrote a thesis, 6.7% a creative component, and 26.7% a dissertation.

Thirty-nine alumnae/alumni had studied in the area of Educational Administration. Of this group 56.4% are female and 43.6% male; 2.6% had received a M.Ed. degree, 51.3% a M.S. or M.A., and 46.2% a Ph.D.; 53.8% had chosen the creative component writing option, 46.2% the dissertation, and none reported writing a thesis.

Ten female and no male graduates of Elementary Education responded to the survey. Eighty percent of the female respondents received a M.Ed. degree, 20.0% a M.S. or M.A., and none a Ph.D.; 20.0% wrote a thesis, 80.0% a creative component, and 0.0% a dissertation.

Of the 48 graduates from Higher Education who participated in the survey, 54.2% are female, 45.8% male; 60.4% received a M.S. or M.A.

degree, 39.6% a Ph.D., none received a M.Ed.; 23.4 chose to write a thesis, 38.3% a creative component, and 38.3% a dissertation.

One female graduate from Historical, Philosophical, and Comparative Studies responded to the survey. She had written a creative component and received a M.Ed. Six alumnae/alumni (4 female, 2 male) indicated they had studied in the area of Research and Evaluation. Two graduates had received a M.S. or M.A., 4 a Ph.D., none a M.Ed.; 1 wrote a thesis, 1 a creative component, and 4 a dissertation.

Eighteen individuals (94.4% female, 5.6% male) had studied in the area of Special Education. Of these 50.0% received a M.Ed., 50.0% a M.S. or M.A., none a Ph.D.; 16.7% had chosen to write a thesis, 83.3% a creative component, and none a dissertation.

Two female and no male graduates from the area of Vocational Education responded to the survey. Both of the respondents had written a creative component and received a a M.Ed. degree.

Survey Procedures

The survey instruments were reviewed and modified in order to make the questions easily read, simple to respond to, and as brief as possible (Borg & Gall, 1983). The revised versions of the questionnaires were sent to each professor in the department to obtain suggestions for additions and/or corrections. The instruments were revised, as recommended by the professors, and sent to section leaders for final correction and approval. A pretest was conducted with a sample group of students and

alumnae/alumni. Corrections, as suggested by this sample group, were made to more fully clarify instructions.

The Iowa State University Committee on the use of Human Subjects in Research approved this study and determined that the confidentiality of data was assured and that the rights and welfare of subjects were adequately protected.

The alumnae/alumni questionnaire was printed, in self-mailing booklet form, by the Iowa State University Publications Department. The current student questionnaire was printed by the Iowa State University Printing Services.

An introductory letter and the self-mailing questionnaire were sent to all Department of Professional Studies 1986-1988 alumnae/alumni (Appendix A). A reminder post card (Appendix B) was mailed three weeks later.

A letter requesting assistance in data collection, was sent to each professor teaching a graduate class spring semester (Appendix C). The faculty disseminated the introductory letter and student questionnaire (Appendix D) to their students and returned the completed forms to the departments' central office. A class check list was used to identify students absent from class the day of distribution.

The names and addresses of those students who were absent from classes, or enrolled for research only spring semester, were obtained from the department central office. Introductory letters and questionnaires were mailed to all of these students.

Data Analysis

The responses on the questionnaires were coded numerically. The location and number of columns for each item was specified. Frequencies were run on the data to determine errors. All identified errors were corrected.

The data were analyzed using SPSSX (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1983). The demographic data were analyzed by frequencies, percentages, and means to describe subjects characteristics. The demographics included area of specialization, writing options, where course work was taken, graduate assistantship, certification, graduate degrees from another institution, year enrolled/received highest degree from Department of Professional Studies, ethnic background, marital status, age, gender, employment classification, job title, utilization of degree preparation, and job satisfaction.

A separate factor analysis was computed for each section in Part Two. Factors were formed by clusters using the criteria of a .4 or above loading on the factor. Cronbach's coefficient alpha was used to determine reliability of items in each factor. Pearson product moment correlation was computed to determine relationships between demographic variables and factors. T-tests and analysis of variance were used to determine influence of demographic variables upon factors. The Scheffé Multiple Range Test was used to identify differences between group means. Alpha was set at the .05 level of significance.

CHAPTER 4. FINDINGS

The statistical analysis of the data and findings are presented in this chapter. The statistical procedures used were: factor analysis, reliability, Pearson correlation, one-way analysis of variance, and t-test. The data were generated from the responses of 417 individuals; 238 students and 179 alumnae/alumni. To facilitate analysis and interpretation of data, findings from student and alumnae/alumni surveys are reported separately and discussed in the sections Student Data and Alumnae/alumni Data. These sections are divided into the following subsections: demographic characteristics, factor analysis, reliability of factors, relationship between factors and demographic variables, inter-correlation of factors and couplets, and differences between factors and variables. A brief summary follows the alumnae/alumni data section.

Student Data

Demographic characteristics

A total of 238 students, from all major areas of specialization, participated in the survey. This was 69.4% of the 342 degree seeking students enrolled spring, 1989. Of the 238 respondents, 60.5% are female, 39.1% male. The majority (64.3%) are married, 25.6% single, and 0.8% divorced. The largest percent (42.9%) of the students are 31 through 40 years of age.

Area of Specialization, recommendation, assistantship, certification and type The largest number of respondents are specializing either in Counselor Education (26.1%) or Higher Education (26.1%). The next largest

percent (20.2%) are specializing in Educational Administration, 10.5% in the area of Curriculum and Instructional Technology, and 7.6% in Adult and Extension Education. Few questionnaires were returned by students majoring in the areas of Elementary Education (2.1%); Historical, Philosophical, and Comparative Studies (2.5%); Research and Evaluation (3.4%); Special Education (0.4%); and Vocational Education (0.8%).

Therefore, these sections are combined for further data analysis as: Adult/Vocational Education, Elementary/Special Education, and Comparative Studies/Research. Over one-half (56.7%) of the subjects indicate they would highly recommend their area of specialization, 34.9% would somewhat recommend, and 8.0% would recommend very little or not at all.

A majority of the subjects (62.6%) will receive no certification as a result of their degree preparation, 37.4% will receive certification. Only forty-four students indicated the type of certification they will receive. Of this number, 9.7% will receive K-12 counselor certificates, 6.7% K-12 administration certification, 1.3% community college endorsement, and .8% teaching certificates. The highest percent of the students have no assistantship (71.4%), 10.5% are research assistants, 11.8% have a student affairs assistantship (general 7.6%, resident hall, 4.2%), and 5.9% are teaching assistants.

Choice of writing option, where course work was completed The dissertation writing option will be chosen by 39.9% of the subjects, 32.4% will write a creative component, and 22.3% a thesis. The majority of the students (96.2%) are completing their course work on campus, 3.8% off campus.

Employment classification, use of degree preparation Responses

Indicate a majority of students are employed at a university (29.8%) or a local school district (27.3%). Due to the low number of responses, the remaining employment classifications are combined as follows:

Industry/Self (7.1%), 4 year/2 year/Community College (10.1%), and Federal/State Government (4.6%). Seventeen percent (17.6%) of the subjects indicate they use their training in their work a great deal, 15.5% use it somewhat, and 8.0% use it very little or not at all.

The statistical profile of students is presented in Table 1a. Chi Square tabulations are found in Tables 1b and 1c. The reader is reminded that Chi Square is only exact when all cells have expected value over 5. When this does not occur Chi Square is only an approximation.

Factor analysis

In order to facilitate statistical analysis of the data a factor analysis, using the PA2 extraction technique and varimax rotation from the SPSSx package (Nie et al. 1983), was completed on the items in Part Two of the questionnaire. This procedure organized 52 single items into nine components (factors) which could then be used for statistical analysis. Part Two is divided into the following sections: 1) satisfaction with area of specialization (section), 2) satisfaction with courses taken outside of section as a part of the program of study, and 3) overall satisfaction with the department. Due to the difference in focus a separate statistical analysis was conducted for each section in Part Two.

Table 1a. Statistical profile of students

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Area of Specialization</u>	237		
Adult and Extension Ed.		18	7.6
Counselor Ed.		62	26.2
Curriculum & Instructional Tech.		25	10.5
Ed. Administration		48	20.2
Elementary Ed.		5	2.1
Higher Ed.		62	26.1
Historical/Philosophical/Comparative Stds.		6	2.5
Research and Evaluation		8	3.4
Special Education		1	.4
Vocational Education		2	.8
<u>Writing Option</u>	231		
Thesis		53	22.3
Creative Component		77	32.4
Dissertation		95	39.9
<u>Where completed course work</u>	238		
On Campus		229	96.2
Off Campus		9	3.8
<u>Graduate Assistantship</u>	237		
No Assistantship		170	71.4
Teaching Assistant		14	5.9
Research Assistant		25	10.5
Student Affairs-General		18	7.6
Student Affairs-Resident Hall		10	4.2
<u>Will Receive Certification</u>	238		
Yes		89	37.4
No		149	62.6
<u>Type of Certification</u>	44		
Superintendent/Principal		16	6.7
Counselor		23	9.7
Community College		3	1.3
Teaching		2	.8
Not Applicable/Missing		194	81.5
<u>Would Recommend Area of Specialization</u>	237		
Highly		135	56.7
Somewhat		83	34.9
Very Little		13	5.5
Not At All		6	2.5

Table 1a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Graduate Degree before ISU</u>	238		
None		140	58.8
M.Ed.		30	12.6
M.S./M.A.		57	23.9
Ph.D.		8	3.4
Ed.D.		1	.4
<u>Highest Degree-Professional Studies</u>	33		
M.Ed.		6	2.5
M.S./M.A.		25	10.5
Ph.D.		2	.8
<u>Date Enrolled-Last Degree</u>	5		
<u>Date Received-Last Degree</u>	4		
<u>Ethnic Background</u>	236		
International Student		19	8.0
Asian American		3	1.3
African/Black American		20	8.4
Hispanic American		2	.8
Native American		4	1.7
White American		187	78.6
<u>Marital Status</u>	235		
Single		61	25.6
Married		153	64.3
Divorced		19	8.0
<u>Age</u>	237		
20-30		65	27.3
31-40		102	42.9
41-50		57	23.9
Over 50		13	5.5
<u>Gender</u>	237		
Female		144	60.5
Male		93	39.1
<u>Employed</u>	235		
Yes		194	81.5
No		41	17.2
<u>Employment Classification</u>	188		
Federal Government		1	.4
State Government		10	4.2
Industry/Business		10	4.2
University		71	29.8
4-year College		13	5.5

Table 1a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Employment Classification (continued)</u>			
2-year/Community College		11	4.6
Local School District		65	27.3
Self-Employed		7	2.9
<u>Job Title</u>	100		
Coordinator-Student Affairs		1	.4
Director/Coordinator Resident Life		3	1.3
Director/Admissions/Financial Aid		3	1.3
Extension Services		1	.4
Academic Advisor/Coordinator		4	1.7
Dean/Assistant		1	.4
Counselor K-12		1	.4
Counselor/Consultant/Coordinator Hg. Ed.		7	2.9
K-12 Administrator		8	3.4
Teacher/Media Specialist K-12		21	8.8
Consultant/Coordinator AEA		1	.4
Business and Industry		6	2.5
Student/Graduate Assistant		14	5.9
Associate Director Hg. Ed.		1	.4
Educator-State		3	1.3
Self-Employed		3	1.3
Community Agency		5	2.1
<u>Use of Degree Preparation</u>	98		
A Great Deal		42	17.6
Somewhat		37	15.5
Very Little		9	3.8
Not At All		10	4.2
<u>Employment Satisfaction-Salary</u>	197		
Highly Dissatisfied		20	8.4
Dissatisfied		56	23.5
Undecided		14	5.9
Satisfied		87	36.6
Highly Satisfied		19	8.0
<u>Employment Satisfaction-Conditions</u>	197		
Highly Dissatisfied		4	1.7
Dissatisfied		38	16.0
Undecided		10	4.2
Satisfied		95	39.9
Highly Satisfied		50	21.0

Table 1a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Employment Satisfaction-Admin. Support</u>	194		
Highly Dissatisfied		13	5.5
Dissatisfied		24	10.1
Undecided		24	10.1
Satisfied		73	30.7
Highly Satisfied		60	25.2
<u>Employment Sat-Relations W/Co-workers</u>	196		
Highly Dissatisfied		2	.8
Dissatisfied		3	1.3
Undecided		8	3.4
Satisfied		92	38.7
Highly Satisfied		91	38.2
<u>Employment Sat-Involvement/Dec.-Making</u>	193		
Highly Dissatisfied		11	4.6
Dissatisfied		34	14.3
Undecided		24	10.1
Satisfied		82	34.5
Highly Satisfied		42	17.6
<u>Employment Sat-Challenge and Growth</u>	196		
Highly Dissatisfied		14	5.9
Dissatisfied		34	14.3
Undecided		28	11.8
Satisfied		69	29.0
Highly Satisfied		51	21.4
<u>Employment Sat-Advancement</u>	181		
Highly Dissatisfied		24	10.1
Dissatisfied		54	22.7
Undecided		29	12.2
Satisfied		52	21.8
Highly Satisfied		22	9.2
<u>Employment Sat-Involvement/Prof. Org.</u>	189		
Highly Dissatisfied		8	3.4
Dissatisfied		26	10.9
Undecided		26	10.9
Satisfied		82	34.5
Highly Satisfied		47	19.7

Table 1b. Crosstabulation gender by student area of specialization

Area of Specialization	Female Number Percent	Male Number Percent	Total Number Percent
Adult & Extension Education	10 7.0%	8 8.6%	18 7.6%
Counselor Education	51 35.7%	11 11.8%	62 26.3%
Curriculum & Instructional Technology	13 9.1%	12 12.9%	25 10.6%
Educational Administration	17 11.9%	31 33.3%	48 20.3%
Elementary Education	4 2.8%	1 1.1%	5 2.1%
Higher Education	39 27.3%	22 23.7%	61 25.8%
Historical, Philosophical, & Comparative Studies	3 2.1%	3 3.2%	6 2.5%
Research & Evaluation	4 2.8%	4 4.3%	8 3.4%
Special Education	1 .7%	0 .0%	1 .4%
Vocational Education	1 .7%	1 1.1%	2 .8%
Total	143 60.6%	93 39.4%	236 100.0%

Chi-Square = 28.37 (approximation) Significance = 0.00

Table 1c. Crosstabulation writing option by student area of specialization

Area of Specialization	Thesis Number Percent	Creative Component Number Percent	Dissertation Number Percent	Total Number Percent
Adult & Extension Education	7 13.2%	7 9.1%	4 4.2%	18 8.0%
Counselor Education	10 18.9%	44 57.1%	4 4.2%	58 25.8%
Curriculum & Instructional Technology	14 26.4%	1 1.3%	10 10.5%	25 11.1%
Educational Administration	3 5.7%	10 13.0%	30 31.6%	43 19.1%
Elementary Education	0 .0%	2 2.6%	3 3.2%	5 2.2%
Higher Education	13 24.5%	13 16.9%	35 36.8%	61 27.1%
Historical, Philosophical, & Comparative Studies	3 5.7%	0 .0%	3 3.2%	6 2.7%
Research & Evaluation	2 3.8%	0 .0%	5 5.3%	7 3.1%
Special Education	0 .0%	0 .0%	1 1.1%	1 .4%
Vocational Education	1 1.9%	0 .0%	0 .0%	1 .4%
Total	53 23.6%	77 34.2%	95 42.2%	225 100.0%
Chi-Square = 60.91 (approximation)		Significance = 0.00		

Satisfaction with area of specialization A factor analysis was completed on questions #24 through #51 which relate to satisfaction with area of specialization (section) within the Department of Professional Studies. Because of failure to uniquely load on any factor the items of PII30 (Number of Required Courses), PII26 (Section Orientation), PII46 (Time Required to Complete Program), and PII32 (Class Size) were dropped from the study. Using the criteria of .40 or above loading on a factor the remaining 24 items form three factors and two couplets. The factors are named: 1) Quality of Graduate Program, 2) Quality of Mentoring, and 3) Quality of Courses. The couplets are named: 1) Admissions (admission procedures within section) and 2) Balance/Enrichment (balance of course work with writing and enrichment activities within section). Table 2 contains information on items within factors related to student satisfaction with section.

Factor 1 (Quality of Graduate Program), within section, has nine items with factor loadings from .44 to .79. The items which loaded on Factor 1 are: quality of instruction, teaching ability, communication with faculty in classroom, courses well-integrated, faculty sensitivity to ethnic diversity, evaluation procedures, challenging course work, usefulness of texts and other materials, and variety of courses.

Factor 2 (Quality of Mentoring) has five items with factor loadings from .48 to .66. The items loading on Factor 2 are: academic advising, availability of major professor, relationship with major professor, contact with faculty outside classroom, and career development assistance.

Table 2. Items within factors related to student satisfaction with section

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1		
Quality of Grad. Program	PII34	Quality of Instruction
	PII36	Teaching Ability
	PII33	Communication With Faculty in Classroom
	PII28	Courses Well-Integrated
	PII35	Faculty Sensitivity to Ethnic Diversity
	PII38	Evaluation Procedures
	PII27	Challenging Course Work
	PII37	Usefulness of Texts and Materials
	PII29	Variety of Courses
Factor 2		
Quality of Mentoring	PII43	Academic Advising
	PII44	Availability of Major Professor
	PII45	Relationship With Major Professor
	PII41	Contact With Faculty Out of Classroom
	PII42	Career Development Assistance
Factor 3		
Quality of Courses	PII48	Overall Program Satisfaction
	PII47	Program Viewed as Worthwhile
	PII51	Courses Provide Sound Theoretical Framework
	PII49	Treatment as a Student
	PII50	Student Quality
	PII31	Courses Relevance to Employment
Couplet 1		
Admissions	PII24	Admission Standards
	PII25	Admission Procedures
Couplet 2		
Balance/ Enrichment	PII40	Balance of Course Work with Writing
	PII39	Enrichment Activities

Factor 3 (Quality of Courses) has six items with factor loadings from .43 to .63. The items in Factor 3 are: overall program satisfaction, program viewed as worthwhile, courses provide sound theoretical framework, treatment of students, student quality, and courses relevant to employment.

The two items in Couplet 1 (Admissions) have factor loadings of .77 and .92. These items are: admission standards and admission procedures.

Couplet 2 (Balance/Enrichment) has factor loadings of .58 and .63. The two items in Couplet 2 are: balance of course work with writing requirements and enrichment activities within the section. The factor loading of items relating to student satisfaction with section is presented in Table 3.

Satisfaction with courses outside section The factor analysis of questions #52 to #63 which relate to satisfaction with courses taken outside section as a part of the program of study extracted two factors: 1) Quality of Instruction, and 2) Quality of Courses (see Table 4).

Factor 1 (Quality of Instruction) contains eight items with factor loadings from .43 to .77. The items are: quality of instruction, teaching ability, evaluation procedures, usefulness of texts and other materials, communication with faculty in classroom, challenged by course work, contact with faculty out of classroom, and class size.

Factor 2 (Quality of Courses) has four items with factor loadings from .55 to .76. The items loading on Factor 2 are: course variety, courses provide sound theoretical framework, courses are well-integrated, and number of required courses, out of section.

Table 3. Factor loading of items related to student satisfaction with section

	Factors			Couplet	
	1	2	3	1	2
Quality of Grad. Program					
<u>Items</u>					
PII34	.79	.14	.30	.02	.19
PII36	.74	.14	.24	.11	.23
PII33	.63	.38	.04	.12	.19
PII28	.61	.18	.39	.21	.02
PII35	.53	.24	.23	.10	.26
PII38	.48	.17	.22	.16	.39
PII27	.47	.13	.28	.31	.21
PII37	.47	.16	.22	.17	.43
PII29	.44	.21	.40	.05	.07
Quality of Mentoring					
<u>Items</u>					
PII43	.27	.66	.24	.03	.24
PII44	.16	.65	-.12	.21	.13
PII45	.16	.62	.17	.20	-.06
PII41	.16	.61	.17	-.02	.12
PII42	.02	.48	.23	-.002	.37
Quality of Courses					
<u>Items</u>					
PII48	.31	.36	.63	.13	.15
PII47	.29	.45	.61	.15	.07
PII51	.20	.09	.51	.10	.25
PII49	.38	.40	.49	.14	.15
PII50	.11	-.06	.45	.17	.12
PII31	.28	.10	.43	.10	.15
Admissions					
<u>Items</u>					
PII24	.11	.05	.21	.92	.07
PII25	.14	.21	.14	.77	.08
Balance/Enrichment					
<u>Items</u>					
PII40	.29	.16	.10	.11	.63
PII39	.22	.12	.31	.007	.58

The factor loading of items relating to student satisfaction with courses outside section is presented in Table 5.

Items within factors related to overall satisfaction with department Questions #64 to #79 relate to overall satisfaction with department and form four factors. The four factors are: 1) Examinations/Credentials, 2) P.O.S. Committee/Student Assistance, 3) Enrichment/Summer Courses/Registration, 4) Support Services. Information concerning satisfaction with the university Library and departmental support staff was considered important in determining overall satisfaction with services provided to students. Therefore, these single items are included in the analysis (see Table 6).

Factor 1 (Examinations/Credentials) contains four items with factor loadings from .68 to .92. The items are: written preliminary examinations, oral preliminary examinations, final oral examination, and attention to employment credentials.

Factor 2 (P.O.S. Committee/Student Assistance) has four items with factor loadings from .49 to .80. The items loading on Factor 2 are: usefulness of P.O.S. committee, size of P.O.S. committee, career development assistance, and financial support.

Factor 3 (Enrichment/Summer Courses/Registration) contains three items with factor loadings from .56 to .74. The items in Factor 3 are: availability of summer courses, enrichment activities, registration procedures.

Factor 4 (Support Services) contains three items with loadings from .53 to .60. The items are: Instructional Resource Center (I.R.C.),

Table 4. Items within factors related to student satisfaction with courses outside section

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1		
Quality of Instruction	PII59	Quality of Instruction
	PII58	Teaching Ability
	PII61	Evaluation Procedures
	PII60	Usefulness of Texts and Materials
	PII62	Communication With Faculty in Classroom
	PII52	Challenged by Course Work
	PII63	Contact With Faculty Out of Classroom
	PII57	Class Size
Factor 2		
Quality of Courses	PII55	Course Variety
	PII56	Courses Provide Sound Theoretical Framework
	PII53	Courses Well-Integrated
	PII54	Number of Required Courses

Table 5. Factor loading of items related to student satisfaction with courses outside section

	<u>Factors</u>	
	1	2
Quality of Instruction		
<u>Items</u>		
PII59	.77	.27
PII58	.73	.33
PII61	.64	.27
PII60	.59	.33
PII62	.57	.32
PII52	.51	.46
PII63	.50	.11
PII57	.43	.41
Quality of Courses		
<u>Items</u>		
PII55	.19	.76
PII56	.35	.75
PII53	.39	.66
PII54	.20	.55

Table 6. Items within factors related to student satisfaction with department

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1		
Examinations/ Credentials	PII76	Written Preliminary Examinations
	PII77	Oral Preliminary Examinations
	PII78	Final Oral Examination
	PII79	Attention to Employment Credentials
Factor 2		
P.O.S. Committee/ Stu. Assistance	PII68	Usefulness of P.O.S. Committee
	PII67	Career Development Assistance
	PII75	Financial Support
	PII69	Size of P.O.S. Committee
Factor 3		
Enrichment/Summer Courses/Reg.	PII65	Availability Summer Courses
	PII66	Enrichment Activities
	PII64	Registration Procedures
Factor 4		
Support Services	PII72	Instructional Resource Center (I.R.C.)
	PII71	Research Institute for Studies in Education (R.I.S.E.)
	PII73	Micro-computer Lab
Single Item 1		
Library	PII74	Library
Single Item 2		
Support Staff	PII70	Support Staff

Research Institute for Studies in Education (R.I.S.E.), and micro-computer lab.

The single items are: 1) Library, and 2) Support Staff.

The factor loading of items relating to overall student satisfaction with department is presented in Table 7.

Reliability of factors

The estimation of reliability on items relating to student satisfaction with area of specialization (section), courses outside section, and overall satisfaction with the department was determined by the Cronbach alpha technique. Factor 1 (Quality of Graduate Program), in section, has the highest mean score (33.50) and Couplet 2 (Balance/Enrichment) has the lowest mean score (6.72).

Couplet 1 (Admission), in section, has the highest inter-item correlation mean score (.81). Factor 3 (Quality of Courses) in section, has the lowest inter-item correlation mean score (.34). The range of reliability (alpha) is .67 to .91. Reliability data are reported in Table 8.

Relationship between factors and demographic variables

The Pearson correlation procedure was used to determine the relationships between all factors, couplets, and single items (dependent variables) and the demographic variables (independent variables) of: age, graduate assistantship, use of degree preparation, and recommendation of specialization. The correlation coefficients for all factors/couplets/

Table 7. Factor loading of items related to student satisfaction with department

	Factors				Single Items	
	1	2	3	4	1	2
Quality of Grad. Program						
<u>Items</u>						
PII76	.92	-.02	.08	.21	.02	-.15
PII77	.90	.08	.07	.18	-.01	-.17
PII78	.84	.19	.07	.11	.07	.01
PII79	.68	.26	.09	-.09	.08	.15
P.O.S. Committee/ Student Assistance						
<u>Items</u>						
PII68	.10	.80	.09	.33	-.25	.03
PII67	.33	.75	.08	.08	.20	.01
PII75	.11	.63	.27	-.24	.36	.13
PII69	.01	.49	.15	.19	-.16	.34
Enrichment/Summer Courses/Registration						
<u>Items</u>						
PII65	.03	.20	.74	.29	-.13	.01
PII66	.22	.24	.57	-.09	.42	-.05
PII64	.05	.02	.56	-.02	.09	.09
Support Services						
<u>Items</u>						
PII72	.12	.08	.05	.60	.07	.11
PII71	.21	.26	.21	.45	.20	-.23
PII73	.54	.04	-.06	.53	.32	.25
Library						
<u>Item</u>						
PII74	.04	-.02	.06	.18	.61	.03
Support Staff						
<u>Item</u>						
PII70	-.06	.13	.08	.07	.07	.80

Table 8. Reliability of factors, couplets, single items student data

	No. of Items	Mean	Std. Dev.	Inter-item corr.			Reli. Alpha	Std. Alpha
				Mean	Min.	Max.		
RELATED TO SECTION								
Factor 1								
Quality of Grad. Program	9	33.50	6.39	.45	.09	.84	.88	.88
Factor 2								
Quality of Mentoring	5	18.26	4.08	.50	.31	.60	.83	.83
Factor 3								
Quality of Courses	6	23.02	3.46	.34	.02	.76	.75	.76
Couplet 1								
Admissions	2	7.93	1.51	.81	.81	.81	.89	.89
Couplet 2								
Balance/ Enrichment	2	6.72	2.15	.75	.75	.75	.86	.86
RELATED TO COURSES OUTSIDE SECTION								
Factor 1								
Quality of Instruction	8	29.37	5.25	.49	.29	.86	.89	.89
Factor 2								
Quality of Courses	4	13.91	3.04	.58	.53	.68	.84	.85
RELATED TO OVERALL SAT WITH DEPT.								
Factor 1								
Exams/Credentials	4	12.96	3.05	.72	.53	.95	.91	.91
Factor 2								
P.O.S. Committee/ Stu. Assistance	4	13.83	3.06	.46	.29	.61	.77	.77
Factor 3								
Enrichment/Summer Courses/Registration	3	10.76	2.34	.42	.38	.47	.67	.69
Factor 4								
Support Services	3	10.30	1.75	.42	.33	.46	.68	.69

single items and demographic variables, used to test Hypothesis #1, are in Table 9. Pearson correlation was also used with all factors/couplets/single items to determine inter-factor relationships. Alpha was set at the .05 level of significance.

Hypothesis 1 There is no relationship between student level of satisfaction with the department and the following variables: age, graduate assistantship, use of degree preparation, or recommendation of specialization.

Age The demographic variable of age is found to have a significant correlation with three of the 13 factors/couplets/single items. Significant correlations are found between age and the one couplet related to section (Admissions, $r=0.15$, $p=.03$), one factor related to courses outside section (Quality of Instruction, $r=0.16$, $p=.02$), and one factor related to overall satisfaction with department (Enrichment/Summer Courses/Registration, $r=0.14$, $p=.04$).

Graduate assistantship The demographic variable of graduate assistantship significantly correlated with one of the 13 factors/couplets/single items. Having a graduate assistantship is found to have a significant correlation with one of the couplets related to section (Balance/Enrichment, $r=0.19$, $p=.003$).

Use of degree preparation The use of preparation is found to have a significant relationship with one of the 13 factors/couplets/single items. The use of training has a significant correlation with one factor

Table 9. Correlation of factors, couplets, single items with student demographic variables

Factors Couplets Single Items	Age	Graduate Assistant	Use of Degree Preparation	Recommend Area of Specialization
RELATED TO SECTION				
<u>Factors</u>				
Quality of Grad. Program	0.02	0.12	0.19	0.49xx
Quality of Mentoring	0.02	0.05	0.08	0.40xx
Quality of Courses	0.04	0.11	0.18	0.50xx
<u>Couplets</u>				
Admissions Balance/ Enrichment	0.15x	0.03	0.08	0.11
	0.06	0.19xx	0.07	0.26xx
RELATED TO COURSES OUT-SECTION				
<u>Factors</u>				
Quality of Instruction	0.16x	0.05	0.21x	0.10
Quality of Courses	0.09	0.01	0.07	0.10
RELATED TO OVERALL SAT WITH DEPT.				
<u>Factors</u>				
Examinations/ Credentials	-0.002	0.05	0.22	0.26xx
P.O.S. Committee/ Stu. Assistance	0.06	0.07	0.11	0.26xx
Enrichment/Summer Courses/ Registration	0.14x	0.02	0.08	0.17xx
Support Services	-0.03	0.04	0.18	0.22xx
<u>Single Item</u>				
Library	-0.02	0.02	0.12	0.01
Support staff	0.04	0.05	0.16	0.07

xx = Significant at .01 level.

related to courses taken outside section (Quality of Instruction, $r = 0.21$, $p = .04$).

Recommendation of specialization Willingness to recommend area of specialization is significantly related to 8 of the 13 factors/couplets/single items. Highly significant relationships are found between recommendation of specialization and: 1) three factors and one couplet related to section (Quality of Graduate Program, $r = 0.49$, $p = .000$; Quality of Mentoring, $r = 0.40$, $p = .000$; Quality of Courses, $r = 0.50$, $p = .000$; Balance/Enrichment, $r = 0.26$, $p = .000$), 2) four factors related to overall satisfaction with department (Exams/Credentials, $r = 0.26$, $p = .001$; P.O.S. Committee/Student Assistance, $r = 0.26$, $p = .000$; Enrichment/Summer Courses/Registration, $r = 0.17$, $p = .009$; Support Services, $r = 0.22$, $p = .002$).

An analysis of the data generated by the Pearson correlation indicate that Hypothesis #1 can be rejected on only one of the four demographic variables. The results of data analysis would reject the hypothesis in the area of recommendation of specialization but fail to reject for age, graduate assistantship, and use of degree preparation. Therefore, the overall results of data analysis failed to reject Hypothesis #1.

Inter-correlation of factors and couplets

The data, as reflected in Table 10, indicate a significant correlation of the factors and couplets with the exception of: Admissions with Exams/Credentials, $r = 0.13$, $p = .11$; Admissions with Support Services, $r = 0.13$, $p = .07$; Library with Quality of Graduate Programs, $r = 0.09$, $p = .21$;

Table 10. Correlation matrix - student data

Factors Couplets Single Items	Quality of Grad. Program	Quality of Mentoring	Quality of Courses	Admissions	Balance/ Enrichment	Quality of Instruction	Quality of Courses	Examinations/ Credentials
RELATED TO SECTION								
<u>Factors</u>								
Quality of Graduate Program	1.00							
Quality of Mentoring	0.50	1.00						
Quality of Courses	0.71	0.49	1.00					
<u>Couplets</u>								
Admissions	0.36	0.31	0.37	1.00				
Balance/ Enrichment	0.59	0.36	0.48	0.18	1.00			
RELATED TO COURSES OUTSIDE SECTION								
<u>Factors</u>								
Quality of Instruction	0.38	0.34	0.39	0.27	0.42	1.00		
Quality of Courses	0.34	0.23	0.44	0.21	0.41	0.62	1.00	
RELATED TO OVERALL SAT WITH DEPT.								
<u>Factors</u>								
Examinations/ Credentials	0.36	0.41	0.31	0.13	0.43	0.24	0.20	1.00
P.O.S. Committee/ Stu. Assistance	0.33	0.57	0.35	0.24	0.37	0.37	0.27	0.47
Enrichment/Summer Courses/ Registration	0.34	0.33	0.36	0.20	0.36	0.35	0.31	0.36
Support Services	0.21	0.29	0.28	0.13	0.19	0.25	0.19	0.35
<u>Single Item</u>								
Library Support	0.09	0.13	0.18	0.15	0.10	0.30	0.28	0.21
Staff	0.16	0.30	0.22	0.18	0.19	0.21	0.14	0.14

P.O.S. Comm./
Student
Assistance
Enrichment/
S.S. Courses/
Registration
Support
Services
Library
Support
Staff

1.00				
0.39	1.00			
0.33	0.25	1.00		
0.19	0.15	0.35	1.00	
0.31	0.22	0.17	0.19	1.00

Library with Balance/Enrichment, $r = 0.10$, $p = .15$; Support Staff with Exam/Credentials $r = 0.14$, $p = .08$, and Quality of Courses, out of section, $r = 0.14$, $p = .08$.

The highest correlation (0.71) is between Quality of Graduate Program and Quality of Courses related to section.

Differences between factors and demographic variables

The data were analyzed to determine the differences between factors and the following variables: gender, writing option, assistantship, age, area of specialization, ethnic background, and employment type.

Analysis of variance, single classification, and t-tests were calculated to test the following hypotheses. Alpha was set at the .05 level of significance and the Scheffé Multiple Range Test procedure was used to determine significant differences.

Hypothesis 2 There is no significant difference in level of satisfaction with the department when students are grouped by gender.

A significant difference is indicated on the couplet Balance/Enrichment, related to section, with females having a lower mean score (3.33) than males (3.61). This finding is significant at the .05 level ($t = -2.41$, $p = .02$). Males are found to have a higher level of satisfaction on all factors. There is a significant difference, by gender, in student satisfaction with only one of the 13 factors/couplets/single items. Therefore, the researcher failed to reject Hypothesis #2 (Table 11).

Table 11. Analysis of difference in student satisfaction by gender

Factor Couplet Single Item	Number		Mean		Standard Deviation		t Value	2-tailed Prob.
	1	2	1	2	1	2		
Quality of Graduate Program	144	93	3.82	3.86	0.70	0.65	-0.44	0.66
Quality of Mentoring	144	93	3.64	3.62	0.73	0.78	0.22	0.83
Quality of Courses	144	93	3.92	3.99	0.63	0.58	-0.90	0.37
Admissions Balance/ Enrichment	141	93	3.97	3.87	0.79	0.79	0.92	0.36
Quality of Instruction	144	92	3.33	3.61	0.83	0.89	-2.41	0.02x
Out-Section Quality of Courses	131	84	3.71	3.75	0.66	0.50	-0.46	0.65
Out-Section Examinations/ Credentials	135	84	3.60	3.73	0.70	0.61	-1.47	0.14
Dept.	94	63	3.28	3.42	0.82	0.80	-1.02	0.31
P.O.S. Comm/Stu. Assistance	140	87	3.31	3.41	0.67	0.79	-1.01	0.32
Dept.	142	92	3.48	3.61	0.69	0.77	-1.29	0.20
Enrichment/ Summer Courses /Registration Dept.	122	82	3.53	3.59	0.67	0.70	-0.58	0.56
Support Services Dept.	130	87	4.05	4.11	0.82	0.69	-0.65	0.52
Library Support Staff Dept	134	87	3.97	4.05	0.86	0.95	-0.61	0.54

1 = female

2 = male

x = Significant at .05 level.

Hypothesis 3 There is no significant difference in level of satisfaction with the department when students are grouped by writing option.

Due of the low number of responses, the four writing option categories are combined into: 1) Thesis/ Dissertation, 2) Creative/Other. There is a significant difference in student satisfaction with the department, when grouped by writing option, on one of the 13 factors, couplets, and single items. The data reflect a significant difference in student satisfaction on a single item related to overall satisfaction with department. Students choosing the Creative/Other option have a mean score of (3.82) on the factor of Support Staff. This is significantly lower than the mean score (4.09) of those students who choose the writing options of Thesis/Dissertation ($t=2.15, p=.03$). No differences are found on the other factors and the results of data analysis (Table 12) failed to reject Hypothesis #3.

Hypothesis 4 There is no significant difference in level of satisfaction between students who have assistantships when compared with those who do not.

Analysis of the data reveal a significant difference, in the level of satisfaction with the department for students who have assistantships and those who do not on one couplet related to section and one factor related to overall satisfaction with department. Students who have assistantships have a higher mean score (3.54) on the couplet, Balance/Enrichment, than students who do not (3.21). This finding is significant at the .05 level ($t=2.34, p=0.02$). Students without assistantships have a higher

Table 12. Analysis of difference in student satisfaction by choice of writing option

Factor Couplet Single Item	Number		Mean		Standard Deviation		t Value	2-tailed Prob.
	1	2	1	2	1	2		
Quality of Graduate Program	148	83	3.83	3.85	0.70	0.63	-0.14	0.89
Quality of Mentoring	148	83	3.68	3.53	0.74	0.76	1.44	0.15
Quality of Courses	144	83	3.96	3.97	0.59	0.63	-0.11	0.91
Admissions Balance/	146	82	3.96	3.91	0.83	0.71	0.44	0.66
Enrichment	147	83	3.42	3.49	0.92	0.78	-0.63	0.53
Quality of Instruction	136	74	3.73	3.75	0.62	0.52	-0.30	0.77
Out-Section								
Quality of Courses	138	76	3.70	3.60	0.70	0.59	1.00	0.32
Out-Section								
Examinations/								
Credentials	104	49	3.36	3.26	0.82	0.78	0.68	0.50
P.O.S. Committee/								
Stu. Assistance	143	79	3.38	3.31	0.76	0.63	0.69	0.49
Enrichment/								
Summer Courses	148	80	3.59	3.45	0.73	0.69	1.35	0.18
/Registration								
Support								
Services	133	65	3.59	3.48	0.68	0.70	1.06	0.29
Library	141	71	4.09	4.06	0.80	0.74	0.25	0.80
Support								
Staff	140	76	4.09	3.82	0.86	0.98	2.15	0.03x

1 = thesis/dissertation

2 = creative component/other

x = Significant at .05 level.

satisfaction mean score (3.53) on the factor, P.O.S. Committee/Student Assistance, than those with assistantships (3.28). These data are significant at the .05 level ($t= 2.40$, $p=.02$).

A significant difference in satisfaction with the department, for students who had assistantships as compared to those who did not, is found on only two of the 13 factors, couplets, and single items. The researcher failed to reject Hypothesis #4 (see Table 13).

Hypothesis 5 There is no significant difference in level of satisfaction with the department when students are grouped by age.

A difference in student satisfaction, by age, is found on four of the 13 factors, couplets, and single items. Students differ in satisfaction on Couplet 2, Balance/Enrichment related to section, with students over 50 reflecting the highest mean score (3.65), and the lowest mean (3.24) those 41 to 50. Students differ in satisfaction with Factor 1, Quality of Instruction as related to courses outside section, with students over 50 having the highest mean score (4.04) and students from 20-30 the lowest (3.56). A significant difference was found between students 20 to 30 (mean, 3.65) and those 20 to 30 (mean, 3.31) on the factor Enrichment/Summer Courses/Registration, which relates to overall satisfaction with the department. A difference is indicated between students 31-40 (mean, 4.18) and those who are 20-30 (mean, 3.78) on the single item, Support Staff, which relates to overall satisfaction with department. Only the differences on the factor Enrichment/Summer Courses/Registration are significant at the .05 level when data are

Table 13. Analysis of difference in student satisfaction of by assistantship

Factor Couplet Single Item	Number		Mean		Standard Deviation		t Value	2-tailed Prob.
	1	2	1	2	1	2		
Quality of Graduate Program	170	67	3.89	3.67	0.60	0.86	1.92	0.06
Quality of Mentoring	170	67	3.59	3.71	0.74	0.78	1.08	0.28
Quality of Courses	170	67	3.99	3.84	0.61	0.60	1.69	0.09
Admissions Balance/ Enrichment	168	66	3.89	3.98	0.76	0.95	0.65	0.52
Quality of Instruction	169	67	3.54	3.21	0.77	1.05	2.34	0.02x
Out-Section Quality of Courses	150	65	3.72	3.73	0.60	0.62	0.07	0.95
Out-Section Examinations/ Credentials	154	65	3.65	3.66	0.65	0.71	0.09	0.93
P.O.S. Committee/ Stu. Assistance	104	52	3.34	3.33	0.80	0.84	0.10	0.92
Enrichment/Summer Courses/Reg.	161	66	3.28	3.53	0.70	0.73	2.40	0.02x
Support Services	168	66	3.53	3.55	0.73	0.71	0.21	0.83
Library Support Staff	140	63	3.52	3.63	0.69	0.66	1.06	0.29
	154	62	4.09	4.03	0.67	0.98	0.43	0.67
	156	65	4.00	3.98	0.88	0.96	0.12	0.91

1 = assistantship
2 = no assistantship
x = Significant at .05 level.

analyzed by the Scheffé procedure. The results of data analysis failed to reject Hypothesis #5 (see Table 14).

Hypothesis 6 There is no significant difference in level of satisfaction with the department when students are grouped by area of specialization.

Differences in student satisfaction, when grouped by area of specialization, are indicated on two of the 13 factors, couplets, and single items. Student satisfaction differs on the couplet Balance/Enrichment which relates to section and the factor Quality of Courses related to courses outside section. Highest mean on the couplet, Balance/Enrichment, is Higher Education (3.67) followed by Adult/Vocational Education (3.58). The lowest mean scores are Elementary Education/Special Education (2.92) and Comparative Studies/Research (3.18). Higher Education has the highest mean score (3.82) on the factor, Quality of Courses Out-Section, and Curriculum and Instructional Technology the second highest mean score (3.79). The lowest mean scores are those of Elementary Education/Special Education (3.04) and Educational Administration (3.44). However, the Scheffé procedure did not produce data to indicate these findings significant at the .05 level. The results of data analysis, as reported in Table 15, failed to reject Hypothesis #6.

Hypothesis 7 There is no significant difference in level of satisfaction with the department when students are grouped by employment type.

The data reflect a higher mean score on this variable for those employed by Federal/State Government and University for all factors with

Table 14. Analysis of difference in student satisfaction by age

Variables	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	No.	Mean Std. Dev.	No.	Mean Std. Dev.	No.	Mean Std. Dev.
Related to Section						
<u>Factors</u>						
Quality of Grad. Prog.	65	<u>3.77</u> 0.75	102	<u>3.91</u> 0.60	57	<u>3.73</u> 0.75
Quality of Mentoring	65	<u>3.59</u> 0.69	102	<u>3.67</u> 0.80	57	<u>3.55</u> 0.75
Quality of Courses	65	<u>3.86</u> 0.61	102	<u>4.02</u> 0.60	57	<u>3.89</u> 0.65
<u>Couplets</u>						
Admission	63	<u>3.71</u> 0.94	101	<u>4.01</u> 0.75	57	<u>3.98</u> 0.68
Balance/Enrichment	65	<u>3.33</u> 0.80	101	<u>3.60</u> 0.87	57	<u>3.24</u> 0.94
Related to Courses Out-Section						
<u>Factors</u>						
Quality of Instruction	58	<u>3.56</u> 0.53	91	<u>3.79</u> 0.61	53	<u>3.72</u> 0.62
Quality of Courses	60	<u>3.59</u> 0.56	91	<u>3.66</u> 0.74	55	<u>3.62</u> 0.62
Related to Overall Sat. with Dept.						
<u>Factors</u>						
Exams/Credentials	38	<u>3.32</u> 0.64	68	<u>3.35</u> 0.91	42	<u>3.34</u> 0.87
P.O.S. Comm./Stu. Assistance	62	<u>3.27</u> 0.72	97	<u>3.37</u> 0.80	55	<u>3.39</u> 0.58
Enrichment/S.S./Reg.	63	<u>3.31</u> 0.69	101	<u>3.65</u> 0.72	57	<u>3.53</u> 0.75
Support Services	53	<u>3.56</u> 0.61	87	<u>3.60</u> 0.72	52	<u>3.42</u> 0.71
<u>Single Items</u>						
Library	59	<u>4.02</u> 0.73	93	<u>4.17</u> 0.75	53	<u>3.98</u> 0.77
Support Staff	60	<u>3.78</u> 0.88	93	<u>4.18</u> 0.90	55	<u>3.96</u> 0.88
Group 1 = 20-30 Group 3 = 41-50 Group 2 = 31-40 Group 4 = Over 50 x=Significant at .05 level.						

<u>Group 4</u>			
No.	Mean Std.Dev.	F Value	F Prob.
13	<u>4.01</u> 0.58	1.33	0.26
13	<u>3.82</u> 0.51	0.63	0.60
13	<u>4.03</u> 0.50	1.20	0.31
13	<u>4.15</u> 0.63	2.49	0.06
13	<u>3.65</u> 0.52	2.87	0.04x
13	<u>4.04</u> 0.62	3.11	0.03x
13	<u>4.01</u> 0.74	1.45	0.23
9	<u>3.28</u> 0.38	0.02	0.99
13	<u>3.38</u> 0.66	0.31	0.82
13	<u>3.74</u> 0.64	3.33	0.02x
12	<u>3.71</u> 0.52	1.03	0.38
12	<u>4.00</u> 1.04	0.91	0.44
13	<u>3.85</u> 0.80	2.69	0.05x

Table 15. Analysis of difference in student satisfaction by area of specialization

Variables	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	No.	<u>Mean</u> Std. Dev.	No.	<u>Mean</u> Std. Dev.	No.	<u>Mean</u> Std. Dev.
Related to Section						
<u>Factors</u>						
Quality of Grad. Prog.	20	<u>3.99</u> 0.79	62	<u>3.66</u> 0.59	25	<u>3.66</u> 0.84
Quality of Mentoring	20	<u>3.32</u> 0.97	62	<u>3.51</u> 0.70	25	<u>3.73</u> 0.90
Quality of Courses	20	<u>4.12</u> 0.63	62	<u>3.84</u> 0.62	25	<u>3.87</u> 0.69
<u>Couplets</u>						
Admission	20	<u>4.00</u> 0.84	62	<u>3.81</u> 0.81	24	<u>3.98</u> 0.77
Balance/Enrichment	20	<u>3.58</u> 1.05	62	<u>3.27</u> 0.71	25	<u>3.26</u> 0.77
Related to Courses Out-Section						
<u>Factors</u>						
Quality of Instruction	19	<u>3.80</u> 0.34	58	<u>3.78</u> 0.55	22	<u>3.66</u> 0.57
Quality of Courses	19	<u>3.72</u> 0.36	59	<u>3.64</u> 0.66	23	<u>3.79</u> 0.67
Related to Overall Sat. with Dept.						
<u>Factors</u>						
Exams/Credentials	15	<u>3.23</u> 0.65	37	<u>3.17</u> 0.84	14	<u>3.32</u> 0.60
P.O.S. Comm./Stu. Assistance	18	<u>3.13</u> 0.59	62	<u>3.24</u> 0.59	24	<u>3.27</u> 0.70
Enrichment/S.S./Reg.	18	<u>3.42</u> 0.57	62	<u>3.39</u> 0.73	25	<u>3.44</u> 0.66
Support Services	17	<u>3.35</u> 0.77	53	<u>3.47</u> 0.71	25	<u>3.95</u> 0.58
<u>Single Items</u>						
Library	18	<u>3.94</u> 0.64	59	<u>4.15</u> 0.66	25	<u>4.28</u> 0.79
Support Staff	16	<u>3.75</u> 0.68	60	<u>3.87</u> 0.87	23	<u>3.74</u> 1.10
Group 1 = ad/voc ed.			Group 3 = curr. & inst. tech.			
Group 2 = counselor ed.			Group 4 = ed. admin.			

<u>Group 4</u>		<u>Group 5</u>		<u>Group 6</u>		<u>Group 7</u>		F	F
<u>Mean</u>	<u>Std. Dev.</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Mean</u>	<u>Std. Dev.</u>		
48	<u>3.84</u> 0.71	6	<u>3.39</u> 0.89	62	<u>3.99</u> 0.53	14	<u>3.67</u> 0.97	1.70	0.12
48	<u>3.74</u> 0.74	6	<u>3.85</u> 0.72	62	<u>3.61</u> 0.68	14	<u>3.90</u> 0.55	1.49	0.18
48	<u>4.01</u> 0.54	6	<u>3.67</u> 0.91	62	<u>4.03</u> 0.53	14	<u>3.90</u> 0.78	1.15	0.33
48	<u>4.05</u> 0.65	6	<u>4.50</u> 0.55	60	<u>3.88</u> 0.83	14	<u>3.64</u> 1.26	1.28	0.27
47	<u>3.55</u> 1.03	6	<u>2.92</u> 1.20	62	<u>3.67</u> 0.75	14	<u>3.13</u> 0.89	2.14	0.05x
39	<u>3.60</u> 0.65	6	<u>3.29</u> 1.19	58	<u>3.81</u> 0.55	14	<u>3.71</u> 0.83	1.16	0.33
40	<u>3.44</u> 0.69	6	<u>3.04</u> 0.80	58	<u>3.82</u> 0.62	14	<u>3.59</u> 0.85	2.49	0.02x
35	<u>3.35</u> 1.07	4	<u>2.98</u> 0.24	43	<u>3.50</u> 0.70	9	<u>3.56</u> 0.65	0.83	0.55
44	<u>3.51</u> 0.83	6	<u>3.18</u> 0.68	60	<u>3.38</u> 0.81	13	<u>3.74</u> 0.46	1.72	0.12
48	<u>3.80</u> 0.80	6	<u>3.28</u> 0.77	61	<u>3.61</u> 0.64	14	<u>3.45</u> 0.80	1.96	0.07
40	<u>3.63</u> 0.77	5	<u>3.53</u> 0.77	51	<u>3.47</u> 0.54	13	<u>3.47</u> 0.61	2.05	0.06
43	<u>4.00</u> 0.79	5	<u>3.60</u> 1.67	55	<u>4.02</u> 0.80	12	<u>4.17</u> 0.58	0.95	0.46
42	<u>4.12</u> 0.80	6	<u>4.50</u> 0.55	61	<u>4.16</u> 0.93	13	<u>4.00</u> 0.91	1.56	0.16

Group 5 = ed./sp. ed.
Group 6 = higher ed.

Group 7 = comp. stds./research
x = Significant at .05 level.

the exception of P.O.S. Committee/Student Assistance. Those who are employed at a university had the lowest mean score (2.91) of all employment types on this factor. However, no differences in student satisfaction on this variable are found to be significant at the .05 level using the Scheffé procedure. The results of data analysis failed to reject Hypothesis #7 (see Table 16).

Hypothesis 8 There is no significant difference in level of satisfaction with the department when students are grouped by ethnic background.

The data indicate a significant difference on the factor of admission standards within section. Asian American students have a lower mean score (2.16) than White Americans (3.92) and International students (4.00). These differences were significant at the .05 level. The difference in the mean score for Asian Americans (2.16) and that of African/Black American students (4.15) was found significant at both the .05 and .01 level. The data, as shown in Table 17, reflect a significant difference on only one of the 13 factors, couplets, and single items. The researcher failed to reject hypothesis #8.

Alumnae/Alumni Data

Demographic characteristics

A total of 179 alumnae/alumni participated in the survey. This was 49.3% of the 363 graduates from 1986-1988. Of the 179 respondents, 69.3% are female, 29.6% male. A majority (72.1%) are married, 19.0% are single, and 8.4% divorced.

Table 16. Analysis of difference in student satisfaction by employment type

Variables	Group 1		Group 2		Group 3	
	No.	Mean Std Dev	No.	Mean Std Dev	No.	Mean Std Dev
Related to Section						
Factors						
Quality of	11	<u>4.21</u>	10	<u>3.93</u>	71	<u>3.68</u>
Grad. Prog.		0.48		0.55		0.80
Quality of	11	<u>3.71</u>	10	<u>3.26</u>	71	<u>3.57</u>
Mentoring		0.74		1.02		0.76
Quality of	11	<u>4.21</u>	10	<u>4.12</u>	71	<u>3.83</u>
Courses		0.47		0.52		0.65
Couplets						
Admission	11	<u>4.18</u>	10	<u>3.70</u>	69	<u>3.91</u>
		0.75		1.06		0.85
Balance/ Enrichment	10	<u>3.90</u>	10	<u>3.55</u>	71	<u>3.34</u>
		0.84		0.98		0.91
Related to						
Courses Out-Section						
Factors						
Quality of	10	<u>3.86</u>	9	<u>3.71</u>	68	<u>3.64</u>
Instruction		0.55		0.52		0.62
Quality of	10	<u>3.75</u>	9	<u>3.47</u>	68	<u>3.61</u>
Courses		0.60		0.63		0.67
Related to Overall						
Sat. with Dept.						
Factors						
Exams/ Credentials	8	<u>3.62</u>	7	<u>2.95</u>	55	<u>3.28</u>
		0.92		1.07		0.79
P.O.S. Comm./ Stu. Assistance	10	<u>3.55</u>	9	<u>3.25</u>	69	<u>3.42</u>
		0.73		1.02		0.74
Enrichment/ S.S./Reg.	11	<u>3.70</u>	9	<u>3.52</u>	70	<u>3.56</u>
		0.75		0.75		0.68
Support Services	9	<u>3.37</u>	8	<u>3.08</u>	65	<u>3.43</u>
		0.39		1.11		0.60
Single Items						
Library	10	<u>4.20</u>	9	<u>3.89</u>	69	<u>4.16</u>
		0.63		0.78		0.76
Support Staff	11	<u>4.09</u>	9	<u>3.89</u>	70	<u>4.09</u>
		0.83		1.27		0.90
<hr/>						
Group 1 = fed/state govt.			Group 3 = university			
Group 2 = industry/business			Group 4 = 4-year college			

<u>Group 4</u>		<u>Group 5</u>		<u>Group 6</u>		<u>Group 7</u>		F	F
No.	Mean Std.Dev.	No.	Mean Std.Dev.	No.	Mean Std.Dev.	No.	Mean Std.Dev.	Value	Prob.
13	<u>4.10</u> 0.51	11	<u>3.89</u> 0.55	65	<u>3.90</u> 0.61	7	<u>3.79</u> 0.43	1.73	0.12
13	<u>3.72</u> 0.55	11	<u>3.60</u> 0.63	65	<u>3.69</u> 0.76	7	<u>3.18</u> 0.83	0.95	0.46
13	<u>4.11</u> 0.53	11	<u>3.98</u> 0.56	65	<u>3.99</u> 0.59	7	<u>3.60</u> 0.40	1.59	0.15
13	<u>4.15</u> 0.55	11	<u>3.82</u> 0.72	65	<u>3.85</u> 0.73	7	<u>3.86</u> 1.07	0.62	0.71
13	<u>3.65</u> 0.90	11	<u>3.23</u> 0.88	65	<u>3.54</u> 0.83	7	<u>3.43</u> 0.84	0.98	0.44
10	<u>3.94</u> 0.89	9	<u>3.71</u> 0.61	56	<u>3.68</u> 0.60	6	<u>3.71</u> 0.56	0.49	0.81
12	<u>3.81</u> 0.86	9	<u>3.78</u> 0.61	58	<u>3.52</u> 0.66	6	<u>3.46</u> 0.78	0.63	0.71
7	<u>3.36</u> 0.66	7	<u>3.50</u> 1.04	41	<u>3.40</u> 0.85	4	<u>3.25</u> 0.29	0.55	0.77
11	<u>2.91</u> 0.96	11	<u>3.27</u> 0.72	62	<u>3.37</u> 0.72	7	<u>3.00</u> 0.61	1.13	0.34
13	<u>3.78</u> 0.97	11	<u>3.30</u> 0.31	65	<u>3.68</u> 0.77	7	<u>3.29</u> 0.76	0.86	0.52
9	<u>3.96</u> 0.66	7	<u>3.19</u> 0.60	54	<u>3.76</u> 0.66	6	<u>3.28</u> 0.39	3.35	0.00xx
10	<u>3.80</u> 0.92	8	<u>3.88</u> 0.35	59	<u>4.00</u> 0.74	7	<u>4.00</u> 1.00	0.68	0.67
11	<u>4.27</u> 0.90	9	<u>4.22</u> 0.83	57	<u>3.95</u> 0.79	7	<u>4.14</u> 0.90	0.39	0.88

Group 5 = 2-year college
Group 6 = local school district

Group 7 = self-employed/other
xx = Significant at .01 level.

Table 17. Analysis of difference in student satisfaction by ethnic background

Variables	Group 1		Group 2		Group 3	
	No.	Mean Std. Dev.	No.	Mean Std. Dev.	No.	Mean Std. Dev.
Related to Section Factors						
Quality of Grad. Prog.	19	<u>3.81</u> 0.78	3	<u>2.70</u> 1.12	20	<u>3.55</u> 0.69
Quality of Mentoring	19	<u>3.97</u> 0.73	3	<u>2.93</u> 0.46	20	<u>3.84</u> 0.53
Quality of Courses	19	<u>3.89</u> 0.70	3	<u>3.67</u> 0.73	20	<u>3.83</u> 0.54
Related to Courses Out Section Factors						
Admission	18	<u>4.00</u> 0.94	3	<u>2.17</u> 1.61	20	<u>4.15</u> 0.76
Balance/Enrichment	19	<u>3.37</u> 0.83	3	<u>3.33</u> 1.61	20	<u>3.18</u> 1.04
Related to Overall Sat. with Dept. Factors						
Quality of Instruction	19	<u>3.84</u> 0.36	3	<u>3.83</u> 0.26	19	<u>3.62</u> 0.75
Quality of Courses	19	<u>3.70</u> 0.43	3	<u>4.08</u> 0.76	19	<u>3.74</u> 0.58
Related to Overall Sat. with Dept. Single Items						
Exams/Credentials	13	<u>3.40</u> 0.43	1	<u>3.00</u>	18	<u>3.16</u> 0.71
P.O.S. Comm./Stu. Assistance	19	<u>3.52</u> 0.66	3	<u>3.56</u> 0.51	20	<u>3.28</u> 0.83
Enrichment/S.S./Reg.	19	<u>3.57</u> 0.51	3	<u>3.78</u> 0.69	20	<u>3.53</u> 0.68
Support Services	18	<u>3.70</u> 0.53	2	<u>3.17</u> 0.24	20	<u>3.50</u> 0.62
Library	19	<u>4.21</u> 0.86	1	<u>4.00</u>	20	<u>3.75</u> 1.01
Support Staff	19	<u>3.95</u> 0.97	3	<u>2.67</u> 0.58	20	<u>4.25</u> 0.79
Group 1 = International Students Group 3 = African/Black American Group 2 = Asian American Group 4 = White American						

<u>Group 4</u>			
No.	Mean	F	F
	Std.Dev.	Value	Prob.
187	<u>3.87</u>		
	0.66	2.46	0.03x
187	<u>3.58</u>		
	0.75	2.36	0.04x
187	<u>3.97</u>		
	0.62	0.37	0.87
185	<u>3.92</u>		
	0.80	2.30	0.006xx
186	<u>3.49</u>		
	0.82	0.66	0.65
166	<u>3.71</u>		
	0.61	0.85	0.51
170	<u>3.64</u>		
	0.69	0.70	0.62
117	<u>3.35</u>		
	0.87	0.38	0.86
177	<u>3.33</u>		
	0.72	0.56	0.73
184	<u>3.53</u>		
	0.75	0.15	0.99
155	<u>3.53</u>		
	0.71	0.58	0.72
168	<u>4.10</u>		
	0.70	1.04	0.40
171	<u>3.92</u>		
	0.90	1.64	0.15

x = Significant at .05 level.
xx = Significant at .01 level.

The largest percent of the participants (41.9%) are 31 to 40 years of age, 29.6% are 41 to 50, and 23.5% are 20 to 30. Five percent (5.0%) are over 50. Over ninety percent (92.7%), of those reporting, are White American, followed by African/Black American (5.0%), Internationals (1.7%), and Native American (0.6%).

Area of specialization, recommendation, degrees, assistantship

The majority of the alumnae/alumni, who responded to the survey, had studied in: Higher Education (26.8%), Educational Administration (21.8%), and Counselor Education (14.5%). Few surveys were returned by alumnae/alumni from Adult and Extension Education (7.8%), H.P.C (0.6%), Vocational Education (1.1%), Research and Evaluation (3.4%), and Special Education (10.1%). Therefore, these sections are combined by compatible disciplines for further analysis as: Adult/Vocational Education, Elementary/Special Education, and Comparative Studies/Research. Curriculum and Instructional Technology was left as an independent section.

Two-thirds (62.6%) of the subjects indicated they would highly recommend their area of specialization, 30.7% would recommend their area somewhat, and 6.7% would recommend very little or not at all.

The majority (70.9%) of the alumnae/alumni had no graduate degree before attending Iowa State University; 27.3% had received a M.Ed., M.S., or M.A.; 01.1% a Ph.D. The highest degree obtained in the Department of Professional Studies was M.S./M.A. (52.5%) followed by Ph.D. (30.7%), and M.Ed. (16.8%). Most of the graduates (63.7%) received no certification as a result of obtaining a degree; 35.2% received certification. Of those

receiving certification, 12.8% received K-12 administrator and 10.6% Special Education endorsement.

Most of the subjects enrolled for their last degree since 1985 (51.9%) and received the degree since 1987 (72.6%); 98.3% have completed no graduate degree since leaving Iowa State University. Sixty percent (60.3%) of the graduates had no assistantship. The majority (17.3%) who had assistantships were in Student Affairs (general, 8.9%; resident halls, 08.4%); 12.3% were research assistants, and 6.1% had been teaching assistants.

Writing option, where completed work Most of the alumnae/alumni had chosen to write a creative component (50.8%), 29.6% wrote a dissertation; and 18.4% a thesis. A large percent (87.2%) completed the course work on campus, 12.3% off campus.

Employment classification, use of degree preparation Responses indicate a majority of alumnae/alumni are employed at a local school district (40.8%) or a university (28.5%); 9.0% self-employed/other; 05.0% 2-yr/community college; 4.5% 4-year college; 3.9% industry/business; 5.0% federal/state government; and 2.8% an intermediate/state agency. One-half (50.8%) of the graduates use the graduate training in their work a great deal, 36.3% use it somewhat, and 10.6% use it very little or not at all.

The statistical profile of alumnae/alumni demographic data is shown in Table 18. Chi Square tabulations are found in Tables 18b and 18c. Again, the reader is reminded that Chi Square is only exact when all cells have expected value over 5. When this does not occur Chi Square is an approximation.

Table 18a. Statistical profile of alumnae/alumni

Demographic Variable	No. Valid Responses	Frequency	Percentage
<u>Area of Specialization</u>	179		
Adult and Extension Ed.		14	7.8
Counselor Ed.		26	14.5
Curr. & Inst. Tech.		15	8.4
Ed. Administration		39	21.8
Elementary Ed.		10	5.6
Higher Ed.		48	26.8
H. P. C.		1	.6
Research and Evaluation		6	3.4
Special Education		18	10.1
Vocational Education		2	1.1
<u>Highest Graduate Degree Before ISU</u>	179		
None		127	70.9
M.Ed.		16	8.9
M.S./M.A.		33	18.4
Ph.D.		2	1.1
<u>Highest Degree-Professional Studies</u>	179		
M.Ed.		30	16.8
M.S./M.A.		94	52.5
Ph.D.		55	30.7
<u>Date Enrolled-Last Degree</u>	175		
1964-1980		10	5.6
1981		10	5.6
1982		15	8.4
1983		20	11.2
1984		31	17.2
1985		48	26.8
1986		27	15.1
1987-1989		18	10.0
<u>Date Received-Last Degree</u>	177		
1985		1	.6
1986		46	25.7
1987		55	30.7
1988		72	40.2
1989		3	1.7

Table 16a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Graduate Degree Since ISU</u>	179		
None		176	98.3
M.Ed.		1	.6
Ph.D.		1	.6
Other		1	.6
<u>Writing Option ISU</u>	179		
Thesis		33	18.4
Creative Component		91	50.8
Dissertation		53	29.6
<u>Where completed course work</u>	178		
On Campus		156	87.2
Off Campus		22	12.3
<u>Graduate Assistantship</u>	178		
No Assistantship		108	60.3
Teaching Assistant		11	6.1
Research Assistant		22	12.3
Student Affairs-General		16	8.9
Student Affairs-Resident Hall		15	8.4
<u>Received Certification</u>	177		
Yes		63	35.2
No		114	63.7
<u>Type of Certification</u>	59		
Superintendent/Principal		23	12.8
Counselor		9	5.0
Special Education		19	10.6
Community College		1	.6
Teaching		5	2.8
Media Specialist		2	1.1
<u>Would Recommend Area of Specialization</u>	179		
Highly		112	62.6
Somewhat		55	30.7
Very Little		7	3.9
Not At All		5	2.8

Table 18a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Employment Classification</u>	179		
Federal Government		4	2.2
State Government		5	2.8
Industry/Business		7	3.9
University		51	28.5
4-year College		8	4.5
2-year/Community College		9	5.0
Intermediate/State Agency		5	2.8
Local School District		73	40.8
Self-Employed/Other		16	9.0
<u>Job Title</u>	176		
Coordinator-Student Affairs		9	5.0
Director/Coordinator Resident Life		16	8.9
Director/Admissions/Financial Aid		5	2.8
Extension Services		6	3.4
Academic Advisor/Coordinator		2	1.1
Dean/Assistant		4	2.2
Counselor K-12		6	3.4
Counselor/Consultant/Coordinator Hg. Ed.		5	2.8
K-12 Administrator		21	11.7
Teacher/Media Specialist K-12		37	20.7
Teacher/Admin. Sp. Ed. K-12		16	8.9
Consultant/Coordinator/Administrator AEA		5	2.8
Ass't. Prof./Instructor/Teaching Ass't.		16	8.9
Business and Industry		9	5.0
Student/Graduate Assistant		7	3.9
Associate Director Hg. Ed.		1	.6
Educator-State		2	1.1
Self-Employed		2	1.1
Community Agency		5	2.8
Unemployed		2	1.1
<u>Employment Satisfaction/Salary</u>	174		
Highly Dissatisfied		10	5.6
Dissatisfied		39	21.8
Undecided		12	6.7
Satisfied		96	53.6
Highly Satisfied		17	9.5
<u>Employment Satisfaction/Conditions</u>	175		
Highly Dissatisfied		4	2.2
Dissatisfied		18	10.1
Undecided		13	7.3
Satisfied		101	56.4
Highly Satisfied		39	21.8

Table 18a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Employment Satisfaction/ Administrative Support</u>			
	171		
Highly Dissatisfied		15	8.4
Dissatisfied		24	13.4
Undecided		14	7.8
Satisfied		78	43.6
Highly Satisfied		40	22.3
<u>Employment Sat/Relations W/Co-workers</u>			
	172		
Highly Dissatisfied		1	.6
Dissatisfied		3	1.7
Undecided		10	5.6
Satisfied		79	44.1
Highly Satisfied		79	44.1
<u>Employment Sat/Involvement W/Decision-Making</u>			
	173		
Highly Dissatisfied		7	3.9
Dissatisfied		25	14.0
Undecided		20	11.2
Satisfied		74	41.3
Highly Satisfied		47	26.3
<u>Employment Sat/ Challenge/Growth</u>			
	174		
Highly Dissatisfied		7	3.9
Dissatisfied		29	16.2
Undecided		21	11.7
Satisfied		68	38.0
Highly Satisfied		49	27.4
<u>Employment Satisfaction/ Opportunity for Advancement</u>			
	166		
Highly Dissatisfied		23	12.8
Dissatisfied		39	21.8
Undecided		37	20.7
Satisfied		49	27.4
Highly Satisfied		18	10.1

Table 18a. (continued)

Demographic variable	No. Valid Responses	Frequency	Percentage
<u>Employment Satisfaction/ Involvement/Prof. Org's.</u>			
	173		
Highly Dissatisfied		3	1.7
Dissatisfied		16	8.9
Undecided		19	10.6
Satisfied		94	52.5
Highly Satisfied		41	22.9
<u>Use of Degree Preparation</u>			
	175		
A Great Deal		91	50.8
Somewhat		65	36.3
Very Little		14	7.8
Not At All		5	2.8
<u>Marital Status</u>			
	179		
Single		34	19.0
Married		129	72.1
Divorced		15	8.4
<u>Age</u>			
	179		
20-30		42	23.5
31-40		75	41.9
41-50		53	29.6
Over 50		9	5.0
<u>Gender</u>			
	177		
Female		124	69.3
Male		53	29.6
<u>Ethnic Background</u>			
	179		
International Student		3	1.7
African/Black American		9	5.0
Native American		1	.6
White American		166	92.7

Table 18b. Crosstabulation gender by alumnae/alumni area of specialization

Area of Specialization	Female Number Percent	Male Number Percent	Total Number Percent
Adult & Extension Education	11 8.9%	2 3.8%	13 7.3%
Counselor Education	21 16.9%	4 7.5%	25 14.1%
Curriculum & Instructional Technology	10 8.1%	5 9.4%	15 8.5%
Educational Administration	22 17.7%	17 32.1%	39 22.0%
Elementary Education	10 8.1%	0 .0%	10 5.6%
Higher Education	26 21.0%	22 41.5%	48 27.1%
Historical, Philosophical, & Comparative Studies	1 100.0%	0 .0%	1 .6%
Research & Evaluation	4 3.2%	2 3.8%	6 3.4%
Special Education	17 13.7%	1 1.9%	18 10.2%
Vocational Education	2 1.6%	0 .0%	2 1.1%
Total	124 70.1%	53 29.9%	177 100.0%

Chi-Square = 23.65
(approximation)

Significance = 0.00

Table 18c. Crosstabulation writing option by alumnae/alumni area of specialization

Area of Specialization	Thesis Number Percent	Creative Component Number Percent	Dissertation Number Percent	Total Number Percent
Adult & Extension Education	2 6.1%	8 8.8%	4 7.5%	14 7.9%
Counselor Education	4 12.1%	16 17.6%	5 9.4%	25 14.1%
Curriculum & Instructional Technology	10 30.3%	1 1.1%	4 7.5%	15 8.5%
Educational Administration	0 .0%	21 23.1%	18 34.0%	39 22.0%
Elementary Education	2 6.1%	8 8.8%	0 .0%	10 5.6%
Higher Education	11 33.3%	18 19.8%	18 34.0%	47 26.6%
Historical, Philosophical, & Comparative Studies	0 .0%	1 1.1%	0 .0%	1 .6%
Research & Evaluation	1 3.0%	1 1.1%	4 7.5%	6 3.4%
Special Education	3 9.1%	15 16.5%	0 .0%	18 10.2%
Vocational Education	0 .0%	2 2.2%	0 .0%	2 1.1%
Total	33 18.6%	91 51.4%	53 29.9%	177 100.0%

Chi-Square = 60.91
(approximation)

Significance = 0.00

Factor analysis

In order to facilitate comparative analysis of the data the same procedures for factor analysis were followed for the alumnae/alumni survey data as reported for the student data. The 53 items, from Part Two of the survey, were analyzed by using the PA2 extraction technique and varimax rotation from the SPSSx package (Nie et al. 1983). A composite of 10 factors and 3 couplets was formed. Part Two is divided into the following sections: 1) satisfaction with area of specialization (section), 2) satisfaction with courses taken outside of section as a part of the program of study, 3) overall satisfaction with the department. A separate analysis of data was conducted for each section in Part Two.

Satisfaction with area of specialization A factor analysis was completed on questions #19 through #46 which relate to satisfaction with area of specialization (section) within the Department of Professional Studies. Because they were of minor importance to the study and failed to uniquely load on any factor, the items of PII33 (Evaluation Procedures), PII35 (Balance of Course Work and Writing), and PII41 (Time Required to Complete Program) were dropped from the study. Using the criteria of .40 or above loading on a factor the remaining 25 items form four factors, one couplet. The factors are named: 1) Quality of Courses, 2) Quality of Mentoring, 3) Quality of Graduate Program, 4) Admission/Student Quality. The couplet is named: Quality of Instruction. Information concerning faculty sensitivity to diversity was considered important in departmental planning for minority programming. Therefore, this single item was retained and named Sensitivity to Ethnicity. Table 19 contains

Information on items within factors related to alumnae/alumni satisfaction with section.

Factor 1 (Quality of Courses), within section, has nine items with factor loadings from .45 to .78. The items which loaded on Factor 1 are: relevance of course work to employment, course work led to theoretical framework, view program as worthwhile, courses well-integrated, overall satisfaction with program, challenging course work, variety of courses, number of required courses, and usefulness of texts and materials.

Factor 2 (Quality of Mentoring) has four items with factor loadings from .56 to .81. The items loading on Factor 2 are: relationship with major professor, availability of major professor, treatment as a student, and quality of academic advising.

Factor 3 (Quality of Graduate Program) has six items with factor loadings from .49 to .67. The items in Factor 3 are: contact with faculty out of class, enrichment activities, student orientation, communication with faculty in class, career development assistance, and class size.

Factor 4 (Admission/Student Quality) has three items with factor loadings from .59 to .73. The items in Factor 3 are: admission standards, student quality, and admission procedures. The two items in the Couplet (Quality of Instruction) have factor loadings of .65 and .67. These items are: quality of instruction and teaching ability.

The factor loading of items relating to alumnae/alumni satisfaction with section is presented in Table 20.

Table 19. Items within factors related to alumnae/alumni satisfaction with section

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1 Quality of Courses	PII26	Relevance of Course Work to Employment
	PII46	Course Work Led to Theoretical Framework
	PII42	View Program As Worthwhile
	PII23	Courses Well-Integrated
	PII43	Overall Satisfaction With Program
	PII22	Challenging Course Work
	PII24	Variety of Courses
	PII25	Number of Required Courses
	PII32	Usefulness of Texts & Materials
Factor 2 Quality of Mentoring	PII40	Relationship With Major Professor
	PII39	Availability of Major Professor
	PII44	Treatment As A Student
	PII38	Quality of Academic Advising
Factor 3 Quality of Grad. Program	PII36	Contact With Faculty Out of Class
	PII34	Enrichment Activities
	PII21	Student Orientation
	PII28	Communication With Faculty in Class
	PII37	Career Development Assistance
	PII27	Class Size
Factor 4 Admission/Student Quality	PII19	Admission Standards
	PII45	Student Quality
	PII20	Admission Procedures
Couplet 1 Quality of Instruction	PII29	Quality of Instruction
	PII31	Teaching Ability
Single Item Sensitivity to Ethnicity	PII30	Faculty Sensitivity to Diversity

Table 20. Factor loading of items related to alumnae/alumni satisfaction with section

	Factors				Couplet	Single Item
	1	2	3	4	1	1
Quality of Courses						
<u>Items</u>						
PII26	.78	.13	.23	.06	.13	.08
PII46	.74	.16	.23	.23	-.04	.25
PII42	.69	.38	.13	.29	.17	.12
PII23	.69	.07	.20	.17	.27	.08
PII43	.66	.38	.23	.27	.24	.07
PII22	.56	.16	-.01	.47	.30	-.02
PII24	.48	.08	.33	.32	.15	-.05
PII25	.47	.22	.12	.25	.07	.36
PII32	.45	.08	.24	.17	.14	.04
Quality of Mentoring						
<u>Items</u>						
PII40	.10	.81	.15	.05	.14	.03
PII39	.14	.79	.15	.04	.01	.08
PII44	.29	.61	.23	.15	.12	.35
PII38	.43	.56	.34	.11	.04	-.07
Quality of Grad. Program						
<u>Items</u>						
PII36	.18	.39	.67	.10	.06	.17
PII34	.29	.003	.64	.15	.08	.05
PII21	.05	.18	.51	.09	-.04	.35
PII28	.15	.49	.51	.06	.25	.24
PII37	.36	.29	.50	.17	-.06	.03
PII27	.13	.10	.49	-.03	.15	.06
Admission/Stu. Quality						
<u>Items</u>						
PII19	.20	.005	-.01	.73	.03	.13
PII45	.30	.05	.11	.70	.16	-.02
PII20	.09	.12	.13	.59	.08	-.02
Quality of Instruction						
<u>Items</u>						
PII29	.53	.24	.16	.29	.67	.14
PII31	.40	.13	.22	.32	.65	.20
Faculty Sensitivity						
PII30	.14	.10	.29	-.04	.17	.55

Satisfaction with courses outside section The factor analysis of questions #51 to #62, which relate to satisfaction with courses taken outside section as a part of the program of study, extracted three factors: 1) Quality of Instruction, 2) Quality of Courses, 3) Relationship with faculty (Table 21).

Factor 1 (Quality of Instruction), out of section, contains four items with factor loadings from .54 to .90. The items are: quality of instruction, teaching ability, challenged by course work, and course work led to theoretical framework.

Factor 2 (Quality of Courses), out of section, has five items with factor loadings from .42 to .71. The items loading on Factor 2 are: course variety, courses well-integrated, usefulness of texts and materials, number of required courses, and class size.

Factor 3 (Relationship with Faculty), out of section, has three items with factor loadings from .46 to .80. The items loading on Factor 3 are: contact with faculty out of class, communication with faculty in class, and evaluation procedures.

The factor loading of items relating to alumnae/alumni satisfaction with courses outside section is presented in Table 22.

Items within factors related to overall satisfaction with department
Questions #65 to #80, relate to overall satisfaction with department, form three factors and two couplets. The factors are: 1) Examinations, 2) Enrichment/Student Assistance, 3) Support Services. The couplets are: Registration/Support Staff, and Summer Courses/Library.

Table 21. Items within factors related to alumnae/alumni satisfaction with courses outside section

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1		
Quality of Instruction	PII57	Quality of Instruction
	PII56	Teaching Ability
	PII51	Challenged by Course Work
	PII62	Course Work Led to Theoretical Framework
Factor 2		
Quality of Courses	PII54	Course Variety
	PII52	Courses Well-Integrated
	PII58	Usefulness of Texts and Materials
	PII53	Number of Required Courses
	PII55	Class Size
Factor 3		
Relationship With Faculty	PII61	Contact With Faculty Out of Class
	PII60	Communication With Faculty In Class
	PII59	Evaluation Procedures

Table 22. Factor loading of items related to alumnae/alumni satisfaction with courses outside section

	Factors		
	1	2	3
Quality of Instruction			
<u>Items</u>			
PII57	.90	.12	.31
PII56	.79	.21	.30
PII51	.61	.40	.16
PII62	.54	.49	.34
Quality of Courses			
<u>Items</u>			
PII54	.21	.71	.07
PII52	.48	.63	.16
PII58	.43	.46	.33
PII53	.21	.42	.30
PII55	.03	.42	.19
Relationship With Faculty			
PII61	.27	.19	.80
PII60	.27	.25	.79
PII59	.43	.28	.46

Factor 1 (Examinations) contains four items with factor loadings from .55 to .90. The items in Factor 1 are: written preliminary examination, oral preliminary examination, final oral examination, and size of P.O.S. committee.

Factor 2 (Enrichment/Student Assistance) has four items with factor loadings from .55 to .81. The items in Factor 2 are: career development assistance, enrichment activities, financial support, and attention to employment credentials.

Factor 3 (Support Services) has four items with factor loadings from .59 to .88. The items in Factor 3 are: Instructional Resource Center (I.R.C.), micro-computer lab, usefulness of P.O.S. committee, and Research Institute for Studies in Education (R.I.S.E.).

The items in Couplet 1 (Registration/Support Staff) are: support staff and registration procedures.

The items in Couplet 2 (Summer Courses/Library) are: library and availability of courses in summer (Table 23).

The factor loading of items relating to overall alumnae/alumni satisfaction with department is presented in Table 24.

Reliability of factors

The Cronbach alpha technique was used to estimate alumnae/alumni satisfaction with area of specialization (section), courses outside section, and overall satisfaction with department. Factor 1 (Quality of Courses), in satisfaction with section, has the highest mean score (35.39)

Table 23. Items within factors related to alumnae/alumni satisfaction with department

FACTORS	ITEM NO.	ITEM STATEMENT
Factor 1		
Examinations	PII79	Final Oral Examination
	PII78	Oral Preliminary Examination
	PII77	Written Preliminary Examination
	PII70	Size of P.O.S. Committee
Factor 2		
Enrichment/Stu. Assistance	PII68	Career Development Assistance
	PII67	Enrichment Activities
	PII76	Financial Support
	PII80	Attention to Employment Credentials
Factor 3		
Support Services	PII73	I.R.C
	PII74	Micro Lab
	PII69	Usefulness of P.O.S. Committee
	PII72	R.I.S.E.
Couplet 1		
Registration/ Support Staff	PII71	Support Staff
	PII65	Registration Procedures
Couplet 2		
Summer Courses/ Library	PII75	Library
	PII66	Availability of Courses in Summer

Table 24. Factor loading of items related to alumnae/alumni satisfaction with department

	<u>Factors</u>			<u>Couplets</u>	
	1	2	3	1	2
Examinations					
<u>Items</u>					
PII79	.90	.21	.08	.20	.03
PII78	.88	-.05	.19	.08	-.02
PII77	.76	.25	.04	-.12	-.02
PII70	.55	.05	.36	.13	-.07
Enrichment/ Stu. Assistance					
<u>Items</u>					
PII68	.03	.81	.12	-.04	-.28
PII67	.02	.69	.16	.03	.32
PII76	.17	.66	.07	.26	.07
PII80	.21	.55	.21	.11	.04
Support Services					
<u>Items</u>					
PII73	.10	.07	.87	.12	.22
PII74	.18	.44	.72	.29	.19
PII69	.37	.26	.60	.10	.04
PII72	.19	.24	.45	.35	.02
Registration/ Support Staff					
<u>Items</u>					
PII71	.34	.21	.17	.88	.02
PII65	-.14	.04	.29	.59	.24
Summer Courses/ Library					
<u>Items</u>					
PII75	-.06	-.02	.22	-.03	.76
PII66	.02	.12	.01	.43	.69

and Couplet 2 (Summer Courses/Library) in overall satisfaction with the department, the lowest (8.14).

Couplet 1 (Quality of Instruction), in satisfaction with section, has the highest inter-item correlation mean score (.79) and Factor 2 (Enrichment/Stu Assistance) in overall satisfaction with department, the lowest (.44). The range of reliability (alpha) is .66 to .89. Reliability data are reported in Table 25.

Relationship between factors and demographic variables

The Pearson correlation procedure was used with the alumnae/alumni data to determine relationships between factors, couplets, single items, and demographic variables of: age, graduate assistantship, use of degree preparation, and recommendation of specialization. The correlation coefficients for all factors/couplets/single items and demographic variables, used to test Hypothesis #1, are in Table 26.

Pearson correlation was also used to determine inter-factor relationships. Alpha was set at the .05 level of significance.

Hypothesis 1 There is no relationship between alumnae/alumni level of satisfaction with the department and the following variables: age, graduate assistantship, use of degree preparation, or recommendation of specialization.

Age The demographic variable of age is not found to be significantly correlated with any of the factors, couplets, or single items. Although, no relationships were found to be significant at the .05

Table 25. Reliability of factors, couplets, single items
alumnae/alumni data

	No. of Items	Mean	Std. Dev.	Inter-item corr.			Reli Alpha	Std Alpha
				Mean	Min.	Max.		
RELATED TO SECTION								
Factor 1								
Quality of Courses	9	35.39	5.57	.47	.17	.91	.89	.89
Factor 2								
Quality of Mentoring	4	17.07	2.58	.48	.30	.70	.74	.79
Factor 3								
Quality of Grad. Programs	6	23.18	4.39	.48	.19	.83	.85	.85
Factor 4								
Admission/Student Quality	3	11.79	2.38	.57	.34	.89	.80	.80
Couplet 1								
Quality of/ Instruction	2	7.82	1.83	.79	.79	.79	.88	.88
Single Item								
Sensitivity to Ethnicity	-	----	----	---	---	---	---	---
RELATED TO COURSES OUTSIDE SECTION								
Factor 1								
Quality of Instruction	4	14.36	3.50	.65	.48	.83	.88	.88
Factor 2								
Quality of Courses	5	19.04	3.09	.55	.37	.73	.85	.86
Factor 3								
Relationship With Faculty	3	11.21	5.36	.59	.42	.82	.81	.81
RELATED TO OVERALL SAT. WITH DEPT.								
Factor 1								
Examinations	4	16.82	2.88	.63	.45	.79	.86	.87
Factor 2								
Enrichment/Stu. Assistance	4	14.50	3.09	.44	.27	.56	.75	.76
Factor 3								
Support Services	4	16.04	2.89	.51	.38	.73	.80	.81
Couplet 1								
Registration/ Support Staff	2	8.71	1.08	.57	.57	.57	.73	.73
Couplet 2								
Summer Courses/ Library	2	8.14	1.51	.52	.52	.52	.66	.68

Table 26. Correlation of factors, couplets, single items with alumnae/alumni demographic variables

Factors Couplets Single Items	Age	Graduate Assistant	Use of Degree Preparation	Recommend Area of Specialization
RELATED TO SECTION				
Factors				
Quality of Courses	0.13	0.003	0.36xx	0.71xx
Quality of mentoring	0.12	0.02	0.33xx	0.47xx
Quality of Grad. Program	0.13	0.04	0.35xx	0.41xx
Admission/Stu. Quality	-0.01	0.05	0.13	0.40xx
Couplets				
Quality of/ Instruction	0.07	0.07	0.20xx	0.58xx
Single Item Sensitivity to Ethnicity	0.08	0.03	0.16x	0.33xx
RELATED TO COURSES OUT-SECTION				
Factors				
Quality of Instruction	0.002	0.003	0.12	0.08
Quality of courses	0.11	0.01	0.19xx	0.13
Relationship With Faculty	0.08	-0.07	0.06	0.05
RELATED TO SAT. W/DEPT.				
Factors				
Examinations	0.14	0.01	0.21xx	0.22xx
Enrichment/Stu. Assistance	0.05	0.19xx	0.42xx	0.37xx
Support Services	0.11	0.08	0.19xx	0.08
Couplets				
Registration/ Support Staff	0.14	0.19xx	0.08	0.13
Summer Courses/ Library	0.02	0.07	0.12	0.07

x = Significant at .05 level. xx = Significant at .01 level.

level, the data do reflect some correlations which may be of interest to decision-makers. Some correlation is indicated between age and two factors related to section (Quality of Courses, $r=0.13$, $p=.08$, Graduate Programs, $r=0.13$, $p=.09$), and two factors related to overall satisfaction with the department (Examination Requirements, $r=0.14$, $p=.07$, Registration/Support Staff, $r=.14$, $p=.07$).

Graduate assistantship The demographic variable of graduate assistantship significantly correlates with two of the 13 factors/couplets/single items. Having had a graduate assistantship is found to have a significant correlation with one factor and one couplet related to Overall Satisfaction with Department (Enrichment/Student Assistance, $r=0.19$, $p=.01$; Registration/Support Staff, $r=0.19$, $p=.001$).

Use of degree preparation The use of preparation is found to have a significant relationship with nine factors/couplets/single items. The use of training has a significant correlation with three factors, the couplet, and single item related to Section (Quality of Courses, $r=0.36$, $p=.000$; Quality of Mentoring, $r=0.33$, $p=.000$; Quality of Graduate Program, $r=0.35$, $p=.000$; Quality of Instruction, $r=0.20$, $p=.000$; Sensitivity to Ethnicity, $r=0.16$, $p=.04$); one factor related to courses out of section (Quality of Courses, $r=0.19$, $p=.01$); and three factors related to Overall Satisfaction with Department (Examinations, $r=0.21$, $p=.003$; Enrichment/Student Assistance, $r=0.42$, $p=.000$; Support Services, $r=0.19$, $p=.01$).

Recommendation of specialization Willingness to recommend area of specialization is significantly related to 8 of the 13 factors/couplets/single items. Highly significant relationships are found between recommendation of specialization and: 1) All areas related to section (Quality of Courses, $r=0.71$, $p=.000$; Quality of Mentoring, $r=0.47$, $p=.000$; Quality of Graduate Program, $r=0.41$, $p=.000$; Admission/Student Quality, $r=0.40$, $p=.000$; Quality of Instruction, $r=0.58$, $p=.000$, Sensitivity to Ethnicity, $r=0.33$, $p=.000$), 2) Two factors related to overall satisfaction with department (Examinations, $r=0.22$, $p=.003$; Enrichment/Student Assistance, $r=0.37$, $p=.000$.)

An analysis of the data generated by the Pearson correlation procedure indicate that Hypothesis #1 can be rejected on two of the four demographic variables. The results of data analysis would reject the hypothesis in the areas of use of degree preparation and recommendation of specialization but fail to reject for age and graduate assistantship. Therefore, the overall results of data analysis failed to reject Hypothesis #1.

Inter-correlation of factors and couplets

The data indicate no significant correlation of the following factors, couplets, single items:

- 1) Faculty Sensitivity to Ethnicity with Admission/Student Quality, $r=0.11$, $p=.15$
- 2) Enrichment/Student Assistance with Quality of Courses, out of section, $r=0.11$, $p=.14$

- 3) Department Support Services with Faculty Sensitivity to Ethnicity ($r=0.09$, $p=.24$); and Quality of Instruction, out of section ($r=0.09$, $p=.27$)
- 4) Department Registration/Support Staff with section Quality of Courses ($r=0.14$, $p=.07$), Admission/Student Quality ($r=0.11$, $p=.14$), Quality of Instruction, out of section, ($r=0.09$, $p=.25$), Quality of Courses, out of section, ($r=0.11$, $p=.16$), and Relationship With Faculty, out of section, ($r=0.09$, $p=.25$)
- 5) Availability of Summer Courses/Library with Faculty Sensitivity to Ethnicity ($r=0.12$, $p=.12$) and Quality of Instruction, out of section, ($r=0.12$, $p=.12$)

The highest correlation (0.74) is between Quality of Courses and Quality of Instruction, related to section (see Table 27).

Differences between factors and demographic variables

The data were analyzed to determine the differences between factors and the following variables: gender, writing option, assistantship, area of specialization, employment type, ethnic background, and highest degree in the Department of Professional Studies in Education.

Analysis of variance, single classification, and t-tests were calculated to test the following hypotheses. Alpha was set at the .05 level of significance and the Scheffé Multiple Range Test procedure was used to determine significant differences.

Table 27. Correlation matrix - alumnae/alumni data

Factors Couplets Single Items	Quality of Courses	Quality of Mentoring	Quality of Grad. Program	Admission/ Stu. Quality	Quality of Instruction	Sensitivity to Ethnicity	Quality of Instruction	Quality of Courses
RELATED TO SECTION								
<u>Factors</u>								
Quality of Courses	1.00							
Quality of mentoring	0.56	1.00						
Quality of Grad. Program	0.59	0.61	1.00					
Admission/Stu. Quality	0.54	0.32	0.32	1.00				
<u>Couplets</u>								
Quality of Instruction	0.74	0.47	0.50	0.52	1.00			
<u>Single Item</u>								
Sensitivity to Ethnicity	0.34	0.30	0.48	0.11	0.37	1.00		
RELATED TO COURSES OUTSIDE SECTION								
<u>Factors</u>								
Quality of Instruction	0.37	0.19	0.29	0.26	0.31	0.17	1.00	
Quality of Courses	0.34	0.20	0.24	0.19	0.24	0.16	0.67	1.00
Relationship With Faculty	0.31	0.28	0.37	0.18	0.26	0.19	0.68	0.59
RELATED TO OVERALL SAT WITH DEPT.								
<u>Factors</u>								
Examinations Enrichment/Stu. Assistance	0.33	0.56	0.45	0.18	0.34	0.23	0.17	0.23
Support Services	0.40	0.43	0.61	0.17	0.29	0.33	0.18	0.11
Support Services	0.24	0.40	0.32	0.25	0.27	0.09	0.09	0.16
<u>Couplets</u>								
Registration/ Support Staff	0.14	0.18	0.19	0.11	0.20	0.19	0.09	0.11
Summer Courses/ Library	0.17	0.23	0.23	0.17	0.15	0.12	0.12	0.18

Relationship With Faculty
Examinations
Enrichment/Stu. Assistance
Support Services
Registration/ Support Staff
Summer Courses/ Library

1.00					
0.23	1.00				
0.15	0.35	1.00			
0.19	0.48	0.43	1.00		
0.09	0.31	0.25	0.34	1.00	
0.16	0.29	0.24	0.34	0.32	1.00

Hypothesis 2 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by gender.

There is a significant difference, by gender, in alumnae/alumni satisfaction on eight of the 13 factors/couplets/single items. Males have higher mean scores on all significant areas. A significant difference is indicated for three factors and the couplet related to section. Males have a higher mean score (4.14) than females (3.85) on the factor, Quality of Courses ($t=2.91$, $p=.004$). Male mean score (4.38) is also higher than females (4.07) on the factors, Quality of Mentoring ($t=2.58$, $p=.01$); Quality of Graduate Program, male 4.02, female 3.66 ($t=3.51$, $p=.001$); and the couplet Quality of Instruction, male 4.18, female 3.74 ($t=2.86$, $p=.005$). A difference, by gender, is found on 3 of the factors and one couplet related to overall satisfaction with department (Examinations, male 4.22, female 3.96, $t=2.54$, $p=.001$; Enrichment/Student Assistance, male 3.66, female 3.31, $t=2.74$, $p=.007$; Support Services, male 3.95, female 3.68, $t=2.17$, $p=.03$; Registration/Support Staff, male 4.39, female 4.07, $t=3.31$, $p=.001$). The results of data analysis (Table 28) reject Hypothesis #2.

Hypothesis 3 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by writing option.

For purposes of data analysis the four writing option categories are combined into: 1) Thesis/Dissertation, 2) Creative/Other. A significant difference is indicated on 2 factors and one couplet related to overall

Table 28. Analysis of difference in alumnae/alumni satisfaction by gender

Factor Couplet Single Item	Number		Mean		Standard Deviation		t Value	2-tailed Prob.
	1	2	1	2	1	2		
RELATED TO SECTION								
Factors								
Quality of Courses	124	53	3.85	4.14	0.74	0.56	-2.91	.004xx
Quality of Mentoring	124	53	4.07	4.38	0.95	0.62	-2.58	.01 xx
Quality of Grad. Program Admission/Stu. Quality	124	53	3.66	4.02	0.75	0.58	-3.51	.001xx
Quality	124	53	3.94	4.04	0.64	0.59	-0.97	.33
Couplets								
Quality of Instruction	124	53	3.74	4.18	0.97	0.83	-2.86	.005xx
Single Item								
Sensitivity to Ethnicity	115	50	3.96	4.16	0.89	0.87	-1.36	.18
RELATED TO COURSES OUT SECTION								
FACTORS								
Quality of Instruction	120	51	3.68	3.93	0.81	0.65	-1.92	.06
Quality of Courses	120	51	3.79	3.86	0.55	0.49	-0.75	.46
Relationship With Faculty	119	51	3.67	3.88	0.80	0.62	-1.85	.07
RELATED TO SAT W/DEPT								
Factors								
Examinations Enrichment/Stu Assistance	123	53	3.96	4.22	0.66	0.55	-2.54	.01 xx
Support Services	120	53	3.31	3.66	0.80	0.73	-2.74	.007xx
Services	123	53	3.68	3.95	0.76	0.75	-2.17	.03 x
Couplets								
Registration/ Support Staff	122	53	4.07	4.39	0.68	0.53	-3.31	.001xx
Summer Courses/ Library	124	53	3.95	4.07	0.68	0.68	-1.02	.31
1 = female 2 = male								
x = Significant at .05. xx = Significant at .01.								

satisfaction with department. Alumnae/alumni who chose to write a thesis or dissertation have higher mean scores in all significant areas for this variable. (Examinations: Thesis/Dissertation 4.18, Creative Component/Other 3.91, $t=2.92$, $p=.004$; Support Services: Thesis/Dissertation 4.00, Creative Component/Other 3.56, $t=3.93$, $p=.000$; Registration/Support Staff: Thesis/Dissertation 4.36, Creative Component/Other 3.98, $t=4.10$, $p=.000$.)

The data (Table 29) indicate no significant difference for the majority of the factors, couplets, single items. Therefore, the researcher failed to reject Hypothesis #3.

Hypothesis 4 There is no significant difference in level of satisfaction between alumnae/alumni who had assistantships when compared with those who did not.

The data as reported in Table 30, reflect a significant difference in alumnae/alumni satisfaction with the department on one factor and one couplet. Alumnae/alumni who did not have an assistantship have a lower mean (3.85) than those who did (4.03) on the couplet Registration/Support Staff ($t=3.43$, $p=.001$).

A significant difference in the level of satisfaction of alumnae/alumni who had assistantships as compared to those who did not, is found on only two of the 13 factors, couplets, and single items. The results of data analysis failed to reject Hypothesis #4.

Hypothesis 5 Student data only.

Table 29. Analysis of difference in alumnae/alumni satisfaction by choice of writing option

Factor Couplet Single Item	Number		Mean		Standard Deviation		t Value	2-tailed Prob.
	1	2	1	2	1	2		
RELATED TO SECTION								
<u>Factors</u>								
Quality of Courses	86	93	3.90	3.90	0.69	0.73	-0.08	.94
Quality of Mentoring	86	93	4.28	4.04	0.76	0.95	1.89	.06
Quality of Grad. Program	86	93	3.84	3.70	0.69	0.73	1.30	.20
Admission/Stu. Quality	86	93	3.94	3.99	0.70	0.55	-0.50	.62
<u>Couplets</u>								
Quality of Instruction	86	93	3.88	3.84	0.97	0.95	0.28	.78
<u>Single Item</u>								
Sensitivity to Ethnicity	81	86	4.02	4.00	0.91	0.87	0.18	.86
RELATED TO COURSES OUT SECTION								
<u>Factors</u>								
Quality of Instruction	84	89	3.68	3.79	0.86	0.72	-0.92	.36
Quality of Courses	84	89	3.83	3.79	0.51	0.56	0.57	.57
Relationship With Faculty	83	89	3.81	3.65	0.70	0.80	1.34	.18
RELATED TO SAT. W/DEPT								
<u>Factors</u>								
Examinations	85	92	4.18	3.91	0.60	0.64	2.92	.004xx
Enrichment/Stu. Assistance	85	89	3.49	3.34	0.80	0.79	1.25	.21
Support Services	85	92	4.00	3.56	0.70	0.78	3.93	.000xx
<u>Couplets</u>								
Registration/ Support Staff	84	92	4.36	3.98	0.55	0.70	4.10	.000xx
Summer Courses/ Library	85	93	4.07	3.91	0.69	0.66	1.60	.11
1 = thesis/dissertation x = Significant at .05 level. 2 = creative component/other xx = Significant at .01 level.								

Hypothesis 6 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by area of specialization.

A difference in alumnae/alumni satisfaction, when grouped by area of specialization, is indicated on five of the 13 factors, couplets, and single items. Level of alumnae/alumni satisfaction differs on two factors, the couplet, and single item as related to section and one factor related to courses outside section.

The Scheffé procedure produced data which reflect a significant difference in satisfaction with Quality of Courses, in section. Alumnae/alumni who specialized in Higher Education (mean, 4.07) are significantly different from those who specialized in Counselor Education (mean, 3.46) at the .05 level of significance and from those in Elementary/Special Education (mean, 3.43) at both the .05 and .01 level. The level of satisfaction of alumnae/alumni in Education Administration (mean, 4.32) differs significantly from those in Counselor Education (3.46) and Elementary/Special Education (mean, 3.43) at both the .05 and .01 level of significance on this factor.

A significant difference is found on the factor Quality of Graduate Program as related to section. Graduates of Educational Administration (mean, 4.11) differ from those of Counselor Education (3.41) at the .05 level of significance and with Elementary/Special Education graduates (mean, 3.39) at both the .05 and the .01 level.

Graduates from Higher Education (mean, 4.15), Educational Administration (4.17), and Comparative Studies/Research (4.50) differ

significantly from Counselor Education (3.15) and Elementary/Special Education (3.27) graduates at the .05 level of significance on the factor Quality of Instruction as related to section. Differences in satisfaction for Educational Administration and Higher Education graduates with those from Counselor Education and Elementary/Special Education are, also, significant at the .01 level on this factor.

Differences at both the .05 and .01 level of significance are found on the factor Faculty Sensitivity to Ethnicity for graduates from Higher Education (4.23), Educational Administration (4.22), and Adult/Vocational Education (4.43) when compared to those from Counselor Education (3.21).

A difference in satisfaction on the factor Relations with Faculty, out of section, at the .05 level of significance, is indicated for alumnae/alumni from Educational Administration (3.95) when compared to those from Elementary/Special Education (3.25). The results of data analysis provide sufficient evidence of differences on this variable to reject Hypothesis #6 (Table 31).

Hypothesis 7 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by employment type.

The data (Table 32) reflect generally higher mean scores on all factors for alumnae/alumni employed by 2-year/community colleges and 4-year colleges. However, no differences at the .05 level of significance are found in alumnae/alumni satisfaction on this variable. The results of data analysis failed to reject Hypothesis #7.

Table 31. Analysis of difference in alumnae/alumni satisfaction by area of specialization

Variables	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	No.	<u>Mean</u> Std. Dev.	No.	<u>Mean</u> Std. Dev.	No.	<u>Mean</u> Std. Dev.
RELATED TO SECTION						
Factors						
Quality of Courses	16	<u>4.04</u> 0.73	26	<u>3.46</u> 0.77	15	<u>3.93</u> 0.59
Quality of Mentoring	16	<u>4.17</u> 0.64	26	<u>3.82</u> 0.96	15	<u>4.03</u> 1.09
Quality of Grad. Prog.	16	<u>3.71</u> 0.70	26	<u>3.41</u> 0.81	15	<u>3.64</u> 0.78
Admission/Stu. Quality	16	<u>3.98</u> 0.55	26	<u>3.79</u> 0.77	15	<u>4.00</u> 0.63
Couplets						
Quality of Instruction	16	<u>4.03</u> 0.96	26	<u>3.15</u> 1.07	15	<u>4.03</u> 0.81
Single Item						
Sensitivity to Ethnicity	14	<u>4.43</u> 0.65	24	<u>3.21</u> 0.98	14	<u>3.93</u> 1.27
RELATED TO COURSES OUT-SECTION						
Factors						
Quality of Instruction	15	<u>3.53</u> 0.34	25	<u>3.92</u> 0.55	15	<u>3.83</u> 0.57
Quality of Courses	15	<u>3.84</u> 0.66	25	<u>3.85</u> 0.59	15	<u>3.80</u> 0.50
Relationship With Faculty	14	<u>3.81</u> 0.94	25	<u>3.79</u> 0.67	15	<u>3.93</u> 0.58
RELATED TO SAT. W/DEPT.						
Factors						
Examinations	15	<u>4.03</u> 0.55	26	<u>3.91</u> 0.53	15	<u>4.08</u> 0.65
Enrichment/Stu. Assistance	15	<u>3.05</u> 0.77	26	<u>3.14</u> 0.72	15	<u>3.07</u> 0.97
Support Services	15	<u>3.73</u> 0.94	26	<u>3.73</u> 0.58	15	<u>3.84</u> 0.92
Couplets						
Registration/Support Staff	14	<u>3.82</u> 0.50	26	<u>4.12</u> 0.62	15	<u>4.17</u> 0.56
Summer Courses/Library	15	<u>3.73</u> 0.59	26	<u>3.88</u> 0.90	15	<u>3.87</u> 0.81
Group 1 = ad/voc. ed. Group 3 = curr. & inst. tech. Group 5 = el./sp. ed. Group 2 = co. ed. Group 4 = ed. admin. Group 6 = higher ed.						

<u>Group 4</u>		<u>Group 5</u>		<u>Group 6</u>		<u>Group 7</u>		F	F
No.	<u>Mean</u> Std.Dev.	No.	<u>Mean</u> Std.Dev.	No.	<u>Mean</u> Std.Dev.	No.	<u>Mean</u> Std.Dev.	Value	Prob.
39	<u>4.32</u> 0.54	28	<u>3.43</u> 0.78	48	<u>4.07</u> 0.51	7	<u>4.19</u> 0.39	8.62	0.000xx
39	<u>4.39</u> 0.67	28	<u>3.82</u> 1.14	48	<u>4.31</u> 0.72	7	<u>4.71</u> 0.37	2.74	0.02x
39	<u>4.11</u> 0.68	28	<u>3.39</u> 0.52	48	<u>3.92</u> 0.34	7	<u>4.02</u> 0.40	5.10	0.000xx
39	<u>4.17</u> 0.51	28	<u>3.80</u> 0.63	48	<u>3.97</u> 0.60	7	<u>4.00</u> 0.84	1.39	0.22
39	<u>4.17</u> 0.83	28	<u>3.27</u> 1.02	48	<u>4.15</u> 0.67	7	<u>4.50</u> 0.41	7.64	0.000xx
37	<u>4.22</u> 0.58	24	<u>3.83</u> 0.76	47	<u>4.23</u> 0.81	7	<u>4.14</u> 0.69	5.67	0.000xx
37	<u>3.89</u> 0.76	27	<u>3.89</u> 0.69	47	<u>3.75</u> 0.72	7	<u>3.50</u> 1.25	1.34	0.24
37	<u>3.81</u> 0.58	27	<u>3.67</u> 0.55	47	<u>3.84</u> 0.44	7	<u>3.95</u> 0.46	0.42	0.86
37	<u>3.95</u> 0.73	27	<u>3.25</u> 0.74	47	<u>3.68</u> 0.70	7	<u>3.88</u> 0.88	2.78	0.01xx
39	<u>4.12</u> 0.63	28	<u>3.89</u> 0.67	47	<u>4.08</u> 0.71	7	<u>4.36</u> 0.48	0.88	0.51
39	<u>3.70</u> 0.74	26	<u>3.16</u> 0.75	47	<u>3.72</u> 0.67	6	<u>3.31</u> 0.91	4.45	0.000xx
39	<u>3.66</u> 0.77	27	<u>3.66</u> 0.81	48	<u>3.86</u> 0.77	7	<u>4.21</u> 0.62	0.74	0.62
39	<u>4.26</u> 0.72	28	<u>3.86</u> 0.62	47	<u>4.39</u> 0.55	7	<u>4.41</u> 1.07	2.96	0.01xx
39	<u>4.04</u> 0.57	28	<u>4.02</u> 0.60	48	<u>4.06</u> 0.67	7	<u>4.21</u> 0.57	0.80	0.57

Group 7 = Comparative Studies/Research

x = Significant at .05 level.

xx = Significant at .01 level.

Table 32. Analysis of difference in alumnae/alumni satisfaction by employment type

Variables	Group 1		Group 2		Group 3	
	No.	Mean Std. Dev.	No.	Mean Std. Dev.	No.	Mean Std. Dev.
RELATED TO SECTION						
Factors						
Quality of Courses	9	<u>3.85</u> 0.84	7	<u>3.71</u> 0.42	51	<u>3.96</u> 0.67
Quality of Mentoring	9	<u>3.50</u> 0.64	7	<u>4.17</u> 0.96	51	<u>0.26</u> 1.09
Quality of Grad. Prog.	9	<u>3.59</u> 0.64	7	<u>3.74</u> 0.77	51	<u>3.80</u> 0.73
Admission/Stu. Quality	9	<u>3.81</u> 0.82	7	<u>3.81</u> 0.72	51	<u>3.87</u> 0.68
Couplets						
Quality of Instruction	9	<u>3.50</u> 0.44	7	<u>4.14</u> 0.63	51	<u>3.94</u> 0.93
Single Item						
Sensitivity to Ethnicity	8	<u>4.38</u> 0.52	7	<u>3.71</u> 0.76	50	<u>4.16</u> 0.87
RELATED TO COURSES OUT SECTION						
Factors						
Quality of Instruction	9	<u>3.97</u> 0.82	7	<u>3.50</u> 0.76	49	<u>3.71</u> 0.88
Quality of Courses	9	<u>3.69</u> 0.63	7	<u>3.71</u> 0.43	49	<u>3.90</u> 0.45
Relationship With Faculty	9	<u>3.78</u> 1.01	7	<u>3.62</u> 0.49	48	<u>3.74</u> 0.73
RELATED TO SAT. W/DEPT.						
Factors						
Examinations	9	<u>3.69</u> 0.83	6	<u>4.17</u> 0.61	50	<u>4.00</u> 0.66
Enrichment/Stu. Assistance	9	<u>3.24</u> 0.63	6	<u>3.24</u> 0.43	50	<u>3.52</u> 0.82
Support Services	9	<u>3.29</u> 0.72	7	<u>3.93</u> 0.75	50	<u>3.89</u> 0.70
Couplets						
Registration/Support Staff	9	<u>3.83</u> 0.90	6	<u>3.83</u> 0.41	49	<u>4.36</u> 0.52
Summer Courses/Library	9	<u>3.83</u> 0.83	7	<u>4.07</u> 0.61	50	<u>4.06</u> 0.60

Group 1 = fed/state gov/t.

Group 2 = industry/business

Group 3 = university

Group 4 = 4-year college

Group 5 = 2-year/comm. college

Group 6 = intermediate/state agency

Group 7 = local school district

Group 8 = self-employed/other

x = Significant at .05 level.

xx = Significant at .01 level.

Table 32. (continued)

<u>Group 4</u>		<u>Group 5</u>		<u>Group 6</u>		<u>Group 7</u>	
<u>No.</u>	<u>Mean</u> <u>Std.Dev.</u>	<u>No.</u>	<u>Mean</u> <u>Std.Dev.</u>	<u>No.</u>	<u>Mean</u> <u>Std.Dev.</u>	<u>No.</u>	<u>Mean</u> <u>Std.Dev.</u>
8	<u>4.01</u> 0.59	9	<u>4.17</u> 0.50	5	<u>3.89</u> 0.16	73	<u>3.91</u> 0.75
8	<u>4.38</u> 0.64	9	<u>4.62</u> 0.41	5	<u>4.25</u> 0.94	73	<u>4.16</u> 0.84
8	<u>3.85</u> 0.42	9	<u>3.90</u> 0.84	5	<u>3.88</u> 0.04	73	<u>3.74</u> 0.74
8	<u>4.17</u> 0.59	9	<u>4.15</u> 0.29	5	<u>4.33</u> 0.70	73	<u>4.09</u> 0.55
8	<u>3.75</u> 0.85	9	<u>4.11</u> 0.65	5	<u>3.50</u> 0.41	73	<u>3.84</u> 0.95
8	<u>3.75</u> 0.17	7	<u>3.71</u> 0.49	3	<u>4.00</u> 1.00	67	<u>3.99</u> 0.81
8	<u>3.78</u> 0.83	9	<u>4.03</u> 0.85	5	<u>4.03</u> 0.88	70	<u>3.66</u> 0.74
8	<u>3.93</u> 0.52	9	<u>3.98</u> 0.61	5	<u>3.96</u> 0.99	70	<u>3.73</u> 0.57
8	<u>3.79</u> 0.83	9	<u>4.13</u> 0.53	5	<u>3.80</u> 1.19	70	<u>3.65</u> 0.80
8	<u>4.38</u> 0.57	9	<u>4.19</u> 0.68	5	<u>4.10</u> 0.74	73	<u>4.04</u> 0.62
8	<u>3.79</u> 0.56	9	<u>3.19</u> 0.90	5	<u>3.57</u> 0.80	70	<u>3.42</u> 0.77
8	<u>4.22</u> 0.41	9	<u>4.05</u> 0.72	5	<u>3.70</u> 1.06	72	<u>3.66</u> 0.75
8	<u>4.69</u> 0.46	9	<u>4.17</u> 0.75	5	<u>3.60</u> 0.82	73	<u>4.08</u> 0.69
8	<u>4.63</u> 0.44	9	<u>4.63</u> 0.44	5	<u>3.90</u> 0.82	73	<u>3.86</u> 0.81

<u>Group 8</u>			
No.	<u>Mean</u> Std. Dev.	F Value	F Prob.
16	<u>3.93</u> 0.68	0.29	0.96
16	<u>3.84</u> 0.84	1.71	0.11
16	<u>3.75</u> 0.64	0.18	0.99
16	<u>3.83</u> 0.50	1.99	0.06
16	<u>3.88</u> 1.02	0.52	0.82
16	<u>3.88</u> 1.36	0.77	0.61
16	<u>3.88</u> 0.60	0.74	0.64
15	<u>3.80</u> 0.38	0.76	0.62
15	<u>3.78</u> 0.47	0.52	0.52
16	<u>4.06</u> 0.49	0.84	0.55
16	<u>3.19</u> 1.04	0.78	0.60
16	<u>3.66</u> 1.06	1.58	0.14
16	<u>4.13</u> 0.50	2.75	0.01xx
16	<u>3.97</u> 0.81	1.66	0.12

Hypothesis 8 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by ethnic background.

A difference in alumnae/alumni satisfaction, when grouped by ethnic background, is indicated on the factor Enrichment/Student Assistance, related to department. The level of satisfaction of International graduates (mean, 1.75) is significantly lower than Native Americans (4.25) at the .05 level. The mean of Internationals (1.75) was significantly different from White Americans (3.43) and African/Black Americans (3.67) at both the .05 and .01 level. A significant difference in alumnae/alumni satisfaction with the department, by ethnic background, was not found on 12 of the factors, couplets, or single items. Therefore, the results of data analysis failed to reject Hypothesis #8 (Table #33).

Hypothesis 9 There is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by highest degree in Department of Professional Studies.

Differences are found on seven factors when alumnae/alumni are grouped by highest degree obtained. On the factor Quality of Mentoring, which relates to section, the mean for Ph.D. (4.47) differs from that of M.Ed. (3.65) at both the .05 and .01 level of significance. M.S./M.A. (mean, 4.14) differs from M.Ed. (mean, 3.65) at the .05 level. On the factor Quality of Graduate Programs, in section, the mean for Ph.D. (3.98) differs from the mean for M.Ed. (3.39) at the .01 and .05 level of significance. The mean for M.S./M.A. (3.76) differs from that of M.Ed. (3.39) at the .05 level.

Table 33. Analysis of difference in alumnae/alumni satisfaction by ethnic background

Variables	<u>Group 1</u>		<u>Group 2</u>		<u>Group 3</u>	
	No.	Mean Std.Dev.	No.	Mean Std.Dev.	No.	Mean Std.Dev.
RELATED TO SECTION						
Factors						
Quality of Courses	3	<u>3.89</u> 0.70	9	<u>4.04</u> 0.65	1	<u>4.56</u>
Quality of Mentoring	3	<u>3.91</u> 1.13	9	<u>4.28</u> 0.72	1	<u>4.00</u>
Quality of Grad. Prog.	3	<u>3.00</u> 1.09	9	<u>3.74</u> 0.65	1	<u>4.33</u>
Admission/Stu. Quality	3	<u>4.22</u> 0.69	9	<u>3.96</u> 0.59	1	<u>4.00</u>
Couplets						
Quality of Instruction	3	<u>4.00</u> 1.00	9	<u>3.94</u> 0.81	1	<u>5.00</u>
Single Item						
Sensitivity to Ethnicity	3	<u>3.33</u> 1.53	9	<u>3.33</u> 1.41	1	<u>5.00</u>
RELATED TO COURSES OUT SECTION						
Factors						
Quality of Instruction	3	<u>4.33</u> 0.76	9	<u>3.67</u> 0.84	1	<u>4.00</u>
Quality of Courses	3	<u>4.40</u> 0.72	9	<u>3.76</u> 0.69	1	<u>4.00</u>
Relationship With Faculty	3	<u>4.33</u> 0.67	9	<u>3.81</u> 0.80	1	<u>4.00</u>
RELATED TO SAT. W/DEPT.						
Factors						
Examinations	3	<u>3.92</u> 0.95	9	<u>4.31</u> 0.75	1	<u>4.03</u>
Enrichment/Stu. Assistance	3	<u>1.75</u> 0.66	9	<u>3.67</u> 0.61	1	<u>4.25</u>
Support Services	3	<u>4.00</u> 1.00	9	<u>4.21</u> 0.59	1	<u>4.75</u>
Couplets						
Registration/Support Staff	3	<u>4.00</u> 0.50	9	<u>4.44</u> 0.46	1	<u>4.00</u>
Summer Courses/Library	3	<u>3.67</u> 0.76	9	<u>4.06</u> 1.01	1	<u>4.50</u>

Group 1 = International students
 Group 2 = African/Black American
 x = Significant at .05 level.

Group 3 = Native American
 Group 4 = White American
 xx - Significant at .01 level.

<u>Group 4</u>			
No.	<u>Mean</u> Std.Dev.	F Value	F Prob.
166	<u>3.92</u> 0.71	0.35	0.79
166	<u>4.16</u> 0.88	0.14	0.93
166	<u>3.78</u> 0.71	1.39	0.25
166	<u>3.96</u> 0.63	0.17	0.92
166	<u>3.84</u> 0.97	0.52	0.67
154	<u>4.06</u> 0.82	3.02	0.03x
160	<u>3.73</u> 0.79	0.64	0.59
160	<u>3.80</u> 0.52	1.33	0.27
159	<u>3.70</u> 0.75	0.76	0.52
164	<u>4.02</u> 0.63	0.57	0.63
161	<u>3.43</u> 0.77	5.47	0.001xx
164	<u>3.73</u> 0.77	1.77	0.15
163	<u>4.15</u> 0.67	0.65	0.58
165	<u>3.98</u> 0.66	0.44	0.73

Significant differences, at both the .05 and .01 level are found between Ph.D. (mean, 4.29) and M.Ed. (mean, 3.72) on the factor Examination, which relates to overall satisfaction with department. A significant difference between Ph.D. (mean, 4.29) and M.S./M.A. (mean, 4.00) were found at the .05 level. M.S./M.A. (mean, 4.00) also differs from M.Ed. (mean, 3.72) at the .05 level. Data analysis of the factor Enrichment/Student Assistance, in department, reflect a difference in satisfaction between Ph.D. (mean, 3.59) and M.Ed. (mean, 3.10) at the .05 level. The Ph.D. degree (mean, 4.10) is significantly different from M.Ed. (mean, 3.66) and M.S./M.A. (mean, 3.49) on the factor Support Services, department, at both the .05 and .01 level.

The mean for Ph.D. (4.54), on the factor related to department Registration/Support Staff, is significantly different from M.Ed. (mean, 3.68) and M.S./M.A. (mean, 4.10) at the .05 and .01 level. The difference in the mean for M.S./M.A. (4.10) and M.Ed. (mean, 3.68) is also, significant at .05 and .01 for this factor. Ph.D. graduates (4.25) are significantly more satisfied with Summer Course Availability and Library than those with M.Ed. (3.78) or M.S./M.A. (3.90). This finding indicates a difference at both the .05 and .01 level of significance. The results of data analysis, as shown in Table 34, rejected Hypothesis #8.

Students and alumnae/alumni were asked to submit written comments of perceived strengths and/or weaknesses of their area of specialization, and suggestions to the department concerning courses, curriculum, procedures,

Table 34. Analysis of difference in alumnae/alumni satisfaction by highest degree

Variables	Group 1		Group 2		Group 3		F Value	F Prob.
	No.	Mean Std.Dev.	No.	Mean Std.Dev.	No.	Mean Std.Dev.		
RELATED TO SECTION								
Factors								
Quality of Courses	30	<u>3.75</u> 0.85	94	<u>3.93</u> 0.63	55	<u>4.01</u> 0.73	1.37	0.26
Quality of Mentoring	30	<u>3.65</u> 1.21	94	<u>4.14</u> 0.77	55	<u>4.47</u> 0.67	9.44	0.000xx
Quality of Grad. Prog.	30	<u>3.39</u> 0.69	94	<u>3.76</u> 0.70	55	<u>3.98</u> 0.68	7.07	0.001xx
Admission/ Stu. Quality	30	<u>3.93</u> 0.55	94	<u>3.99</u> 0.55	55	<u>3.94</u> 0.78	0.18	0.84
Couplets								
Quality of Instruction	30	<u>3.57</u> 1.01	94	<u>3.94</u> 0.88	55	<u>3.89</u> 1.03	1.80	0.17
Single Item								
Sensitivity to Ethnicity	26	<u>3.81</u> 0.90	87	<u>4.05</u> 0.93	54	<u>4.06</u> 0.81	0.82	0.44
RELATED TO COURSES OUT-SECTION								
Factors								
Quality of Instruction	29	<u>3.66</u> 0.78	91	<u>3.84</u> 0.68	53	<u>3.61</u> 0.94	1.66	0.19
Quality of Courses	29	<u>3.76</u> 0.59	91	<u>3.81</u> 0.51	53	<u>3.83</u> 0.55	0.16	0.85
Relationship With Faculty	29	<u>3.50</u> 0.81	90	<u>3.74</u> 0.73	53	<u>3.82</u> 0.75	1.80	0.17
RELATED TO SAT. W/DEPT.								
Factors								
Examinations	30	<u>3.72</u> 0.67	93	<u>4.00</u> 0.60	54	<u>4.22</u> 0.65	8.86	0.000xx
Enrichment/ Stu. Assistance	28	<u>3.10</u> 0.83	92	<u>3.41</u> 0.77	54	<u>3.59</u> 0.78	3.47	0.03x
Support Services	30	<u>3.49</u> 0.91	93	<u>3.66</u> 0.70	54	<u>4.10</u> 0.71	8.73	0.000xx
Couplets								
Reg./Support Staff	30	<u>3.68</u> 0.58	93	<u>4.10</u> 0.63	53	<u>4.54</u> 0.53	21.02	0.000xx
Summer Courses/Library	30	<u>3.78</u> 0.67	94	<u>3.90</u> 0.67	54	<u>4.25</u> 0.65	6.57	0.002xx

Group 1 = M.Ed.
Group 2 = M.S./M.A.
Group 3 = Ph.D.

x = Significant at .05.
xx = Significant at .01.

and staffing. An analysis of these comments was included with the data to determine recommendations made to the department concerning program and service revision. A composite of the comments, by section, are listed in Appendix E. A summary of the general tone and direction of those comments will be discussed in the next chapter.

Chapter Summary

This study attempted to determine level of satisfaction with the Department of Professional Studies in Education, Iowa State University, for 1986-1988 graduates and students (spring, 1989).

While the data did not support some of the anticipated differences (gender, age, employment type) the information presented for each factor studied, is of importance to departmental decision-makers. In examining the data, it is apparent that alumnae/alumni indicate more significant differences in level of satisfaction with the department than do current students (area of specialization, use of degree preparation, overall satisfaction with department).

In the next chapter, findings of this study will be discussed in detail and compared to those of the previous studies.

CHAPTER 5. CONCLUSIONS

Summary

This study examined student and alumnae/alumni level of satisfaction with the Department of Professional Studies in Education at Iowa State University. Of the 417 subjects, 238 were graduate students spring, 1989, and 179 were 1986-1988 graduates from the department. This represents 60.0% of the total possible respondents.

Two-thirds (64.3%) of the respondents are female, 35.0% male. The largest percent (67.6%) are married, 22.8% single, and 8.2% divorced. The majority (42.4%) are 31 to 40 years of age, 26.4% are 41 to 50, 25.7% are 20 to 30, and 5.3% are over 50. The subjects represent the following areas of specialization: Adult/Vocational Education, 8.7%; Counselor Education, 21.1%; Curriculum and Instructional Technology, 0.96%; Educational Administration, 20.9%; Elementary/Special Education, 8.2%; Higher Education, 26.4%; Comparative Studies/Research, 5.1%.

Subjects responded to a revision of the survey program evaluation instruments developed by Braskamp et al. (1979). A modification of these instruments were also used in previous studies of the department conducted by Photisuvan (1987) and Subah (1986). The questionnaire consists of two parts: 1) background and demographic information, and 2) items related to satisfaction with graduate programs. Part two is divided into three sections: 1) level of satisfaction with major program, 2) satisfaction

with courses taken outside section as a part of the program of study, and
3) overall satisfaction with the department.

The data were analyzed using SPSSX (Nie et al. 1983). The demographic data were analyzed by frequencies, percentages, and means to describe subjects characteristics. To facilitate statistical analysis and interpretation of the unique data, a separate factor analysis was computed for each of the 3 sections in Part Two. Pearson product moment correlation was computed to determine relationships between demographic variables and factors. T-tests and analysis of variance were used to determine influence of demographic variables on factors. The Scheffé Multiple Range Test was used to identify differences between group means at the .05 level of significance. The statistical analysis, as described, was utilized to test the following hypotheses.

Hypothesis 1

The researcher failed to reject the hypothesis that there is no relationship between (a) student, (b) alumnae/alumni level of satisfaction with the department and the following variables: age, graduate assistantship, use of degree preparation, or recommendation of specialization.

Age A relationship of this demographic variable with student satisfaction is found in three areas: admission procedures for section, quality of instruction in courses taken outside of section, and departmental enrichment activities/availability of summer courses/registration. Age is not found to significantly correlate with

alumnae/alumni satisfaction with the department on any factor. Therefore, the researcher concludes that, although there is some relationship between age and student satisfaction, the factor does not relate to student or alumnae/alumni satisfaction to any significant degree.

These findings do not support those as reported for the previous study of student satisfaction, conducted by Subah (1986), which indicate a significant relationship with age on all variables. The data do support the findings of Photisuvan (1987) which reflect no significant relationship between alumnae/alumni satisfaction with programs, by age, and any factor. Both Subah (1986) and Photisuvan (1987) found older students more satisfied in all areas.

The findings of this study suggest a need for departmental review of current quality of programs, admission procedures, and enrichment activities. Plans for revision of departmental procedures, on these three factors, should consider current research on identified need differences by age. Further findings related to differences in satisfaction, by age, are reported for Hypothesis #5.

Graduate assistantship This variable is found to have a significant relationship with student and alumnae/alumni satisfaction and the three factors of: departmental enrichment/student assistance, registration/support staff, and balance/enrichment within section. Other significant relationships did not occur and therefore, the data support Subah's (1986) findings that this variable is not a significant determinant of student satisfaction with graduate programs. This variable was not analyzed in the previous alumnae/alumni study. Further

Interpretation of data for this variable, as related to significant differences, is discussed for Hypothesis #4.

Use of degree preparation This variable is found to have significant correlations with student satisfaction and one factor; alumnae/alumni satisfaction and nine factors. The correlations are: quality of courses, quality of mentoring, quality of graduate program, quality of instruction, and faculty sensitivity to ethnicity within sections; and departmental required examinations, enrichment activities, student assistance, and support services. The previous study of student satisfaction found no correlations with this variable; the previous alumnae/alumni study did not investigate this variable.

This finding supports the previous suggestion that there is a need to conduct an in-depth study of departmental program quality, student assistance, and enrichment activities. The information gained from these studies should be used in developing plans to meet consumer expectations and improve level of satisfaction.

Recommendation of specialization Student and alumnae/alumni satisfaction, as related to willingness to recommend area of specialization, is found to correlate with 11 factors: quality of courses, quality of mentoring, quality of graduate program, quality of instruction, admission procedures/student quality, and faculty sensitivity to ethnicity within section; departmental required examinations, enrichment activities, P.O.S. comm/student assistance, availability of summer courses/registration, and support staff. These data do not support the findings of the previous study of student satisfaction which found few

correlations between this variable and similar factors. The previous alumnae/alumni study did not examine the variable.

The data reflect a consistency in level of satisfaction, in that, several factors are repeated which were also, significant for variables previously discussed.

Hypothesis 2

The results of student data analysis failed to reject, while those of alumnae/alumni rejected, the hypothesis that there is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by gender.

A significant difference in student satisfaction, by gender, was found only on the factor of balance and enrichment as related to section. This finding does not support the former student study which found significant differences on the factors of: quality of graduate program, quality of courses, relationship with major professor, enrichment activities, and sensitivity to students.

The data do, however, indicate a significant gender difference in satisfaction for graduates on the factors quality of mentoring, quality of graduate programs, quality of instruction related to section; and the factor quality of instruction related to courses taken out of section. Data also, indicate significant differences for graduates on the factors examination requirements, enrichment/student assistance, support services, and registration/support staff which are related to overall satisfaction with the department. These findings support those of the previous alumnae/alumni study which reported significant differences of these

factors. Many of the alumnae/alumni may have completed the survey as students and the similarity in level of satisfaction, reported by 1986-1988 alumnae/alumni and students in the former study, would support the findings of Wise et al. (1981). Wise identified little difference in the level of satisfaction reported by subjects as students and in later follow-up studies of the same individuals as graduates.

This study and the previous studies found student and graduate males more satisfied, than their female counterparts, with all aspects of departmental programming. Hearn (1978) found females more influenced by faculty/student interaction and aspects of academic social climate. The research of Pascarella (1980), Hearn (1985), and Gilligan (1982), suggest that women place a stronger emphasis on social climate and relationships.

Hypothesis 3

The researcher failed to reject the hypotheses that there is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by writing option.

Neither the student nor the alumnae/alumni data indicate a significant difference in satisfaction with the department, by choice of writing option, on any of the factors. This finding supports those as reported in the previous study of student satisfaction which found no significant differences. Although, not significant at the .05 level, the data do show a higher mean for alumnae/alumni who chose to write a thesis or dissertation on all factors. These data support the findings as reported in the former alumnae/alumni study.

These findings may be tied to age and gender differences. Therefore, efforts to identify specific items which relate to satisfaction on this variable should be included in the suggested in-depth study.

Hypothesis 4

The researcher failed to reject the hypothesis that there is no significant difference in level of satisfaction between (a) students who have or (b) alumnae/alumni who had assistantships when compared with those who did not.

A significant difference in satisfaction with the department, for students and alumnae/alumni with assistantships as compared to those who did not, are found on the factors of: balance/enrichment, P.O.S. committee/student assistance, and registration/support staff. The data indicate having an assistantship is not a significant determinant for satisfaction. This supports findings of previous departmental studies which failed to reject a similar hypothesis.

These findings may reflect a need for a concentrated effort to develop "community" for graduate assistants in order to increase their adjustment to and satisfaction with the department. Certainly, one could expect that the closer contact with faculty and increased involvement with departmental affairs, enjoyed by those on assistantships, would result in a higher level of satisfaction. However, if the assignment does not offer increased professional and personal networking, it is understandable that the level of satisfaction is not significantly higher.

Hypothesis 5

The researcher failed to reject the hypothesis that there is no significant difference in level of satisfaction with the department when students are grouped by age.

Differences in level of satisfaction, by age, are found on the factors of: balance/enrichment related to section, quality of instruction in courses taken outside of section, enrichment activities/availability of summer courses/registration, and support staff related to overall satisfaction with the department. However, only the differences on the factor enrichment/summer courses/registration are significant, at the .05 level, when data are analyzed by the Scheffé procedure. The previous study of student satisfaction determined that as age increased the mean score for level of satisfaction also increased; current data support this finding. Cross (1981) identifies need differences, by age, as do Chickering and Associates (1981), Hodgkinson (1983), Henry (1988), and Schlossberg et al. (1989). This demographic variable was not analyzed, by the current or previous study, for alumnae/alumni satisfaction with the department.

Those sections which enroll a large number of younger students may wish to conduct internal studies to determine needs which are unique to this variable. All sections should be made aware of the results of these studies, and carefully consider this information when developing plans for program changes.

Hypothesis 6

The researcher rejected the hypothesis that there is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/ alumni are grouped by area of specialization.

A significant difference in student and alumnae/alumni satisfaction was found on seven factors. The factors are: balance/enrichment, quality of courses, quality of graduate program, quality of instruction, and faculty sensitivity to ethnicity, in section; and relationship with faculty, quality of courses out of section. Students and graduates from Educational Administration and Higher Education, generally, had higher mean scores than those from the other areas of specialization. The mean scores of graduates and students from Counselor Education and Elementary/Special Education were lower, overall.

A large percent of the students in Counselor Education and Elementary/Special Education are younger females. Throughout this study the data indicate gender and age differences in level of satisfaction. The suggested in-depth study of gender and age differences appears important to these programs in their efforts to better meet consumer needs.

Both Subah (1986) and Photisuvan (1987) found Educational Administration students and graduates to be more satisfied with graduate programs than those from other sections. Braskamp et al. (1979) found significance between student satisfaction with major area of study, general satisfaction with major area, and satisfaction with mentoring.

Hearn (1985) also, found significant differences by area of specialization.

Hypothesis 7

The researcher failed to reject the hypothesis that there is no significant difference in level of satisfaction with the department when (a) students or (b) alumnae/alumni are grouped by employment type.

No significant differences are found for either students or alumnae/alumni when grouped by this variable. These results support the findings of the previous studies that employment type is not a significant determinant for satisfaction with the department.

The data do reflect that those employed by government agencies, universities or colleges are generally more satisfied with department programming on all factors. Those employed by industry/business or are self-employed appeared to be least satisfied.

Hypothesis 8

The researcher failed to reject the hypothesis that there is no significant difference in level of satisfaction when (a) students, or (b) alumnae/ alumni are grouped by ethnic background.

Significant differences, by ethnic background, are found which indicate a lower level of satisfaction for Asian students on the factor of admission standards for section. The data reflect a lower level of satisfaction for International alumnae/alumni on the factor enrichment activities/financial support/career development assistance related to department. No significant differences are found for any of the other

eleven factors. The previous studies of the department did not analyze this variable.

An effort to identify needs, specific to ethnicity, should be included with the suggested in-depth study of program quality, admission procedures, and student assistance.

Hypothesis 9

The researcher rejected the hypothesis that there is no significant difference in level of satisfaction with the department when alumnae/alumni are grouped by highest degree obtained.

A significant difference in satisfaction of graduates, by highest degree, are found which indicate a higher level of satisfaction for those with a Ph.D. Graduates with the Ph.D. degree were significantly more satisfied with the department on the factors of quality of mentoring, quality of graduate program, examination requirements, enrichment/student assistance, support services, and summer courses/library. These differences are found at both the .05 and .01 level of significance when the Scheffé procedure is employed.

These findings support the data reported in the previous departmental studies and may be tied to the variables of age and gender. The suggested in-depth study on age and gender may reveal additional satisfaction variables which impact this factor.

Summary of respondent comments

Subjects were provided an opportunity to respond to six open-ended questions concerning area of specialization and the department as a whole.

The following information provides a synopsis of these comments, by section. A composite list of identified strengths and weaknesses, respondent suggestions for program modification, and their recommendations to the department are found in Appendix E. Both the information from analysis of the written comments and statistical data were used to formulate recommendations to the department.

Adult/Vocational Education Alumnae/alumni and students from this section are most positive about quality of faculty and courses. Their concerns are for the number of faculty, limited course offerings, and career assistance. They suggest increasing number of professors and class offerings.

Counselor Education Graduates and students from this area of specialization were most positive about the quality of faculty and students, course variety, and class size. They are concerned about limited practical experience, quality of instruction, lack of faculty collegiality, and course content. The suggestions are for adding women to the staff, more frequent scheduling of classes, and increased cooperative efforts on the part of faculty.

Educational Administration Respondents for this section are most positive about professor expertise, enrichment activities, curriculum, and rapport within section. They expressed concern for limited faculty, lack of specific information, limited field training, quality of instruction, and practical application of knowledge. Suggestions for Education Administration are to increase orientation, provide information packet, add staff, improve instruction, and provide more field experience.

Curriculum and Instructional Technology Positive comments from students and graduates of this section were for subject matter, competent faculty, and faculty/student relations. Needs of the section are for more specialization, increased course offerings, and up-dating technology and equipment. Suggestions made by the respondents are to diversify and deepen course offerings, include more curriculum development, investigate optical media, and broaden Instructional T.V.

Elementary/Special Education The strengths most often mentioned for these sections are the off-campus offerings, class size, and quality of faculty/students. Graduates and students expressed concern for infrequent course offerings, class presentations by students, repetition, and advising. They suggested greater emphasis on teaching strategies, more science education, more teaching and practicum sites, and attention to both elementary and secondary instruction.

Higher Education Students and alumnae/alumni from Higher Education were most positive about the teaching/learning/application process of instruction, relevance of course work, student/faculty interaction and rapport, and faculty involvement with professional organizations. Respondents are concerned about the limited number of professors, 2-hour courses, academic advising, information to students, limited staff diversity, and limited training in finance/budgeting. They suggest the section employ a wider, more diverse faculty; provide an information packet; improve mentoring and academic advising; and offer a thesis seminar.

Comparative Studies/Research The identified strengths for these sections are flexibility, sequence/relevance of course work, and quality of instruction. Graduates and students are concerned about duplication of material, lack of advanced statistics, frequency of course offerings, quality of students, and variety of courses. They suggest the sections consider rotating staff teaching assignments, include more variety in course offerings, and raise entrance standards.

Discussion

The results of this study provide important information to departmental decision-makers and interesting comparisons to previous studies. Data which indicate males and older subjects are generally more satisfied with quality of graduate programs concur with findings of previous departmental studies. It is suggested that the variables of age and gender be carefully considered when developing plans for program change. This consideration is especially important for those sections which enroll a large number of younger, female students.

This study of alumnae/alumni satisfaction with the department, and the previous study of this population, concur that those graduates who hold a Ph.D. degree were, overall, more satisfied than those with M.A./M.S. or M.Ed. degrees. This difference could be attributed to the age of Ph.D. students, who are usually older than those seeking other degrees. The stronger relationship with major professor and smaller class size may also, impact the significance of this variable.

Surprisingly, having an assistantship is not found to be a significant determinant for satisfaction with the department. A need for a concentrated effort to develop "community" for graduate assistants may be indicated for this variable. Data on choice of writing option, though not significant at .05, did indicate those writing a thesis or dissertation were more satisfied than those who chose to write a creative component. This finding may also, be tied to gender and age differences.

The differences in the current findings, as compared to those reported by the previous departmental studies, may be explained by the fact that the items in the original studies did not uniquely load on one factor which resulted in higher correlations among factor scores. In an attempt to improve clarification and readability, minor changes were made in wording and some items added to the present questionnaire. These changes could have had an impact on the data. To achieve stability in factor analysis a sample of at least 300 is needed. Therefore, the number of respondents could have influenced the data. Another possible explanation is that actual changes in the level of satisfaction have occurred.

The previous studies of the department represent a combined sample of 538 subjects, the current study 417. These numbers appear to be sufficient to gain a relative degree of stability in factor analysis. The changes in wording and items, on the questionnaire used for the current study, were minimal and did not alter the intent of questions. Therefore, those findings which indicate positive growth in satisfaction with the

department are assumed to be reflective of improvement efforts implemented in response to information obtained in the last departmental review.

As discussed in the summary comments for Hypothesis 1, 2, 5, and 6 the factors of quality of graduate programs, admission standards, and enrichment activities were common areas of differences for both students and graduates. The written comments reflect concerns in these areas and suggestions to increase course offerings were common. Certainly, available faculty determines the number of courses that can be offered and may be a factor in overall program quality. It appears that plans for modification and/or revision of programming should begin with a careful analysis of the current level of quality in these areas.

There is an increased representation of females in the student body. However, these women have few gender role models represented on the faculty. Gilligan (1982), Schlossberg et al. (1989), Chickering (1981), have identified what they believe to be differences in how females and males perceive relationships and respond to climate. Therefore, it would seem appropriate that an effort be made to increase the number of women faculty.

Minority students also, need the benefit of role models. The work of Fleming (1984) clearly outlines the experiences of black students on predominantly white campuses. Magner (1989) discusses the unique problems encountered by minority graduate students. Both authors suggest the absence of minority role models, to act as mentors, is common to most large universities. The Department of Professional Studies in Education at Iowa State University is no exception. This study presents information

which indicates a need to place a priority on hiring women and minority faculty members.

Recommendations

Recommendations for the Department of Professional Studies

1. There appears to be a pressing need for a more comprehensive information delivery system. Therefore, it is recommended that a method of delivery be implemented which will clarify requirements and continuously inform students of course offerings and/or changes, procedures, deadlines, and social/enrichment activities. In order to assure contact with all graduate students, the system of information delivery must cross section boundaries.
2. An effort should be made to increase career development and employment assistance to students. It is recommended that a study be made to determine the most efficient method to deliver this service. At a minimum, plans should be implemented to insure all students are informed of services available to them through the placement office.
3. The problems of faculty over-load, academic advising, limited course offerings, and mentoring can be lessened with increased staff or by limiting the number of students accepted into programs. It is recommended that the Department of Professional Studies in Education intensify efforts to provide funding for the employment of additional staff, with priority emphasis on hiring women and minority personnel.

4. There is a need to strengthen the sense of "community" within the department. This can be achieved by decreasing fragmentation and increasing student to student and student to faculty interaction. It is recommended that a department-wide schedule of seminars, enrichment activities, fireside chats, and social events be planned on a year-to-year basis and that this schedule be included in an information packet to all graduate students.
5. Increased efforts, designed to meet the needs of female and younger students, are necessary. It is recommended that a committee be established to review the most current research concerning gender and age differences in student needs and departmental training be conducted to update staff expertise on these issues.
6. There is evidence of alumnae/alumni and student concern for program quality, admission procedures, and student assistance efforts. It is recommended that an in-depth study be conducted to determine level of quality on these factors and specific plans be developed for improvement.
7. It is suggested that current recommendations, which duplicate those from previous studies, be given priority in departmental planning.

Recommendations for further research

1. It is recommended that this study be replicated, within the next five years, and that new findings be compared to those of all previous studies.

2. It is suggested that each section conduct an in-depth study of student and alumnae/alumni satisfaction and that these findings, when compared with those reported in departmental review, be used to provide direction for program modification.

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I greatly appreciate the financial support provided this project by the Department of Professional Studies, the Iowa State University Graduate Office, and the Research Institute for Studies in Education. I appreciate approval to conduct this study granted by the Iowa State University Committee for use of Human Subjects in Research.

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**APPENDIX A. ALUMNAE/ALUMNI INTRODUCTORY
LETTER AND QUESTIONNAIRE**

Dear Graduate,

The Department of Professional Studies in Education would like your assistance in replicating a follow-up study of alumnae/alumni satisfaction and perceptions of programs. We plan to replicate the follow-up study of 1980-1985 graduates which was completed in 1987.

Specifically the objectives of this study are:

1. To examine the degree of satisfaction with elements in programs of study.
2. To examine the degree of current job satisfaction.
3. To examine demographic data of students.
4. To make recommendations for program revision.

You have been selected to participate in this evaluation because you earned a M.S. and/or Ph.D. degree after 1985, at Iowa State University, in one of the following programs of study: Adult and Extension Ed., Counselor Ed., Curriculum and Instructional Technology, Educational Administration, Elementary Ed., Higher Ed., Historical, Philosophical, and Comparative Studies, Research and Evaluation, Special Ed., or Vocational Ed.

No identifying information is requested as your response to this questionnaire is strictly confidential. Only group data from this survey will be analyzed and compared with the data as reported in the 1987 study. We are particularly desirous of obtaining your responses as they will provide essential information for possible program revision. We hope you will take time to help us with this effort.

We would appreciate your returning the questionnaire within the next two weeks. Other phases of this research cannot be carried out until the analysis of the survey data is completed. A reminder letter will be sent in three weeks. We welcome questions or comments concerning any aspect of your program of study not covered in the instrument. We would be pleased to make a summary of the survey results available to you if you desire.

If there is any way we can be of service to you in your work, do not hesitate to contact us. Thank you for your anticipated assistance in this study.

Sincerely,

Larry H. Ebbers
Professor and Chair
Professional Studies
in Education

Richard D. Warren
Director
Research Institute for
Studies in Education

5. Have you completed a graduate degree at another institution since obtaining your degree at ISU?
- No other graduate degree
 - M.Ed.
 - M.S.
 - Ph.D.
 - Other
(specify) _____
6. Which of the following options was selected to satisfy the requirements for your last degree at ISU?
- Thesis
 - Creative Component
 - Dissertation
 - Other
(specify) _____
7. Where was the majority (over 50%) of the course work for your last degree at ISU completed?
- On campus
 - Off campus
8. Did you have a graduate assistantship?
- No assistantship
 - Teaching assistantship
 - Research assistantship
 - Student Affairs-general
 - Student Affairs-Residence Halls
 - Other _____
9. Did you receive certification as a result of your last degree in the Department of Professional Studies?
- Yes
 - No
- If yes, please specify _____
10. Would you recommend your area of specialization in the Department of Professional Studies at ISU to others?
- Highly
 - Somewhat
 - Very little
 - Not at all

11. How would you classify your place of employment?

- a. Federal Government
 - b. State Government
 - c. Industry/Business
 - d. University
 - e. 4-year College
 - f. 2-year/Community College
 - g. Intermediate Service Agency (AEA, etc.)
 - h. Local School District
 - i. Self-employed
 - j. Other
- (specify) _____

12. What is your current job title? _____

13. How satisfied are you with the following factors as related to your current employment? Please respond by listing one number in front of each item using the following scale.

5	4	3	2	1	0
Highly Satisfied	Satisfied	Undecided	Dissatisfied	Highly Dissatisfied	Not Applicable

- ____ a. Salary
- ____ b. General working conditions
- ____ c. Amount of administrative support
- ____ d. Relationship with co-workers
- ____ e. Degree of involvement in decision making
- ____ f. Level of professional challenge and opportunity for growth
- ____ g. Opportunity for advancement
- ____ h. Involvement with professional associations

14. In your present position to what extent have you utilized the elements of your program for the last graduate degree you received in the Department of Professional Studies at ISU?

- a. A great deal
- b. Somewhat
- c. Very little
- d. Not at all

15. What is your marital status?

- a. Single
- b. Married
- c. Divorced
- d. Other _____

16. What is your age?
 - a. 20-30
 - b. 31-40
 - c. 41-50
 - d. Over 50

17. What is your gender?
 - a. Female
 - b. Male

18. What is your ethnic/racial background?
(International alumni circle "a" only).
 - a. International alumni
 - b. Asian American
 - c. African/Black American
 - d. Hispanic American
 - e. Native American
 - f. White American
 - g. Other (specify) _____

Part II: Department of Professional Studies: Specific Information.

The purpose of Part II is to evaluate your program experiences in the Department of Professional Studies.

Section 1 is your evaluation of the specific area of specialization in which you received your graduate degree (e.g., Adult Education, Higher Education, Elementary Education, etc.).

Section 2 is your evaluation of courses which were a part of your program of study taken in the Department of Professional Studies, but outside of your section.

Section 3 is your overall evaluation of the Department of Professional Studies.

Please respond by listing one number in front of each question using the following scale:

5	4	3	2	1	0
Highly Satisfied	Satisfied	Undecided	Dissatisfied	Highly Dissatisfied	Not Applicable

Section 1: Department of Professional Studies: Specific Area Specialization.

____ 19. Admission standards in your section.

- | 5 | 4 | 3 | 2 | 1 | 0 |
|------------------|-----------|-----------|--------------|---------------------|----------------|
| Highly Satisfied | Satisfied | Undecided | Dissatisfied | Highly Dissatisfied | Not Applicable |
- ____ 20. Admission procedures in your section.
 ____ 21. Orientation of students to the section.
 ____ 22. Extent to which you were challenged by course work in the section.
 ____ 23. Extent to which your section provided well-integrated courses.
 ____ 24. Variety of course offerings in your section.
 ____ 25. Number of required courses in the graduate program of your section.
 ____ 26. Relevance of course work in your section to future employment.
 ____ 27. Class size in your section.
 ____ 28. Opportunity to communicate with faculty in the classroom, regarding student needs, concerns, and suggestions within your section.
 ____ 29. Quality of instruction in your section.
 ____ 30. Faculty sensitivity to diverse ethnic/racial backgrounds within the section.
 ____ 31. Faculty teaching ability in your section.
 ____ 32. Usefulness of texts and instructional materials as learning tools within your section.
 ____ 33. Evaluation procedures in the section (e.g., percent of grade based on tests, papers, discussion, etc.).
 ____ 34. Enrichment activities provided by the section in addition to regular classes (e.g., seminars, colloquia, social events, etc.).
 ____ 35. Balance between attention to writing (e.g., dissertation, thesis, or creative component) and course work in your section.
 ____ 36. Contact with faculty from your section outside of the classroom.

5	4	3	2	1	0
Highly Satisfied	Satisfied	Undecided	Dissatisfied	Highly Dissatisfied	Not Applicable

- ____ 37. Quality of career development assistance in your section.
- ____ 38. Quality of academic advising in the section.
- ____ 39. Availability of major professor.
- ____ 40. Relationship between you and your major professor.
- ____ 41. Length of time required to complete the program in the section.
- ____ 42. Extent to which you regarded the graduate program in the section as worthwhile.
- ____ 43. Overall satisfaction with the graduate program in your section.
- ____ 44. Your treatment as a student in the section.
- ____ 45. Quality of students in your area of specialization.
- ____ 46. Courses taken in your section led to a sound theoretical framework.
47. What were the strengths of your section?
- a.
 - b.
 - c.
48. What were the weaknesses of your section?
- a.
 - b.
 - c.
49. How did the section fail to meet your expectations?
- a.
 - b.
 - c.
50. What changes would you suggest for your section in courses, curriculum, procedures, or staffing?
- a.
 - b.
 - c.

Section II: Department of Professional Studies: Courses Outside Section.

5	4	3	2	1	0
Highly Satisfied	Satisfied	Undecided	Dissatisfied	Highly Dissatisfied	Not Applicable

- ___ 51. Extent to which you were challenged by course work outside of your section but in the department.
- ___ 52. Courses outside of section provided a well-integrated program.
- ___ 53. Number of courses required outside of section.
- ___ 54. Variety of course offerings in the department outside your section.
- ___ 55. Class size outside of section, in the department.
- ___ 56. Teaching ability of faculty outside of section, in the department.
- ___ 57. Quality of instruction in classes outside of section, in the professional studies department.
- ___ 58. Usefulness of texts and instructional materials as learning tools in courses outside the section.
- ___ 59. Evaluation procedures used outside the section.
- ___ 60. Opportunity to communicate with faculty in the classroom regarding student needs, concerns, and suggestions in the department, outside your section.
- ___ 61. Contact with faculty outside of classroom in the department.
- ___ 62. Courses taken in the department, outside your section, led to a sound theoretical framework.
63. What were the strengths of the courses taken outside your section, in the department?
- a.
 - b.
 - c.

64. What were the weaknesses of the courses taken outside your section, in the department?

- a.
- b.
- c.

Section III: The Department of Professional Studies: Related Activities.

- | 5 | 4 | 3 | 2 | 1 | 0 |
|------------------|-----------|-----------|--------------|---------------------|----------------|
| Highly Satisfied | Satisfied | Undecided | Dissatisfied | Highly Dissatisfied | Not Applicable |
- ___ 65. Registration procedures.
 - ___ 66. Availability of courses during summer school.
 - ___ 67. Enrichment activities offered by the department in addition to regular classes.
 - ___ 68. Quality of career development assistance.
 - ___ 69. Usefulness of program of study committee.
 - ___ 70. Size of program of study committee.
 - ___ 71. Departmental support staff (secretaries, etc.).
 - ___ 72. Research Institute for Studies in Education (R.I.S.E.) support services.
 - ___ 73. Instructional Resource Center (I.R.C.) support services.
 - ___ 74. Microcomputer Laboratory support services.
 - ___ 75. University Library support services.
 - ___ 76. Financial support available within the department.
 - ___ 77. Overall satisfaction with preliminary written examinations as a learning experience (Ph.D. only).
 - ___ 78. Overall satisfaction with preliminary oral examinations as a learning experience (Ph.D. only).
 - ___ 79. Procedures followed for conducting final oral examination.
 - ___ 80. Departmental attention to providing students with necessary credentials for obtaining employment after graduation.

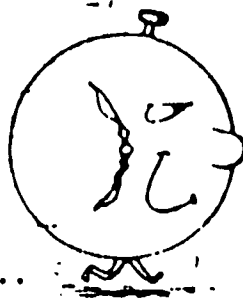
81. How did the department fail to meet your expectations?
 - a.
 - b.
 - c.

82. What changes would you suggest for the department in courses, curriculum, procedures, or staffing?
 - a.
 - b.
 - c.

If you have any additional comments about your program of study in the Department of Professional Studies at Iowa State University, please use the space below.

The Department of Professional Studies and the Research Institute for Studies in Education appreciate the time you have taken to complete this questionnaire. Postage for the questionnaire is prepaid, so all you need do is tape it and drop it in the mail. Thank you.

APPENDIX B. ALUMNAE/ALUMNI REMINDER POSTCARD



Time is running out....

Remember the...

College of Education
Department of Professional Studies
Alumnea/Alumni Questionnaire

If you have mailed it, THANKS! If not, PLEASE!
Information from you is important!
Need another one? Please call (515) 294-4143.

APPENDIX C. FACULTY MEMORANDUM

MEMORANDUM

TO: Faculty, Department of Professional Studies
FROM: Larry Ebbers
RE: Questionnaire Distribution
DATE: April 10, 1985

Documentation for the NCATE review must include evidence of survey information on current graduate students and alumnae/alumni of the department. In order to update our files, we are gathering data to replicate departmental studies of these two populations. Shirley Henry is working with me on this project and will be using selected portions of it for her dissertation.

We need your help in collecting the data. Please pass out the enclosed questionnaires and answer sheets to your students. We would appreciate your allowing sufficient time, in class, for the completion of the questionnaires on the day they are distributed.

Instruct your students to cross their names off the enclosed class list as they return the materials. This will enable us to contact those students who have not completed the evaluation. Please return the completed questionnaires, answer sheets, and student list to my office.

I realize that preparation for the required NCATE review entails a great deal of work for all of us. I sincerely appreciate all of your efforts including your assistance with this documentation.

Thanks.

**APPENDIX D. STUDENT INTRODUCTORY LETTER
AND QUESTIONNAIRE**

Dear Graduate Student,

The Department of Professional Studies in Education would like your assistance in replicating a study of graduate student satisfaction and perceptions of programs. The study to be replicated was completed in 1986.

Specifically the objectives of this study are:

1. To examine the degree of satisfaction with elements in programs of study.
2. To examine the degree of current job satisfaction.
3. To examine demographic data of students.
4. To make recommendations for program revision.

You have been selected to participate because you are a M.S. and/or Ph.D. student enrolled in one of the following programs of study at Iowa State University, spring semester, 1989: Adult and Extension Ed., Counselor Ed., Curriculum and Instructional Technology, Educational Administration, Elementary Ed., Higher Ed., Historical, Philosophical, and Comparative Studies, Research and Evaluation, Special Ed., or Vocational Ed.

No identifying information is requested as your response to this questionnaire is strictly confidential. Only group data from this survey will be compared with the data as reported in the 1986 study. WE ARE PARTICULARLY DESIROUS OF OBTAINING YOUR RESPONSES AS THEY WILL PROVIDE ESSENTIAL INFORMATION FOR POSSIBLE PROGRAM REVISION. We hope you will take time to help us with this effort.

IF YOU DO NOT COMPLETE THE QUESTIONNAIRE IN CLASS, PLEASE RETURN YOUR COMPLETED FORM AT THE NEXT CLASS SESSION OR TO MARJORIE SMITH, N242 LAGOMARCINO. Other phases of this research cannot be carried out until the analysis of the survey data is completed. Questions or comments concerning any aspect of your program of study are welcome. We would be pleased to make a summary of the survey results available to you if you desire.

If there is any way we can more effectively serve you please do not hesitate to contact us. Thank you for your anticipated assistance in this study.

Sincerely,

Larry H. Ebbers
Professor and Chair
Professional Studies
in Education

Richard D. Warren
Director
Research Institute for
Studies in Education

COLLEGE OF EDUCATION
DEPARTMENT OF PROFESSIONAL STUDIES
GRADUATE STUDENT QUESTIONNAIRE

PLEASE USE A #2 PENCIL TO FILL IN THE APPROPRIATE CIRCLES ON THE ATTACHED ANSWER SHEET. ANSWER ALL ITEMS REQUIRING A WRITTEN RESPONSE DIRECTLY ON THE QUESTIONNAIRE.

ONLY ONE DOCUMENT PER STUDENT IS NEEDED. PLEASE DO NOT COMPLETE THIS FORM IF YOU HAVE ALREADY DONE SO.

PART I: Demographic Information.

1. What is your present graduate degree area of specialization within the Department of Professional Studies at ISU?
 - A. Adult and Extension Education
 - B. Counselor Education
 - C. Curriculum and Instructional Technology
 - D. Educational Administration
 - E. Elementary Education
 - F. Higher Education
 - G. Historical, Philosophical, and Comparative Studies
 - H. Research and Evaluation
 - I. Special Education
 - J. Vocational Education
 - Other (Please specify) _____

2. Which of the following options will you complete to satisfy the requirements for your degree at ISU?
 - A. Thesis
 - B. Creative Component
 - C. Dissertation
 - Other (specify) _____

3. Where are you taking the majority (over 50%) of your courses at ISU?
 - A. On campus
 - B. Off campus

4. Do you have a graduate assistantship?
 - A. No assistantship
 - B. Teaching assistantship
 - C. Research assistantship
 - D. Student Affairs-general
 - E. Student Affairs-Residence Halls
 - Other _____

5. Will you receive certification as a result of your present degree work in the Department of Professional Studies?
 A. Yes Please specify _____
 B. No
6. Would you recommend your area of specialization in the Department of Professional Studies at ISU to others?
 A. Highly
 B. Somewhat
 C. Very little
 D. Not at all
7. Which, if any, of the following graduate degrees did you complete at another institution before starting your degree in the Department of Professional Studies?
 A. No other graduate degree
 B. M.Ed.
 C. M.S.
 D. Ph.D.
 E. Ed.D.
 Other (specify) _____
8. What is the highest graduate degree you have completed in the Department of Professional Studies at ISU?
 A. M.Ed.
 B. M.S.
 C. Ph.D.
 D. Not applicable
- If you completed a previous graduate degree at ISU in the Department of Professional Studies when did you enroll for the degree _____, receive the degree _____
 (date) (date)
9. What is your ethnic/racial background?
 (International students use "a" only).
 A. International student
 B. Asian American
 C. African/Black American
 D. Hispanic American
 E. Native American
 F. White American
 Other (specify) _____
10. What is your marital status?
 A. Single
 B. Married
 C. Divorced
 Other _____

11. What is your age?
 A. 20-30
 B. 31-40
 C. 41-50
 D. Over 50
12. What is your gender?
 A. Female
 B. Male
13. Are you currently employed?
 A. Yes
 B. No
14. If you are employed how would you classify your place of employment?
 A. Federal Government
 B. State Government
 C. Industry/Business
 D. University
 E. 4-year College
 F. 2-year/Community College
 G. Intermediate Service Agency (AEA, etc.)
 H. Local School District
 I. Self-employed
 J. Not applicable
 Other (specify) _____
 What is your current job title?

15. In your present employment, to what extent do you utilize the elements of your program of study from the last graduate degree you received in the Department of Professional Studies at ISU?
 A. A great deal
 B. Somewhat
 C. Very little
 D. Not at all
 E. Not applicable

If employed, how satisfied are you with the following factors as related to your employment? (Please respond by filling in the appropriate circle on the answer sheet, using the following scale):

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

16. Current salary
17. Current general working conditions

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

18. Current amount of administrative support
19. Current relationship with co-workers
20. Current degree of involvement in decision making
21. Current level of professional challenge and opportunity for growth
22. Current opportunity for advancement
23. Current involvement with professional associations

PART II: Department of Professional Studies: Specific Information.

The purpose of Part II is to evaluate your program experience in the Department of Professional Studies.

Section 1 is your evaluation of the specific area of specialization in which you are currently enrolled (e.g., Adult Education, Education Administration, Elementary Education, etc.).

Section 2 is your evaluation of courses which are a part of your program of study taken in the department, but outside of your section.

Section 3 is your overall evaluation of the Department of Professional Studies.

Section 1: Department of Professional Studies: Specific Area of Specialization.

How satisfied are you with the following items? (Please respond by filling in the appropriate circle on the answer sheet, using the following scale):

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

24. Admission standards in your section.
25. Admission procedures in your section.
26. Orientation of students to the section.
27. Extent to which you are challenged by the course work in the section.

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

28. Extent to which your section provides well-integrated courses.
29. Variety of course offerings in your section.
30. Number of required courses in the graduate program of your section.
31. Relevance of course work in your section to future employment.
32. Class size in your section.
33. Opportunity to communicate with faculty in the classroom regarding student needs, concerns, and suggestions in your section.
34. Quality of instruction in your section.
35. Sensitivity of faculty to diverse ethnic/racial backgrounds within the section.
36. Teaching ability of faculty in your section.
37. Usefulness of texts and instructional materials as learning tools in courses within the section.
38. Evaluation procedures used in the section (e.g., percent of grade based on tests, papers, discussion, etc.).
39. Enrichment activities provided by the section in addition to regular classes (e.g., seminars, colloquia, social events, etc.).
40. Balance between attention to writing (e.g., dissertation, thesis, or creative component) and course work in your section.
41. Contact with faculty from your section outside of the classroom.
42. Quality of career development assistance in your section.
43. Quality of academic advising in the section.
44. Availability of major professor.
45. Relationship between you and your major professor.
46. Length of time required to complete the program in your section.

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

- 47. Extent to which you regard the graduate program in your section as worthwhile.
- 48. Overall satisfaction with the graduate program in your section.
- 49. Quality of treatment you experience as a student in your section.
- 50. Quality of students in your area of specialization.
- 51. Extent to which courses taken in your section lead to a sound theoretical framework.

(Please write your responses directly below the following questions).

What are the strengths of your section?

What are the weaknesses of your section?

In what ways is your section meeting, or failing to meet, your expectations?

What changes would you suggest for your section in courses, curriculum, procedures, or staffing?

Section 2: Department of Professional Studies: Courses Outside Section.

How satisfied are you with the following items? (Please respond by filling in the appropriate circle on the answer sheet, using the following scale):

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

- 52. Extent to which you are challenged by course work outside of your section but in the department.
- 53. Extent to which courses outside of section provide a well-integrated program.

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

54. Number of courses required outside of section.
55. Variety of course offerings in the department, outside your section.
56. Extent to which courses taken in the department, outside of your section, lead to a sound theoretical framework.
57. Class size outside of section, in the department.
58. Teaching ability of faculty outside of section, in the department.
59. Quality of instruction in classes outside of section, in the professional studies department.
60. Usefulness of texts and instructional materials as learning tools in courses outside of section.
61. Evaluation procedures used in courses outside of section.
62. Opportunity to communicate with faculty in the classroom regarding student needs, concerns, and suggestions in the department, outside your section.
63. Contact with faculty outside of classroom, in the department.

(Please write your responses directly below the following questions).

What are the strengths of the courses taken outside your section, in the department?

What are the weaknesses of the courses taken outside your section, in the department?

Section 3: The Department of Professional Studies: Related Activities.

How satisfied are you with the following items? (Please respond by filling in the appropriate circle on the answer sheet, using the following scale):

1	2	3	4	5	6
HIGHLY DISSATISFIED	DISSATISFIED	UNDECIDED	SATISFIED	HIGHLY SATISFIED	NOT APPLICABLE

64. Registration procedures in the department.
65. Availability of courses during summer school.
66. Enrichment activities offered by the department in addition to regular classes.
67. Quality of career development assistance in the department.
68. Usefulness of program of study committee.
69. Size of program of study committee.
70. Department support staff (secretaries, etc.).
71. Research Institute for Studies in Education (R.I.S.E.) support services.
72. Instructional Resource Center (I.R.C.) support services.
73. Microcomputer Laboratory support services.
74. University Library support services.
75. Financial support available within the department.
76. Overall satisfaction with preliminary written examinations as a learning experience (Ph.D. only).
77. Overall satisfaction with preliminary oral examinations as a learning experience (Ph.D. only).
78. Procedures followed for conducting final oral examination.

(Please write your responses directly below the following questions).

In what ways is the department meeting, or failing to meet, your expectations?

What changes would you suggest for the department in courses, curriculum, procedures, or staffing?

**APPENDIX E. SUMMARY OF RESPONDENT COMMENTS
BY SECTION**

Summary of Respondent Comments by Section

Adult/Vocational EducationStrengths

- * quality of professors
- * diversity of students
- * personalized instruction
- * flexibility
- * convenient off-campus program
- * attention to student needs
- * availability of off-campus courses
- * applicability of instruction to world-of-work
- * program flexibility

Weaknesses

- * lack of career development and placement assistance
- * few professors, resulting in over-load for existing faculty
- * teaching
- * limited number of courses offered at one time
- * lack of contact with faculty out of class

Suggestions

- * Increase staff
- * Increase course offerings

Counselor EducationStrengths

- * variety of course
- * small classes
- * sound theoretical base
- * personal contact with faculty
- * flexibility
- * practical knowledge-base
- * quality of faculty and students
- * sensitivity to needs of commuting and working students
- * networking

Weaknesses

- * scheduling of course
- * lack of emphasis on community counseling
- * some unprofessional behavior
- * poor instruction
- * availability of courses
- * examination procedures
- * limited practical experience
- * limited faculty - need female representation
- * lack of collegiality and cooperative efforts on the part of faculty

Suggestions

- * offer course more frequently
- * provide more counseling experiences
- * develop 3 hour courses
- * teach practical use of theory taught
- * offer more seminars on current problems
- * hire additional staff, especially women
- * eliminate faculty in-fighting, students are placed in the middle

Curriculum and Instructional TechnologyStrengths

- * faculty competent and knowledgeable
- * appropriate subject matter
- * good advising
- * practical experience
- * facilities
- * faculty/student relationships

Weaknesses

- * not enough specialization
- * too much emphasis on media vs instruction technology
- * lack of job placement assistance
- * ambiguity in class direction
- * limited course offerings
- * out-of-date technology and equipment
- * need more software development

Suggestions

- * include more development of curriculum materials
- * include instructional design for industry
- * investigate options in instructional T.V. and optical media
- * diversify and deepen course offerings

Educational AdministrationStrengths

- * expertise of professors
- * enrichment activities with specialists in the field
- * well-balanced curriculum
- * focus on current trends
- * relevant instruction
- * peer rapport
- * quality of instruction
- * individual attention afforded students
- * research

Weaknesses

- * work in curriculum development
- * career development and placement assistance
- * advising
- * favoritism

- * information on course content and requirements
- * some instruction is weak
- * information on POS committee and examination requirements
- * number of staff - no minorities or women
- * field training and practical application of knowledge
- * information for new students

Suggestions

- * supply more information of career opportunities
- * add more staff
- * increase orientation efforts
- * develop student information packet
- * provide more practical training in field
- * improve instruction and teaching strategies
- * hire more faculty - women, minorities

Elementary/Special Education

Strengths

- * communication between professors and students
- * variety of courses
- * supportive, well-informed faculty
- * faculty responsive to student needs
- * small classes
- * off-campus class offerings

Weaknesses

- * courses offered infrequently
- * courses too general
- * student projects used as class instruction
- * repetition of course content
- * lack of integration of course work
- * no stated guidelines for writing requirements
- * poor advising
- * creative component organization
- * curriculum development

Suggestions

- * develop stronger courses with greater emphasis on teaching strategies
- * include more courses in science education
- * offer more enrichment activities
- * diversify program to include elementary and secondary needs
- * identify more student teaching and practicum sites
- * provide for application of research

Higher Education

Strengths

- * teaching/learning/application process in classes
- * flexibility
- * highly qualified and "connected" faculty

- * advising
- * student input valued
- * graduate assistantships and practicum opportunities
- * student/faculty interaction and rapport
- * excellent instruction
- * relevant courses
- * number and diversity of students
- * active participation of faculty in student affairs and professional organizations

Weaknesses

- * too few professors
- * limited staff diversity
- * faculty over-extended
- * infrequency of course offerings
- * too many 2 hour courses
- * insufficient opportunity to interact with other doctoral students
- * lack of "community" for students
- * academic advising
- * no course offered on budgeting
- * some courses too ISU specific
- * some poor instruction

Suggestions

- * a thesis seminar first semester
- * standardized written preliminary examination procedures
- * employ a wider, more diverse faculty, especially women and minorities
- * provide student orientation
- * give more assistance in career development and job search
- * offer courses on regular semester basis
- * offer more evening classes
- * develop more opportunity for informal student/faculty interaction
- * develop method to communicate pertinent information
- * change some 2 hour courses to 3 hours
- * provide more staff to improve mentoring and advising

Comparative Studies/Research

Strengths

- * flexibility
- * quality of instruction
- * sequence of course
- * relevant course work
- * evaluation procedures
- * academic rigor of courses

Weaknesses

- * variety of courses
- * duplication of material
- * no advanced statistics
- * students who do not appear to be graduate material

- * frequency of course offerings
- * instructors teaching same course for years - some poorly

Suggestions

- * rotate staff teaching assignments
- * raise entrance standards
- * introduce an advanced statistics course
- * include more variety in courses offered
- * more practical course work on planning research

Department of Professional Studies

Suggestions

- * increase efforts to develop support group for graduate students
- * increase faculty - need women and minority representation
- * create orientation program
- * develop newsletter to students which clearly identifies procedures, requirements, and dead lines
- * offer more 3 hour courses
- * improve parking system for evening students
- * improve faculty cooperation within sections
- * offer more summer courses
- * provide clearer instructions to Ph.D. students on preliminary examinations
- * offer more student financial assistance
- * increase efforts in considering the needs of evening and commuting students
- * increase information on career opportunities
- * offer faculty/student meeting or reception at beginning of academic year
- * establish a student study/meeting room
- * expect teaching excellence and see that it happens
- * standardize admission procedures
- * coordinate and increase communication with part-time and older students concerning course offerings and/or changes, special events, resources, and services provided
- * investigate possibility of changing residency requirements to accommodate employed student
- * review scheduling conflicts