IOWA STATE UNIVERSITY
Digital Repository

Retrospective Theses and Dissertations

Iowa State University Capstones, Theses and Dissertations

1987

Evaluation of professional studies degree programs by graduates 1980-1985

Chairit Photisuvan
Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd

Part of the Higher Education Administration Commons, and the Higher Education and Teaching Commons

INFORMATION TO USERS

While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. For example:

- Manuscript pages may have indistinct print. In such cases, the best available copy has been filmed.

- Manuscripts may not always be complete. In such cases, a note will indicate that it is not possible to obtain missing pages.

- Copyrighted material may have been removed from the manuscript. In such cases, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or as a 17"x 23" black and white photographic print.

Most photographs reproduce acceptably on positive microfilm or microfiche but lack the clarity on xerographic copies made from the microfilm. For an additional charge, 35mm slides of 6"x 9" black and white photographic prints are available for any photographs or illustrations that cannot be reproduced satisfactorily by xerography.

Evaluation of professional studies degree programs by graduates, 1980–1985

Photisuvan, Chairit, Ph.D.

Iowa State University, 1987

Evaluation of professional studies degree programs

by graduates 1980-1985

by

Chairit Photisuvan

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 (Adult and Extension Education)

Approved:

In Charge of Major Work

For the Major Department

For the Graduate College

Iowa State University
Ames, Iowa

1987

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1.   INTRODUCTION

To maintain and provide higher-quality academic
programs, especially, in a society that is characterized by
rapidity of social and cultural change, it is imperative for
higher education institutions to evaluate their academic
programs (Noel & Parsons, 1973).

In developing an evaluation process, it is necessary to
remember the most important purpose of evaluation. This
purpose of program evaluation is not to prove but to
improve. That is, evaluation should not be only an
instrument of accountability but a tool by which to help
make programs work better for the people they are intended
to serve (Stufflebeam, 1983).

To assess academic program quality, there are four
major ways of data collection but the most frequent form of
data collection is the program or departmental self-study.

Students and alumni ratings are useful information for
departmental self-rating. Opinions and perceptions of
students and graduates are unbiased and are valuable sources
of information (Startup, 1972; McAlduff, 1975; Centra,
1977). Furthermore, students and graduates are frank and
sincere in their assessments. They give praise where praise
is due (McAlduff, 1975). Russo, Brown and Rothweiler (1977)
believed that:

The act of asking questions of the graduate, drop-

outs, current students and faculty about goals, objectives, education process, and their relationship to each other causes each to pause to contemplate these matters. Specific program strengths and weaknesses are often identified. Curricular revisions have been initiated or expedited as a result of the review process...the follow-up of the graduate has been encouraged and is taking place in some departments for the first time. Questions and recommendations about academic quality and student flow have produced positive program revision (pp. 297-298).

Another study (Clark, Hartnett & Baird, 1976) revealed that the recent alumni have a better perspective about contents, procedures, and requirements of a program than do enrolled students and are more objective than faculty members. Moreover, in the survey of department heads at 134 institutions, Clark (1977) found that nearly 60% considered alumni ratings and opinions to be very important information in departmental use. However, only 40% indicated that evaluation information from alumni was available.

This study was designed to evaluate the graduate program of all sections in the Department of Professional Studies by graduates (alumni) from 1980-85. This study had a companion study of enrolled graduate students which was started in 1985 and completed in 1986 by Subah. Both questionnaires were similar with Subah (1986) adapting from this study.

Department of Professional Studies

The department of Professional Studies consisted of seven sections which included the following area of emphasis:

1. Adult and Extension Education

2. Curriculum and Instructional Media

3. Counselor Education

4. Educational Administration

5. Elementary Education

6. Higher Education

7. Historical, Philosophical and Comparative Studies in Education

Each area of emphasis is designated as a section with its own staff and curriculum except Elementary Education and Learning Disabilities. These two areas are administered primarily by the Department of Elementary Education. Therefore, the two areas are designated as affiliated programs, not considered as sections (Iowa State University, 1982).

The general goals of the Department are as follows (Iowa State University, 1982):

> (1) Conduct high quality graduate education programs, both on-campus and off-campus, for students 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

CHAPTER 2.   REVIEW OF LITERATURE

The review of literature was designed to look at the evaluation of educational programs by alumni. Since confusion about the definition of evaluation existed and there were many evaluation models, it was necessary to briefly review the definition of evaluation and the major evaluation models to provide appropriate background. The concept of decision-making evaluation and the CIPP Model were examined closely.

This review consisted of the following parts:

(1) definition of evaluation.

(2) major evaluation models.

(3) concept of decision-making evaluation.

(4) CIPP model.

(5) evaluation studies using alumni and students.

Definition of Evaluation

"Definitions are one of those things that are to live with and hard to live without" (Patton, 1982, p. 33). Patton believes that it is necessary to define terms in order to communicate and "...no single-sentence definition will suffice to fully capture the practice of evaluation" (Patton, 1982, p. 35).

Gephart (1981) defines evaluation in six different ways (1) classificatory: as a problem-solving strategy employed

for establishing the relative or absolute worth of various choices, (2) comparative: comparing evaluation to research, development, management and others, presenting similarities and differences with each, (3) operational: describing how an evaluation is conducted, from identification of decision to conducting evaluation through data collection and analysis to use of information, (4) componential: pointing out that evaluation includes a problem, a situation involving choices, worth of options, a context, a set of values etc. (5) ostensive: giving examples of evaluations, (6) synonym: including words as judgement and appraisal.

Then Gephart concludes that these six definitions are taken together to form his concept of evaluation (Gephart, 1981).

Besides the various ways of approaching the definition of evaluation by Gephart (1981), a review of literature showed that educators defined evaluation several ways and the differences arise largely from differing assumptions about why evaluation is conducted and what uses it serves. Then the different schools of thought have grown up from these definitions.

From the measurement movement in education in the 1920s and 1930s, evaluation was viewed as educational measurement (Thorndike and Hagen, 1969; Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman & Provas, 1971).

There is another school of thought, Patton (1982) calls
"The classic approach of Ralph Tyler". Tyler (1949) defines
evaluation as the process of determining the extent to which
the goals and objectives of a program are being attained.

Pace and Friedlander (1978) presents another school of
thought called "educational decision" model which has been
associated with the work of Alkin (1969) and Stufflebeam and
his associates (1971). This school of thought views
evaluation as a process of identifying and collecting
information to help decision makers choose among available
alternatives.

From literature reviewed, it is clear that there are
several ways to approach the definition of evaluation and
also there is no consensus of the definition among the
educators. However, in general, most approaches are
concerned with judgement of worth and merit but they differ
in the means they advocate (Pace et al., 1978).

Major Evaluation Models

To understand evaluation, beside examining the various
definitions, one should compare the numerous evaluation
models with one another. There are many possibilities for
comparison but House (1983) proposed "...the most
significant comparisons are those among the underlying
theoretical assumptions on which the model are based" (p.

45). He points out that evaluation models are based on variations in the assumptions of liberal ideology or the conceptions of liberal democracy.

House (1983, pp. 46-47) classified evaluation models into 8 major models.

1. System analysis. Variables are assumed to be quantifiable, e.g., test scores and differences in programs are related to variations in test scores. The data are often survey data and the outcome measures are related to the programs via correlation analyses.

2. Behavioral objectives. The objectives of a program are identified in terms of specific student performances which can be derived to specific student behaviors and measured by tests, either norm-referenced or criterion-referenced. Ralph Tyler was the originator of this model.

3. Decision making. The evaluations are structured by the decisions to be made. The evaluator is to supply information on these particular decisions. Data collecting methods can be questionnaires, interviews, and surveys. Stufflebeam was the originator.

4. Goal free. This model was developed to respond to the concern about bias in evaluation of Scriven. The evaluators are not informed of the prespecified objectives of the program. Hence the evaluator must search for all outcomes.

5. Art criticism. Educational critics evolve from the traditions of arts and literary criticism. House (1983, p. 46) concluded that a critic is "...one who is attuned by experience and training to judge the important facets of the educational program". Eisner is the leading figure.

6. Accreditation. House (1983) described the procedures as

> This is ordinarily done by a team of outside professionals who visit on-site. The local people have previously collected information and studied their program according to a set of external standards. The reviewers commend or disapprove of the local programs" (p. 46).

7. Adversary. This model employs quasi-legal procedures to present the pros and cons of a program. The model ensures the presentation of both sides.

8. Transaction. The educational processes are emphasized. Various informal methods of investigation are used. Stake is the leading figure (House, 1983, pp. 45-47).

Concept of Decision-Making Evaluation

It is widely accepted that evaluation should facilitate decision-making (Stufflebeam, 1983; Dressel, 1978; Alkin, 1969). Alkin (1969) views evaluation as

> the process of ascertaining the decision areas of concern, selecting and analyzing information in order to report summary data useful to decision makers in selecting among alternatives (p. 2).

This position is consistent with Stufflebeam (1969) who decided that the definition of evaluation, as determining whether objectives had been achieved, is too narrow for educators. Then Stufflebeam (1969) proposed to redefine the evaluation as the process of providing useful information for decision making.

As evaluation is viewed as a basis for decision making, it becomes necessary to examine the type of decisions to be made.

Dressel (1978) points out 4 areas of decisions.

1. Intended ends. This area concerns the alteration and clarification of objectives because some of the objectives may be unachievable within the existing situation.

2. Intended means. Clarification and refinement of processes are concern in this area.

3. Actual ends. Objectives may not be met and undesirable results may occur which need to be remedied or eliminated.

4. Actual means. This area concerns the alterations and adjustments which make the process used different from those intended.

From these four areas of decisions, Dressel (1978) purposes eight:

1. Affirmation of the status quo of the operating

patterns, of the goals, of the staff.

2. Reconsideration and possible redefinition of
   goals, purposes, objectives, or clients served.

3. Review and alteration of the means of process
   used.

4. Redefinition or possible reassignment of
   functions, duties, responsibilities, and pattern
   of performance.

5. Clarification or alteration of rules, standards
   and policies.

6. Reallocation of resources including staff and
   budget.

7. Reassignment of individuals or redefinition of
   role or alteration of organizational structure.

8. Reconsideration of priorities and ordering of
   activities (Dressel, 1978, pp. 12-14)

In the decision making approach, evaluation is
structured by type of decision to be made. Information,
usually from a questionnaire, interview and a survey, for
those decisions is supplied by the evaluation. This
approach concerns an effectiveness of the program. The
major proponents of the decision making evaluation are
Stufflebeam and Alkin (House, 1983).

Since the evaluation in this approach is structured by
type of decision, the evaluation must be planned in relation

to those decisions. Dressel (1978) believes that it is useful for the evaluator to answer the following series of questions:

> (1) what is to be evaluated ? (2) why is evaluation being done ? (3) what period of time is the evaluation to cover ? (4) who determines the goals, purposes, or objectives of the program ? (5) who determines the criteria or standards to be used ? (6) what criteria or standards to be employed ? (7) what are the possible decisions to be taken as a results of the evaluation ? (8) what are the steps and procedures are to be included in the evaluation ? (9) who will make the decisions after completion of the evaluation? (10) who will do the evaluation and how is this person relate to program staff and institutional administration ? (11) what conceptions, commitments, or prejudices exist, in either individuals or groups, which may complicate or interfere with an objective appraisal and consequent actions (pp. 14-15).

Dressel (1978) stated that an understanding of types of evaluation is helpful to answer these questions. Four types of evaluation were presented as (1) planning or developmental (2) input (3) process and (4) output.

According to Dressel, planning or developmental evaluation is to determine needs and to devise objectives to meet these needs. Input evaluation is to help make decisions on the utilization of resources to attain the program objectives. Process evaluation provides continuing or periodic feedback for alteration or review of the program planning or program operation. Output evaluation is to assess the attainment of those objectives.

These four types of evaluation proposed by Dressel (1978) are similar to those of Stufflebeam (1983) in the CIPP model which are context, input, process, product. CIPP model will be examined closely in the next sections.

Dressel (1978) found that the terms formative and summative have been widely used to describe type of evaluation. Dressel views summative evaluation as an evaluation that provides a basis for decisions regarding continuation, modification, termination, or replacement of a program while views formative as one providing a basis for formation and reformation of a program. Dressel also stated that planning, input, process and output evaluation can be regarded as both summative and formative. One example of his explanation is about output evaluation. To the extent that it is used for feed back, development of alternatives and improvement, it is formative, while it is summative to the extent that it is used for retaining, modifying, replacing or eliminating a program. From this point of view, Dressel (1978) believes "... summative and formative refer to the nature and finding of a decision than the role of evaluation" (p. 17).

CIPP Model

The CIPP model for evaluation was developed in the late 1960s among many models at that time which were oriented to objectives, testing, and experimental design. According to Stufflebeam (1983),

> The CIPP approach is based on the view that the most important purpose of evaluation is not to prove but to improve. It is a move against the view that evaluations should be witch hunts or only instruments of accountability (p. 118).

Patton (1978) and Cronbach and Associates (1980) also view evaluation consistently with Stufflebeam. Stufflebeam (1983) suggests the use of CIPP as:

> to promote growth and to help the responsible leadership and staff of an institution systematically to obtain and use feedback so as to excel in meeting important needs, or, at least, to do the best they can with the available resources (p. 118).

For a good understanding of the CIPP model, the development of this model, its overview, and its application will be presented.

Emergence of the CIPP model

Stufflebeam (1983) described the historical background of the CIPP model. Through the attempts to evaluate projects that had been funded through the Elementary and Secondary Education Act of 1965 (ESEA), CIPP was conceptualized. This Act provided billions of dollars to school districts throughout the United States for the

purpose of upgrading the system of elementary and secondary education. Educators were required to evaluate their funded projects. This requirement created a crisis since educators lacked evaluation training and experience. Moreover, there was no evaluation approach that matched the needs of the ESEA. The Ohio State University Evaluation Center was one of several agencies that tried to develop new ways of evaluating education and to provide training in these approaches. Through the work of this center, the CIPP model was first developed.

The center contracted with the Columbus, Ohio Public Schools to evaluate their Elementary and Secondary Education Act projects. The Columbus district sponsored the center to evaluate eight projects. The center staff employed the Tylerian evaluation approach to measure whether, the identified behavioral objectives of each project were met. Stufflebeam (1983) soon found that "... this approach was not adequate for evaluating the Columbus projects" (p. 119) since even after the project had started, the project staff could not agree on what specific objectives should be. Furthermore, "The assumption that educators knew or could easily determine what student behaviors should result from the projects was far from realistic" (p. 119).

Stufflebeam visited the project staff member and observed their activities, he found that

the activities within a given project were not
consistently across classrooms, and these
activities bore little resemblance to those that
had been described in the funding proposal (p.
120).

Therefore he decided that the educators needed a
broader definition of evaluation that aimed at managing and
improving the programs, then he purposed to redefine
evaluation as "...a process of providing useful information
for decision making" (p. 120). As a consequence,
Stufflebeam decided what types of decisions were needed at
that time, then derived appropriate evaluation strategies.
Since the projects were implemented and there were concerns
on the government's annual funding, Stufflebeam considered
there were two major decisions; implementation and recycling
and their evaluation; process and product, respectively
(Stufflebeam, 1983). After that the context evaluation for
planning decisions and input evaluation for structuring
decisions were proposed to fill gaps of the program
evaluation. So the basic framework of the CIPP model was
completed.

An overview of the CIPP model

Each type of evaluation is studied more closely in
terms of objectives and methods.

Context evaluation   According to Stufflebeam (1983),
the main objectives are

to assess the object's overall status, to identify

its deficiencies, to inventory the strengths at
hand that could be used to remedy the
deficiencies, and to diagnose problems whose
solution would improve the object's well-being. A
context evaluation also is aimed at examining
whether existing goals and priorities are attuned
to the needs of whoever is being served (p. 128).

Stufflebeam recommended using system analysis, survey,

document reviews, hearings, interviews, diagnostic tests,

and the Delphi technique.

Input evaluation   The main objectives are to help

the clients consider alternatives in the context of their

needs and environmental circumstance, to evolve a plan that

will work for them and to help clients avoid the wasteful

practice of pursuing proposed innovations that predictably

would fail or at least waste resources (Stufflebeam, 1983).

Methods used are inventorying and analyzing available

human and material resources, solution strategies and

procedural design for relevance, feasibility and economy.

Another recommended method is the using of advocate teams

(Stufflebeam, 1983).

Process evaluation   In general, process evaluation

is an ongoing check on the implementation of a plan. The

objectives are to provide feedback to manager and staff

about the implementation, to provide guidance for modifying

the plan as needed, to assess periodically the extent to

which program participants accept and are able to carry out

their roles, and to provide an extensive record of the

program that was actually implemented and how it compared to what was intended.

Methods used are monitoring the potential procedural barriers of the activity and remaining alert to unanticipated ones by obtaining specified information for programmed decisions and by continually interacting with and observing the activities of project staff (Stufflebeam, 1983).

<u>Product</u> <u>evaluation</u>   Objectives are to collect descriptions and judgements of outcomes, then relate them to objectives, context, input and process information, then interpret their worth and merit.

Recommended methods are (1) defining operationally criteria and measuring outcome criteria (2) collecting judgements of outcomes from stakeholders and (3) performing both qualitative and quantitative analyses (Stufflebeam, 1983).

<u>An application of CIPP model</u>

According to Stufflebeam (1983), The CIPP model was applied in many institutions; for example, the Southwest Regional Educational Laboratory in Austin, Texas; the National Center for Vocational and Technical Education; the U.S. Office of Education; and the school districts in Columbus, Toledo, Cincinnati, Ohio; Dallas, Fort Worth, Houston, and Austin, Texas; and Saginaw, Detroit, and

Lansing, Michigan.

The CIPP model was adapted by Randall (1969) of the Southwest Educational Development Laboratory. Randall's adapted model was called CDPP (context, design, process, and product evaluation). The major objective of his model is

> to maximize the effectiveness of critical
> decisions that are made in organization through
> the timely reporting of relevant information in a
> useful form to appropriate levels of decision
> making, in order to optimize planning and
> development activities (p. 40).

Randall (1969) emphasized that evaluation is the combination of effective decisions based on timely, relevant information. CDPP model focused on four decisions and is designed to yield four kinds of information. Four kinds of evaluation are context, design, process and product evaluation.

The CDPP model is similar to the CIPP model in general. Four decisions that Randall (1969) identified are (1) planning (2) structuring (3) restructuring and (4) recycling. It can be noted that Randall called the third kind of decision "restructuring" which Stufflebeam (1983) called it " implementation". Furthermore, Randall called the evaluation which served the structuring decision, "design" while Stufflebeam called it "input".

Randall (1969) also presented problems of applications of his CDPP model. Since CDPP model is based on the assumption that the most effective decisions are those based

on the best information to the decision makers in the time
that is available. Randall pointed out that in operation
this task posed some serious problems as follows (Randall,
1969):

1. Identifying decisions. Decisions that are faced
    are not always easily recognized since an
    evaluation system may bring new information in.
    It is recommended by Randall (1969) that "...the
    system must provide persons who are in contact
    with key decision-makers and are continually
    alert to decisions that will be faced" (p. 44).
    Another problem in identifying decisions is that
    decision criteria may change as time passes.
    Therefore the evaluation system must provide for
    a continual reassessment of criteria that may
    affect decisions.

2. Identifying decision-makers. Besides a final
    decision-maker, the decision process involves a
    complex network of persons who have varying
    degrees of influence on the final decision-maker.
    Hence the evaluation system "must identify the
    key persons involved in any strategic decision
    and make arrangement for getting necessary
    information to these people" (Randall, 1969, p.
    44).

3. Timing of decisions. The best information is no
use if it is not available when decisions based
on that information are made. Randall suggested
that "the system must respond to the time when
critical decisions will be made and yield the
information needed in time for it to be
considered" (p. 44).

4. Identifying relevant information. It is a duty
of the evaluator to make relevant information
understandable for a decision-maker since the
decision-maker who considers which information is
relevant will disregard a sophisticated one in
favor of a more understandable one (Randall,
1969).

5. Reporting in a useful form. Besides a concern
for degree of sophistication of information, it
is recommended by Randall (1969) to be concerned
for the degree of specificity of the information.
In other words, information should be in a useful
form for the decision-maker regarding terminology
and techniques used to present the information.

After all, Randall emphasized the importance of
communication. Besides the written communication,
"...visual and oral cues and face-to-face interaction" are
needed for more understanding (Randall, 1969).

It is obviously seen that Randall (1969) put a lot of effort in applying the CIPP model at an operational level with the emphasis of the two important components of his adapted model; CDPP (decisions and information to serve that decision).

Evaluation Studies Using Alumni and Students

To assess academic program quality, Clark (1983) briefly presented four major forms of data collection: the program or departmental self-study, assessing student learning, assessing faculty scholarship and reputational ratings. There are various methods; checklists, .questionnaires, and tests, that might be used in the assessment of educational quality (Dressel, 1978; Stauffer, 1981; Webster, 1981).

According to Clark (1983), The most frequent form of data collection is the program or departmental self-study. Stake (1976) stated that the self-study had a great value of keeping problem-solving responsibility at the site of the problem. The self-study processes help to improve the program and result in the institutions being more effective. Furthermore, self-study can improve openness of communication patterns and trust among staff and heighten effective group functioning to face and solve problems (Kells, 1983).

Centra (1977) summarized six ways to evaluate teaching,
one component of an academic program. Six ways were: (1)
self-evaluation or self-reports (2) student ratings (3)
colleague evaluations (4) alumni rating (5) use of
videotaping and (6) assessment of student learning. Only
student ratings and alumni ratings will be examined because
they related closely to this study.

The image of the academic program can be determined by
assessing the perceptions and satisfaction of students and
graduates concerning the depth and width of the program,
rapport of instructors with students, and the extent to
which students encounter learning experiences that they
value (Cooley & Lohnes, 1976; Marsh, Fleiner & Thomas,
1975). Opinions and perceptions of students and graduates
are unbiased and are valuable sources of information
(Startup, 1972; McAlduff, 1975; Centra, 1977). Furthermore,
McAlduff believes that "students are frank and sincere in
their assessments. They give praise where praise is due"
(p. 29). Centra (1977) viewed the use of the student rating
that "although the ratings are increasingly being considered
in personnel decisions, they have been used primarily to
improve instruction" (p. 95). Centra (1977) added that
"when student ratings are used to make personnel decisions,
the means of collecting and interpreting data become
particularly important" (p. 96). Centra illustrated some

examples as

> we might expect that students would be more
> lenient or generous if they were informed that
> the ratings would be used for tenure, promotion,
> or salary considerations. Conversely, we might
> expect students to be more frank and possibly more
> severe in their ratings and criticisms if they
> understood that the results would be used for
> improving the course or the instruction; such
> information, they might logically assume, could
> lead to needed changes (pp. 96-97).

However, the study of Centra (1976) showed that the
differences in ratings under the circumstances were only
slight.

Another source of information is alumni or graduates.
There is evidence from two published studies that clearly
indicates the substantial agreement between the current
students and alumni's rating (Druckers & Remmers, 1951;
Centra, 1974). However, "survey of alumni provide useful
information for adjusting the curriculum or environment of a
college" (Centra, 1977, p. 101). Moreover, Centra also
pointed out that alumni views of utility of particular
courses or experiences were likely to be of greater benefit
than their ratings of the instructional procedures of
particular teachers. Centra's opinion is consistent with
Clark et al. (1976) who suggested that recent alumni have a
better perspective about the contents, procedures, and
requirements of a program, than do enrolled students and are
more objective than faculty members. According to Clark
(1977), the majority of the department heads view alumni

rating and opinions to be "very important" information in departmental review and evaluations for departmental uses.

From the literature review, students and graduates are obviously useful resources for assessing an academic program quality. The following section will be a summary of related evaluation studies using students or graduates.

Wise, Hengstler, and Braskamp (1981) conducted a study investigating the alumni ratings of departmental quality. A total of 4,573 enrolled students of 22 university departments from 6 colleges rated 11 items concerning satisfaction on various aspects of their major department. Two years later, 1,228 alumni from the same departments completed and returned the alumni survey. The results of this study were reported as (1) former students continue to evaluate their major programs along the same dimensions after graduation. Hence, it appears reasonable to make comparisons between groups of enrolled students and alumni. (2) There were significant differences between department means for four items. Alumni were more satisfied with integration of courses, classroom evaluation procedures, and accessibility of instructors than were enrolled students, whereas they were less satisfied with vocational guidance. Wise et al. (1981) believes that "... alumni have a more valid perspective in the quality of vocational guidance in a department than do enrolled students" (p. 76). (3) Only the

variable dealing with helpfulness of major in job highly influences an alumni's attitudes toward major program. Overall, the satisfaction items showed higher correlations with alumni attitudes toward major program and slightly lower correlations with attitudes toward the university.

From 172 enrolled graduate students in the Professional Studies Department at Iowa State University, Subah (1986) identified 12 factors relating to the section and department. These were: quality of graduate program, quality of courses, relationship with major professor, enrichment activities in section, sensitivity to students, career development and admission standards in section. Other factors related to the department were: quality of instruction, course structure, program of study committee, career development, and registration/course availability. Factor reliabilities ranged from .46 to .90.

Significant differences were found between age, sex, area of specialization, and employment and the level of satisfaction of enrolled graduate students.

The objective of an academic program should be relevant to its clients' professional responsibilities to enable them to fully serve their future roles. Noel and Parsons (1973) conducted an evaluation study at the Department of Adult and Community College Education, North Carolina State University to determine the perceptions held by doctoral graduates of

the relevance of the department's learning objective to the graduates in regard to their professional responsibilities. Relevance, in this study, was defined as "... the utility or usefulness of the Department's objectives to the graduates' professional responsibilities" (p. 44). Eighty-four graduates responded to the questionnaire which contained a list of 38 competencies that were considered representative of the Department's objectives. The results indicated that professional responsibilities were associated with the graduates' evaluation of the relevance of the Department's objectives. Teachers or researchers gave the research objective higher ratings of relevance. Program development specialists and administrators emphasized the relevance of an understanding of adult education as a process of social change and the objectives stressing professional skills needed by the practitioner.

Braskamp, Wise, and Hengstler (1979) used undergraduate and graduate students from 38 departments to indicate their degree of satisfaction with their major department at University of Illinois at Urbana-Champaign. These students were asked to respond to a 24-item instrument titled Program Evaluation Survey (PES) which was developed to measure student perception of and satisfaction with the instructional, curricular, advising, and operational phases of the department. The report showed the results as

28

follows:

> Two highly correlated factors, General
> Satisfaction with Major and Satisfaction with
> Mentorship, were obtained for the two groups of
> students for 2 successive years. Factor scores
> did not differ substantially across subgroups of
> students with differing characteristics on class
> level, grade point average, sex, field of study,
> or reason for choosing their major. Fifteen
> faculty and departmental characteristics were also
> uncorrelated with factor scores. Student
> satisfaction appears to represent a unique
> criterion for assessing departmental quality (p.
> 494).

In another study (Hearn, 1985) used students to evaluate an academic program, 775 students from 2 universities were asked to evaluate their academic programs. This report showed that, in general, stimulating course work and good teaching were more important than opportunities for faculty-student interaction or perceived faculty knowledgeability. However, there were significant field or gender differences, for example, faculty availability and course stimulation were more critical among women than among men and faculty teaching ability was particularly significant in artistic fields.

Centra (1974) conducted a study to investigate the relationship between student and alumni ratings of instructors. This study found that the student and alumni ratings for 23 teachers were highly correlated (.75). This substantial agreement between current students and alumni (of five years) regarding who have been effective or

ineffective teachers suggests a good deal of persistence in judgements of teachers by students.

From the above literature review, it can be concluded that student and alumni ratings are valid, useful, and important sources of information to be considered in assessing academic program (Wise et al., 1981).

Conclusion

The review of literature was geared to bring a background of evaluation; various approaches to the definition of evaluation and major models. Then a close investigation was given to the concept of decision-making evaluation studies using alumni and students. The overall review could be summarized as follows:

1. The definition of evaluation can be defined several ways according to differing assumptions about why evaluation is conducted and what uses it serves.

2. One of the major models, CIPP is based on the view that the most important purpose is not to prove but to improve programs, and was developed to provide information for making four decisions (planning, structuring, implementation, and recycling).

3. There are various ways to assess academic program

quality but the most frequent use is departmental
or program self-study.

4. Students and alumni ratings are useful
   information for departmental self-study.

5. Recent studies showed that former students
   continued to evaluate their major programs along
   the same dimensions after graduation.

6. Alumni ratings of the ability of the faculty and
   overall excellence of the program correlated
   highly with ratings of enrolled students.

However, alumni have a better perspective about
contents, procedures, and requirements of a program than do
enrolled students and are more objective than faculty
members (Clark et al., 1976).

CHAPTER 3. METHODS OF PROCEDURE

This chapter was organized into several sections; purposes of this study, hypothesis, assumptions, limitations, development of the questionnaire, description of population, data collection, data analysis and human subjects' rights.

Purposes of the Study

The purposes of this study were to:

1. Identify the degree of satisfaction of the alumni with the graduate degree programs in terms of goals and process.

2. Examine the demographic data including age, sex, occupation, year of graduation, section major, type of degree, graduate degree at another institution, thesis/creative component requirement, and off/on campus degree as factors in satisfaction.

3. Make recommendations for improvement of the sections and department based on the perceptions of alumni.

Hypothesis

There were no significant differences between degree of satisfaction of alumni and age, sex, occupation, year of graduation, section major, highest degree at ISU, and thesis/creative component requirement.

Assumptions

1. A questionnaire from alumni obtained accurate and valid information for evaluating a program.
2. The list of the graduates obtained from the Alumni Development Office was accurate and up-to-date.
3. Graduates responded openly to the questionnaires.
4. All graduates were able to recall experiences in the program.

Limitations

1. Responses were limited to the 1980-1985 graduates of the Professional Studies Department, College of Education.
2. The applicability of the data collected was related to the program in higher education at Iowa State University where it was collected and no inferences were made to any other population.

Development of the Questionnaire

In the preparation for the study a review was made of literature concerning program evaluation in higher education, and also available instruments. The result was a modification from the questionnaire used by Braskamp, Wise, and Hengstler (1979).

The questionnaire consisted of two parts: (1) the personal demographic data, (2) a list of statements concerning the elements(i.e., course structure, content, instruction) of a graduate program. Part two consisted of three sections: (1) statements related to the section major, (2) statements related to the Professional Studies Department outside the major, and (3) statements related to the overall department. Respondents were asked to assign a number on a scale from zero to five, indicating the degree of satisfaction with the graduate program at ISU. Number five indicated that the respondents were highly satisfied with that statement, one indicated highly dissatisfied, three indicated undecided and zero indicated not applicable. Six open-ended items gave respondents the opportunity to list the strengths and weaknesses of their section, the weaknesses and strengths of the courses taken outside their section major but in the Professional Studies Department, and how the department failed to meet their expectations when they entered and their suggestions on changes for the

department in courses, curriculum, procedures, or staffing
of the overall program.

The tentative questionnaire was submitted to all of the
faculty members of the Professional Studies Department in
the Fall of 1985 for additions, corrections, rewording and
clarity of statements. A few items were added and reworded.
This revised questionnaire was resubmitted to all of the
section leaders and the department head to ascertain content
validity and to receive more suggestions. According to the
suggestions made by the section leaders and the department
head, the questionnaire was rearranged and revised.

Description of Population

The population of this study was comprised of graduates
of the Professional Studies Department from 1980-1985. The
list of names and mailing addresses of these graduates was
obtained from the Alumni Development Office.

Data Collection

The questionnaire including self-addressed envelopes
were mailed to the graduates by first class mail for the
purposes of forwarding to a new address and/or returning to
sender in case of incorrect address. To increase the
percentage of questionnaires returned, a follow-up letter
was sent to encourage response at the end of two weeks and a

second follow-up at the end of four weeks.

Four hundred ninety of the questionnaires were mailed to the graduates. A total of 374 questionnaires were returned. Of this number, 1 questionnaire was returned from abroad after data analysis was done, 3 were returned unanswered, and 5 were returned as "address unknown". This was a 75 percent response rate or 366 usable questionnaires.

Data Analysis

The 366 questionnaires were coded for computation. The information from the questionnaires were entered and data were analyzed at Iowa State University Computation Center. Before computation of the data began, a print-out of data was checked for possible errors. Identified errors were corrected.

SPSSX (Nie, Hull, Jenkins, Steinbrenner & Bent, 1983) was the statistical package used to analyze the data. Alumni demographics included age, sex, graduated degree from another institution before coming and after, year of graduation, type of degree, employment related to degree, thesis/creative component requirement, graduate assistantship, and certification while working on last degree at ISU in the Professional Studies Department. The demographic data were analyzed by frequencies, percentages, and means to describe alumni's characteristics.

Three separate factor analyses on statements of program elements of Part II section I, II, III were computed, every item was included in the factor analysis, except items 69-74 and item 76 which were items with a large number of no responses and "not applicable". Factors were formed by clusters by the following criteria:

1. High loading on that factor (.4 or above).

2. Uniqueness; item should load highly on only one factor (at least .10 differences in loading).

3. Meaning; items should be meaningful for overall content of the factor. Individual items which did not meet these criteria were not used for further analysis.

The reliabilities of the factors were computed to determine internal consistency of each factor. Each factor was correlated with every other factor. Correlation coefficients were used to indicate the independence among the factors. T-tests and analysis of variance: single classification were used to determine the influence of the demographic variables upon the factors. For those which had significant differences, the multiple ranges test; Scheffe was used to identify the differences within the group of variables at the 0.05 level of significance.

Human Subjects' Rights

The questionnaire used in this study was reviewed by the Iowa State University Committee on the Use of Human Subjects in Research and was approved that the right and welfare of the human subjects were protected, that confidentiality of data was assured, and that informed consent was obtained by appropriate procedures.

CHAPTER 4. FINDINGS AND DISCUSSION

General Characteristics of Respondents

The respondents were asked to provide information on their characteristics including age, sex, occupation, year of graduation, type of degree, graduate degree at another institution, employment related to the last degree, thesis/creative component requirement, on/off campus degree. This information served as background data for interpreting other data and to make this study as meaningful as possible. The characteristics presented are from 366 of the 490 graduates of the Professional Studies Department from 1980-1985. The number and percentage of the graduates represented in each category are presented.

Age level

Age levels are divided into 4 categories, as shown in Table 1, from 20 years of age to over 50 years of age. Respondents were represented in every age category. The largest percentage (49.2%) of the respondents were 31 through 40 years of age. The next largest percentage (23.8%, 18.9%) were in the 20 through 30 year and the 41-50 year age groups respectively. Seventy-three percent of the respondents were in the age span of 20 through 40 years (see Table 1).

TABLE 1. Age of respondents by number and percent

Age grouping	Number	Percent
20-30	87	23.8
31-40	180	49.2
41-50	69	18.9
over 50	30	8.2
Total	366	100.0

Highest graduate degree before entering ISU

In Table 2, the largest percentage (79.2%) of the respondents had no other graduate degree before entering their programs at ISU. The next largest percentage (11.2%) had an M.S. degree (see Table 2).

TABLE 2. Highest graduate degree before entering ISU by number and percent

Degree	Number	Percent
M.Ed.	13	3.6
M.S.	41	11.2
Ph.D.	3	0.8
Other	18	4.9
No Other	290	79.2
No Response	1	0.3
Total	' 366	100.0

Highest ISU degree

Table 3 showed that the largest percentage (68.6%) of the respondents had M.S. as the highest ISU degree. The next largest percentage (23.0%) had a Ph.D. degree (see Table 3).

TABLE 3. Highest ISU degree by number and percent

Highest ISU degree	Number	Percent
M.Ed.	29	7.9
M.S.	251	68.6
Ph.D.	84	23.0
No Response	2	0.5
Total	366	100.0

Year of graduation

The percentages of the distribution of the respondents over the 6 years of 1980 through 1985 were fairly equal. The largest percentage (19.1%) of the respondents graduated in the year 1981. The next largest percentage (18.9%) graduated in 1980 (see Table 4).

Degree after ISU graduation

In Table 5, 97.8% of the respondents had no other graduate degree after ISU graduation (see Table 5).

TABLE 4. Year of graduation by number and percent

Year of Graduation	Number	Percent
1980	69	18.9
1981	70	19.1
1982	64	17.5
1983	56	15.3
1984	67	18.3
1985	37	10.1
No Response	3	0.8
Total	366	100.0

TABLE 5. Degree after ISU graduation

Degree	Number	Percent
M.S.	1	0.3
Other	3	0.8
No Other	358	97.8
No Response	4	1.0
Total	366	100.0

Area of specialization

The largest percentage (24.3%) of the respondents were
in Higher Education. The next largest percentage (19.7%)
were in Education Administration. Counselor Education and
Learning Disabilities were the two areas of specialization
that were fairly even in number of respondents (15% and
15.8% consecutively, see Table 6).

TABLE 6. Area of specialization by number and percent

Area of Specialization	Number	Percent
Education	8	2.2
Adult and Extension Education	24	6.6
Curriculum and Instructional Media	28	7.7
Educational Administration	72	19.7
Elementary Education	19	5.2
Counselor Education	55	15.0
Higher Education	89	24.3
History, Philosophy and Comparative Education	5	1.4
Learning Disabilities	58	15.8
Research and Evaluation	8	2.2
Total	366	100.0

Thesis/creative component requirement

To meet the requirements for the last graduate degree the respondents earned while majoring in the Professional Studies Department, 66.4% completed a thesis or dissertation (see Table 7).

On/off campus

Over 90% of the respondents completed over 50% of their ISU course work for their last degree on campus (Table 8).

Assistantship

Over half (68.3%) of the respondents were not on any assistantship and 21.3% were on research and some administrative, resident hall assistantships (Table 9)

TABLE 7. Thesis, dissertation or creative component
          completion by number and percent

Completion	Number	Percent
Thesis, dissertation	122	33.3
Creative component	243	66.4
Other	1	0.3
Total	366	100.0

TABLE 8. Course work on/off campus

On/off	Number	Percent
On campus	334	91.3
Off campus	31	8.5
No response	1	0.3
Total	366	100.0

TABLE 9. Assistantships by number and percent

Assistantships	Number	Percent
Teaching assistantship	37	10.1
Research assistantship and other	78	21.3
No assistantship	250	68.3
No response	1	0.3
Total	366	100.0

Certification

Almost half (48.4%) of the respondents received certification (i.e., superintendent, principal, guidance counselor, instructional media specialist, and learning disabilities specialist) while working on their last degree at ISU in Professional Studies (Table 10).

TABLE 10. Certification at ISU by number and percent

Certification	Number	Percent
Yes	177	48.4
No	188	51.4
No response	1	0.3
Total	366	100.0

Classification of employment

In Table 11 the largest percentage (43.7%) of the respondents were employed by local school districts, The next largest percentage (20.5%) were in a 4-year college. Due to the low number in some categories, the "Federal Government" and the "State Government" categories were combined to form the "Federal-State Government" and the "Industry-Business" and the "Self-employed" were combined to form the "Industry/Business/Self-Employed" (Table 11).

TABLE 11. Classification of employment by number and
           percent

Classification of Employment	Number	Percent
Federal/State Government	29	7.9
Industry/Business/Self-Employed	31	8.4
4-Year College	75	20.5
2-Year/Community College	19	5.2
Local School District	160	43.7
Other	49	13.4
No Response	3	0.8
Total	366	100.0

Utilization of gained skills and competencies to job

In the respondents' present job, 51.6% utilized a great
deal of the skills and competencies gained from the last
degree received from ISU, 35% somewhat, 8.2% very little,
and 1.1% not at all (Table 12).

Recommendation of area of specialization to others

Almost half (49.2%) of the respondents would recommend
"a great deal" their area of specialization in Professional
Studies at ISU to other Students. Thirty-eight percent
would recommend it "somewhat" (Table 13).

Ethnic-racial group

The largest percentage (90.2) of the respondents were
white/Caucasian while 5.7% were black American (Table 14).

TABLE 12. Utilization of gained skills and competencies to
          job

Degree	Number	Percent
A great deal	189	51.6
Somewhat	128	35.0
Very little	30	8.2
Not at all	12	3.3
Not applicable	4	1.1
No response	3	0.8
Total	366	100.0

TABLE 13. Recommendation of area of specialization to
          others by number and percent

Degree	Number	Percent
A great deal	180	49.2
Somewhat	141	38.5
Very little	36	9.8
Not at all	7	1.9
No response	2	0.5
Total	366	100.0

Summary of demographic data

Review of the demographic data revealed: 49.2% of the
366 respondents were 31-40 years of age, 65.0% of the
respondents were female, had no other graduate degree before
entering their program at ISU (79.2%), had M.S. as the
highest degree at ISU (68.6%), graduated in 1981 (19.1%),

TABLE 14. Ethnic-racial group by number and percent

Ethnic-Racial Group	Number	Percent
International Alumni	11	3.0
White/Caucasian	330	90.2
Hispanic American	1	0.3
Black/Afro American	21	5.7
Native Indian American	1	0.3
Other	1	0.3
No Response	1	0.3
Total	366	100.0

had no other graduate degree after ISU graduation (97.8%),
had Higher Education as their area of specialization
(24.3%), completed the creative component to meet their
requirements of degree (66.4%), completed the majority of
course work on campus (91.3%), were not on assistantships
(68.3%), did not received certification while working on ISU
degree (51.4%), and were employed by local school districts
(43.7%).

Highest and Lowest Program Satisfaction Statements

The respondents were asked to rate each of the 55
statements on elements of the program of their area of
specialization, other courses outside their area of
specialization and the Professional Studies Department on
the scale 0 to 5 in terms of satisfaction (0-not applicable,

1-highly dissatisfied, 3-undecided, and 5-highly satisfied). The ten highest and lowest mean score statements were as shown below. Nine out of ten of the ten highest were the statements related to their section major.

Ten highest satisfaction statements

Statement	Mean
Size of classes in section	4.43
Relationship between student and major professor	4.18
Availability of major professor to student	4.14
Overall treatment as a student in section	4.14
Opportunity to communicate with faculty and student in section	4.13
Length of time require to complete the program in section	4.13
Admissions procedures in section	4.06
Admission standards in section	4.01
Procedures used for registration (overall)	3.99
The extent to which student regarded his/her graduate program as worthwhile in section	3.98

Ten lowest satisfaction statements

Statement	Mean
The quality of career development assistance in the department	2.84

The quality of career development assistance

    in section   2.91

Departmental attention to providing with

    credentials for obtaining employment

    after graduation   2.94

The availability of enrichment activities

    in the department offered in addition to

    regular classes   2.96

The availability of enrichment activities

    offered by section in addition to

    regular classes   3.03

Orientation of students to the section   3.07

Usefulness of the program of study committee   3.37

Contact with faculty outside the classroom in

    the department   3.46

The variety of course offerings taken in the

    department but outside section   3.49

The extent to which a sound theoretical

    framework was developed for the

additional courses taken in the department   3.51

Factor Analysis

Responses to the 55 statements (items 18-45, 48-59, and 62-76) on the questionnaires were analyzed using factor analysis. The analysis used the extraction technique of PA2

and Varimax rotation from the SPSSX package (Nie et al., 1983). Criteria used to consider factor loading were as follows:

1. high loading on that factor (.4 or above).

2. uniqueness: item should load highly on only one factor (at least .10 difference in loading).

3. meaning: items should be meaningful for overall content of the factor.

Four factors, one couplet, and one general composite were formed from items 18-45 and two factors, one couplet from items 48-59, and one factor and one couplet from items 62-76 (Tables 15, 16, 17). Totally seven factors, one general composite, and three couplets emerged from 39 of the 55 statements and were named according to the apparent content of statements. Names assigned to the factors, general composite and couplets were:

1. graduate program quality in section.

2. course structure in section.

3. communication, sensitivity and enrichment within section.

4. major professor.

5. section admissions.

6. curriculum and student' evaluation.

7. course structuring and materials in department.

8. graduate program quality in department.

9.   communication in the department

10.   program of study committee and procedures.

11.   enrichment activities and career development.

Intercorrelation of all items in each factor can be found in Appendix B. There were 9 individual items which did not meet the criteria to be included in any of the above factors. Nine individual items were 26, 41, 45, 49, 53, 57, 62, 63 and 68. Therefore they were treated as individual items which were not used in further analysis. Furthermore, items 69-74 and 76 had only a few responses and were not included in the analysis.

Factor 1-graduate program quality in section

There were 5 statements that were judged to be representative of Factor 1. Overall quality of instruction in section, instructors' ability to teach, and overall satisfaction with graduate program in section was best characterized by the title graduate program quality in section. The 5 statements had factor loadings from 0.59 to 0.73. The reliability for this factor was 0.92. Items in the factors were identified by item numbers assigned in the questionnaire and factor loadings were given after each item.

Statements in factor 1

28 Overall quality of instruction in section   .73

TABLE 15.   Items and factor loadings related to section

Item	Factor[1] 1	2	3	4	Couplet[1] 5	Composite[1] 6
28	$.73^2$	.27	.25	.21	.10	
30	$.70^2$	.32	.28	.19	.12	
43	$.70^2$	.33	.29	.23	.11	
42	$.69^2$	.37	.27	.19	.11	
21	$.59^2$	.46	.09	.17	.20	
22	.34	$.78^2$	.09	.12	.03	
23	.24	$.68^2$	.16	.08	.20	
25	.35	$.59^2$	.22	.94	.02	
24	.16	$.53^2$	.19	.10	.17	
37	.16	.31	$.60^2$	.20	.04	
36	.12	.04	$.59^2$	.27	-.04	
27	.39	.20	$.57^2$	.25	-.08	
29	.14	.03	$.54^2$	.06	.17	
20	.23	.18	$.49^2$	.10	.20	
34	.12	.32	$.49^2$	.01	.08	
35	.09	.28	$.43^2$	.27	.13	
40	.19	.14	.18	$.82^2$	.06	
39	.15	.09	.22	$.77^2$	.03	
38	.27	.19	.26	$.77^2$	.10	
18	.12	.16	.00	.06	$.92^2$	
19	.07	.07	.12	.08	$.68^2$	
31	.36	.39	.19	.21	.24	$-^3$
32	.43	.45	.19	.09	.25	$-^3$
33	.30	.35	.30	.11	.23	$-^3$
44	.52	.10	.54	.35	.08	$-^3$

[1]Factor titles indicated as follow: (1) graduate program quality in section (2) course structure in section (3) communication, sensitivity and enrichment within section (4) major professor (5) section admission (6) curriculum and student evaluation.

[2]Indicates on which factors the items load.

[3]A composite of items which do not uniquely load on a factor.

TABLE 16. Items and factors loadings related to department

Item	Factor[1] 7	8	Couplet[1] 9
51	$.62^2$	.12	.10
50	$.58^2$	.10	.01
52	$.58^2$	.17	.18
56	$.40^2$	.23	.16
48	.28	$.70^2$	.10
55	.12	$.61^2$	.16
54	.13	$.59^2$	.06
58	.13	.14	$.81^2$
59	.12	.07	$.74^2$

[1]Factors' titles indicated as follows: (7) course structure and materials in department (8) graduate program quality in department (9) communication in department.

[2]Indicates on which factors the items load.

TABLE 17. Items and factor loadings related to overall questions about department

Item	Factor 10[1]	Couplet 11[1]
66	$.92^2$	.15
67	$.59^2$	.09
75	$.40^2$	.23
64	.08	$.84^2$
65	.24	$.50^2$

[1]Factors' titles indicated as follows: (10) program of study committee and procedures (11) enrichment activities and career development.

[2]Indicates on which factors the items load.

30 Instructors' ability to teach in section   .70

43 Overall satisfaction with graduate program

    in section   .70

42 Extent regarded graduate program as

    worthwhile in section   .69

21 Extent to which you were challenged by

    course work in section   .59

Factor 2-course structure in section

The four statements in this factor focus on the course structure and its relevance to their job. Factor loading of the four statements were between .53 and .78. The reliability for this factor was .83.

Statements in factor 2

22 Extent section provided a well-integrated set

    of courses   .78

23 Variety of different course offerings in section .68

25 Relevance of course work in section to job

    in that area   .59

24 Amount of structure in the graduate program

    of section   .53

Factor 3-communication, sensitivity and enrichment within section

The 7 statements in this factor focus on communication and sensitivity of instructors and students and enrichment activities. The factor loadings of the 7 statements were between .43 and .60. The reliability of this factor was .81.

Statements in factor 3

37 Quality of career development assistance
    in section   .60

36 Contact with faculty outside classroom
    in section   .59

27 Communication with faculty and students
    regarding student needs, concerns,
    suggestions   .57

29 Instructors' sensitivity to people of
    different racial and ethnic backgrounds   .54

20 Orientation of students to section   .49

34 Availability of enrichment activities
    in section   .49

35 Balance between writing and course work
    in section   .43

Factor 4-major professor

There were 3 statements represented in this factor. The 3 statements focused on the major professor. The factor loadings of the 3 statements were between .77 and .82. The

reliability for this factor was .89.

Statements in factor 4

40	Relationship between you and your major professor	.82
39	Availability of major professor to student	.77
38	Quality of academic advising from advisor	.77

Couplet 5-section admission

There were 2 statements represented in this couplet. The 2 statements focused on the admission standards and procedures. The factor loadings for these 2 statements were .68 and .92. The reliability for this couplet was .80.

Statements in couplet 5

| 18 | Admission standards in section | .92 |
| 19 | Admission procedures in section | .68 |

General composite 6-curriculum and student evaluation

The 4 statements in this general composite focused on the theoretical framework developed in the section and the evaluation procedures used in course work. These four statements were not uniquely loading on a factor, however, they highly correlated with each other. It was decided to add them together. This general composite may represent 1 or 2 of the previous factors (see Table 15).

Statements in general composite 6   This composite
included the following statements:

31 Extent a sound theoretical framework was

     developed in the section

32 Usefulness of texts and instructional materials to help

     you learn in section

33 Evaluation procedures used in course work in section

44 Overall treatment as student in section

Factor 7-course structure and materials in department

The 4 statements in this factor focused on course
structure and materials used in instruction outside the
section but in Department. The factor loadings of the 4
statements were between .40 and .62. The reliability for
this factor was .70.

Statements in factor 7

51 Variety of course offerings in department but

     outside your section   .62

50 Number of courses required outside section   .58

52 Extent a sound theoretical framework was
developed

     for the additional courses taken in the

     department   .58

56 Usefulness of texts and other instructional

     materials in helping you to learn the course

     work in your section   .40

Factor 8-graduate program quality in department

The 3 statements in this factor focused on quality of graduate program and ability of instructors. The factor loadings of the 3 statements were between .59 and .70. The reliability for this factor was .78.

Statements in factor 8

48 Extent to which challenged by course work

    outside section   .70

55 Quality of instruction in additional courses

    taken in Professional Studies   .61

54 Instructor's ability to teach in courses

    outside section   .59

Couplet 9-communication in the department

The 2 statements focused on the communication between faculty and student needs, concerns, suggestions. The factor loadings were .74 and .81. The reliability for this couplet was .78.

Statements in couplet 9

58 Communication with faculty and students within

    classroom regarding student needs and suggestions

    in the department but outside your section   .81

59 Contact with faculty outside the classroom

    in the department   .74

Factor 10-program of study committee and procedures

There were 3 statements in this factor. The statements focused on the usefulness and the appropriateness of the size of the program of study committee and the satisfaction with the final oral examination. The factor loadings of the 3 statements were between .40 and .92. The reliability for this factor was .75.

Statement in factor 10

66 Usefulness of the program of study committee   .92

67 Appropriateness of the size of the program of

study committee   .59

75 Overall satisfaction with the way in which the   .40

final oral examination was conducted   .40

Couplet 11-enrichment activities and career development

The 2 statements in this couplet focused on the availability of enrichment activities in department and quality of career development assistance. The factor loadings of the 2 statements were .56 and .70. The reliability for this couplet was .63.

Statements in couplet 11

64 Availability of enrichment activities in

departments offered in additional to

regular classes (seminars, colloquia,

social events, etc.)   .70

65 The quality of career development assistance   .56

Influence of Demographic Data on Factors

The relationship between factors scores and the following variables were studied: age, sex, occupation, year of graduation, area of specialization, highest degree at ISU and thesis/creative component requirement. An analysis of variance: single classification and t-test were calculated to determine the relationship between the variables and factors. The variables which had significant differences are discussed. These variables were sex, highest degree completed while in Professional Studies at ISU, area of specialization, thesis/creative component requirement and occupation. In addition, the variable of age was discussed which was not significant.

Influence of sex on the factors

There were seven factors found to have significant differences with sex. The seven factors were:

- graduate program quality in section

- course structure in section

- communication, sensitivity and enrichment within section

- major professor

- curriculum and student evaluation

- program of study committee and procedures (see Table 18).

TABLE 18.   T-test of scores from eleven factors in relation
to sex

Factor[1]	# of Cases[2]		Mean[2]		Standard[2] Deviation		T. Value	2-tail Prob.
	1	2	1	2	1	2		
1	273	128	3.73	4.07	0.87	0.66	-4.16**	.000
2	237	128	3.64	3.88	0.78	0.66	-3.13**	.002
3	237	128	3.52	3.80	0.66	0.60	-3.87**	.000
4	236	126	3.97	4.25	1.03	0.87	-2.76**	.006
5	237	127	4.04	4.06	0.64	0.58	-0.37	.713
6	237	126	3.84	3.99	0.67	0.58	-2.14*	.033
7	233	127	3.62	3.68	0.58	0.60	-0.99	.321
8	233	127	3.83	3.88	0.61	0.58	-0.78	.434
9	228	126	3.72	3.78	0.74	0.74	-0.74	.461
10	236	128	3.73	3.92	0.71	0.71	-2.51*	.012
11	227	124	2.98	3.35	0.89	0.89	-3.72**	.000

[1](1) graduate program quality in section. (2) course
structure in section. (3) communication, sensitivity and
enrichment within section. (4) major professor. (5)
section admission. (6) curriculum and student evaluation.
(7) course structure and materials in department. (8)
graduate program quality in department. (9) communication
in department. (10) program of study committee and
procedures. (11) enrichment activities and career
development.

[2]Group indicated as follows: (1) female, (2) male.

*Significant at .05.

**Significant at .01.

Examination of the group means for factor 1-graduate

program quality in section, revealed that males had a higher

mean score (4.07), compared with females (3.73). The same

was true with the other 6 factors, factor 2-course structure

in section, males 3.88 and females 3.64; factor

3-communication, sensitivity and enrichment within section, males 3.80 and females 3.52; factor 4-major professor, males 4.25 and females 3.97; factor 6-curriculum and student evaluation, males 3.99 and females 3.84; factor 10-program study committee and procedures, males 3.92 and females 3.73; factor 11-enrichment activities and career development, males 3.35 and females 2.98. From this finding, it may be said that males were more satisfied with the program than females based on the mean scores of satisfaction.

Influence of the highest degree completed while in the
Professional Studies Department on the factors

Six factors were found to have significant difference regarding the highest degree completed while in the Professional Studies Department. The six factors were:

- graduation program quality in section
- course structure in section
- communication, sensitivity and enrichment within section
- major professor
- curriculum and student evaluation
- program of study committee and procedures (see Table 19).

Examination of the group means for factor 1-graduate program quality in section revealed that the Ph.D. group had a high group mean (4.14) when compared with the M.S. group

TABLE 19. Analysis of variance of scores from eleven
factors and highest degree completed and group
means

Factor[1]	Variable	Group Mean[2]			F. value	F. prob
		1	2	3		
1	Highest	3.29	3.74	4.14	7.68**	.0005
2	degree	3.80	3.63	4.00	8.24**	.0003
3		3.62	3.55	3.83	5.66**	.0038
4		4.26	3.92	4.44	9.68**	.0001
5		4.16	4.01	4.10	1.17	.3105
6		3.89	3.82	4.10	6.12**	.0024
7		3.65	3.61	3.73	1.41	.2462
8		3.83	3.86	3.82	.14	.8724
9		3.79	3.72	3.78	.25	.7776
10		3.63	3.71	4.09	10.19**	.0000
11		3.07	3.08	3.21	.66	.5178

[1]See Table 18 for titles of factors.

[2]Group indicated as follows: (1) M.Ed., (2) M.S. and
(3) Ph.D.

**Significant at .01.

which was the lowest group mean score (3.74), even though
the M.Ed. group mean score was at the middle (3.92). The
difference between the Ph.D. group and the M.S. group mean
scores probably was the cause of the significant difference.
The same was true for the factor 2-course structure in
section (Ph.D. 4.00, M.Ed. 3.88, M.S. 3.63) and factor
3-Communication, sensitivity and enrichment within section
(Ph.D. 3.83, M.Ed. 3.62, M.S. 3.55). For factor
6-curriculum and student evaluation, the mean scores of the

M.S. group were close (M.Ed. 3.89, M.S. 3.82), however the
mean scores of the Ph.D. group (4.10) was high when compared
to mean scores for M.Ed. or M.S. A similar pattern was
found for factor 10-program of study committee and
procedures except the M.Ed. group mean score was the lowest
one. In general, for all the factors found significant, the
Ph.D. group had the highest mean score for satisfaction.

Influence of the area of specialization on the factors

There were seven factors found to have significant
differences with the area of specialization. The seven
factors were:

- graduate program quality in section.
- course structure in section.
- communication, sensitivity and enrichment within
  section.
- major professor.
- curriculum and student evaluation.
- program of study committee and procedures.
- enrichment activity and career development (see
  Table 20).

Examination of the group means, for factor 1-graduate
program quality in section revealed that group 4-Educational
Administration mean score was the highest (4.23) and the
second of the highest was group 7-Higher Education (4.14).
The lowest mean score was group 5-Elementary Education

TABLE 20. Analysis of variance of scores from eleven factors in relation to the area of specialization and group means

Factor[1]	Group mean[2]					
	1	2	3	4	5	6
1	4.08	3.81	3.85	4.23	3.29	3.58
2	4.06	3.52	3.38	4.08	3.32	3.50
3	3.65	3.68	3.54	3.76	3.34	3.41
4	3.38	4.07	4.12	4.26	3.65	3.80
5	3.88	4.10	3.88	4.06	3.95	4.01
6	3.88	3.92	3.78	4.10	3.66	3.66
7	3.41	3.71	3.40	3.65	3.62	3.57
8	3.75	3.74	3.70	3.96	3.91	3.85
9	3.81	3.74	3.80	3.76	3.66	3.64
10	3.19	3.82	3.74	3.90	3.67	3.67
11	3.00	3.78	3.09	3.43	2.74	2.91

[1]See Table 18 for the titles of factors.

[2]Group indicated as follows: (1) Education, (2) Adult and Extension Education, (3)Curriculum and Instructional Media, (4) Educational Administration, (5) Elementary Education, (6)Counselor Education, (8) Historical, Philosophical, and Comparative Education, (9) Learning Disabilities, and (10) Research and Evaluation.

**Significant at .01.

Group mean^2				F.	F.
7	8	9	10	value	Prob.
4.14	3.27	3.35	4.09	8.17**	.0000
3.99	3.32	3.48	3.65	7.02**	.0000
3.89	3.71	3.34	3.56	4.68**	.0000
4.43	4.40	3.71	4.00	4.14**	.0000
4.13	4.30	4.01	4.19	0.72**	.6864
4.08	3.95	3.66	3.97	3.92**	.0001
3.74	3.38	3.68	3.59	0.94	.4895
3.89	3.5	3.85	3.54	1.02	.4252
3.79	3.78	3.70	4.00	0.43	.9765
3.92	4.40	3.62	4.21	2.52**	.0083
3.35	2.70	2.84	3.12	3.52**	.0003

(3.29) and the second and the third of the lowest were group 9-Learning Disabilities (3.35) and group 6-Counselor Education (3.58). The difference between the highest and the lowest scores caused the significant difference.

For factor 2-course structure in section, the first and second highest mean scores were group 4-Educational Administration (4.08) and group 1-Education (4.06). The first and second lowest were group 8-History, Philosophy and Comparative Education (3.32) and group 5-Elementary Education (3.32).

For factor 3-communication, sensitivity and enrichment within section, the two highest mean scores were group 7-Higher Education (3.89) and group 4-Educational Administration (3.76). The two lowest were group 5-Elementary Education (3.34) and group 9-Learning Disabilities (3.34).

For factor 4-major professor, group 7-Higher Education (4.43) and group 8-History, Philosophy and Comparative Education were the two highest mean scores. Group 1-Education (3.38) and group 5-Elementary Education (3.65) were the two lowest mean scores.

Factor 6-curriculum and student evaluation, the highest mean score was group 4-Educational Administration (4.10) and the lowest was group 5-Elementary Education (3.66), group 6-Counselor Education (3.66) and group 9-Learning

Disabilities (3.66).

Factor 10-program of study committee and procedures, the highest mean score was group 8-History, Philosophy and Comparative Education (4.40). The second highest was group 10-Research and Evaluation (4.21). The lowest was group 1-Education (3.19).

For factor 11-enrichment activities and career development, group 2-Adult and Extension Education (3.78) was the highest mean score. The lowest was group 8-History, Philosophy and Comparative Education.

Influence of the thesis/creative component requirement on the factors

There were five factors found to have significant differences with the thesis/creative component requirement. The five factors were:
- graduate program quality in section.
- communication, sensitivity and enrichment within section.
- major professor.
- curriculum and student evaluation.
- program of study committee and procedures (see Table 21).

Examination of the group means for factor 1-graduate program quality in section revealed that group 1-requirement of thesis or dissertation (4.05) was higher than group

TABLE 21. T-test of scores from eleven factors in relation to the thesis/creative component and group means

Factor[1]	# of Cases[2]		mean[2]		Standard [2] Deviation		T. Value	2-tail Prob.
	1	2	1	2	1	2		
1	122	243	4.05	3.75	0.73	0.86	3.41**	.001
2	122	243	3.81	3.69	0.74	0.75	1.46	.144
3	122	243	3.76	3.55	0.63	0.65	2.88**	.004
4	120	242	4.34	3.93	0.89	1.00	3.88**	.000
5	122	242	4.07	4.03	0.60	0.04	0.66	.512
6	121	242	4.02	3.82	0.60	0.65	2.84**	.005
7	121	239	3.70	3.61	0.59	0.58	1.33	.185
8	121	239	3.80	3.87	0.70	0.54	-0.91	.364
9	120	235	3.76	3.73	0.80	0.71	0.42	.675
10	122	242	3.99	3.70	0.68	0.71	3.81**	.000
11	120	231	3.11	3.10	0.93	0.89	0.13	.899

[1]See Table 18 for titles of factors.

[2]Group indicated as follows: (1) Thesis or dissertation, (2) Creative component.

**Significant at .01.

2-creative component (3.75). The same was true for factor 3-communication, sensitivity and enrichment within section (Group 1. 3.76, Group 2. 3.55), factor 4-major professor (Group 1. 4.34, Group 2. 3.93), factor 6-curriculum and student evaluation (Group 1. 4.02, Group 2. 3.82), factor 10-program of study committee and procedures (Group 1. 3.99, Group 2. 3.70). In general, the group writing theses or dissertations have higher mean scores for every factor than those with creative components.

Influence of occupation on the factors

There were six factors found to have significant differences with occupation. Six factors were:

- graduate program quality in section.
- course structure in section.
- communication, sensitivity and enrichment within section.
- major professor.
- curriculum and student evaluation.
- program of study committee and procedures (see Table 22).

Examination of the group means, for factor 1-graduate program quality in section revealed that the highest mean score was group 4-2-year and community college (4.31) and the lowest was group 5-Local school district (3.70). For factor 2-course structure in section, group 4-2-year and community college (4.03) was the highest mean score and group 6-Others (3.57) was the lowest.

For factor 3-communication, sensitivity and enrichment within section, the highest mean score was group 3-4-year college (3.83) and group 4-2-year and community college (3.83). The lowest was group 6-Others (3.46).

For factor 4-major professor, the highest mean score was group 3-4-year college (4.38). The lowest was group 5-Local school district.

TABLE 22. Analysis of variance of scores from eleven factors in relation to the occupation and group means

Factor[1]	Group mean[2]						F. value	F. prob.
	1	2	3	4	5	6		
1	3.98	3.99	4.02	4.31	3.70	3.81	3.34**	.0058
2	3.85	3.65	3.92	4.03	3.65	3.57	2.66**	.0223
3	3.72	3.63	3.83	3.83	3.53	3.46	3.33**	.0059
4	4.12	4.31	4.38	4.33	3.86	3.98	3.77**	.0024
5	4.07	3.95	4.07	4.29	4.05	3.99	0.89	.4894
6	3.95	3.91	4.06	4.28	3.78	3.83	3.73**	.0026
7	3.63	3.57	3.73	3.78	3.62	3.60	0.77	.5732
8	3.92	3.75	3.75	4.12	3.88	3.86	1.58	.1638
9	3.80	3.71	3.75	4.00	3.71	3.66	0.67	.6461
10	3.95	3.74	4.00	4.00	3.68	3.73	2.95*	.0127
11	3.14	2.82	3.31	3.10	3.13	2.94	1.64	.1482

[1]See Table 18 for the titles of the factors.

[2]Group indicated as follows: (1) Federal and state government, (2) Industry, business and self-employed, (3) 4-year college, (4) 2-year and community college, (5) Local school district, and (6) Others.

*Significant at .05.

**Significant at .01.

71

For factor 6-curriculum and student evaluation, the highest mean score was group 4-2-year and community college (4.28). The lowest was group 5-Local school district (3.78).

For factor 10-program of study committee and procedures, group 3- 4-year college (4.00) and group 4-2-year and community college (4.00) were the highest mean scores and the lowest was group 5-Local school district (3.68).

In general, Local school district group had the lowest mean scores for satisfaction and 2-year and community college and 4-year college had the highest mean scores for satisfaction.

Influence of age on the factors

Age was not found to be significant but older alumni were more satisfied than younger alumni. This finding was similar to Subah (1986) but her differences were significant.

Factor Reliability

The mean, standard deviation, number of items for factors and the mean, minimum and maximum of inter-item correlation, reliability (alpha), standardized alpha were shown in Table 23. Factor 3-communication, sensitivity and enrichment within section had the highest mean score (25.66)

for factors, and factor 11-enrichment activity and career development had the lowest mean score (6.51) for the factors. Factor 4-major professor had the highest inter-item correlation score (.73) and factor 3-communication, sensitivity, and enrichment within section and factor 7-course structure and materials in department had the lowest inter-item correlation score (.37). The range of reliability (alpha) was .63 to .92.

Summary of Strengths, Weaknesses and Suggestions by Respondents to Their Section Major

The following summary of open ended questions represents a response of one third to one half of the alumni. In some cases such as Historical, Philosophical, and Comparative Studies only five total respondents were in the population and Research and Evaluation had eight in the population, as well as, Education. In Curriculum and Instructional Media only two people responded to the open ended questions. The criteria for selection of the strengths, weakness, and suggestions were those mentioned most often and the variation in responses listed was related to the number of alumni responding.

TABLE 23. Reliabilities, number of items, mean scores, standard deviation, correlations and standardized alpha for the factors

Factor[1]	No. of items	Mean	Std. dev.	Inter-item correlation			Reliability (alpha)	Standardized alpha
				mean	min.	max.		
1	5	19.48	4.14	.70	.61	.87	.92	.92
2	4	15.14	2.93	.54	.46	.66	.83	.83
3	7	25.66	4.70	.37	.27	.51	.81	.81
4	3	12.25	2.96	.73	.70	.79	.89	.89
5	2	8.15	1.24	.67	.67	.67	.80	.80
6	4	15.70	2.54	.53	.40	.51	.75	.75
7	4	14.48	2.37	.37	.29	.47	.70	.70
8	3	11.56	1.79	.54	.47	.67	.78	.78
9	2	7.48	1.48	.65	.65	.65	.78	.79
10	3	12.10	1.98	.50	.38	.67	.75	.75
11	2	6.51	1.89	.46	.46	.46	.63	.63

[1]See Table 18 for the titles of the factors.

Adult and Extension Education

Strengths

- Flexibility of programs; courses outside concentration were accepted.
- Student/professor relationship; supporting, challenging and helping.
- Small class size.
- Good classes schedule, especially for working students.
- Using learner-centered concept for learning-teaching process.

Weaknesses

- Limited number of faculty members.
- Courses being dropped because of low participation.
- Limited courses offered.
- Need more practical application to real world and how the degree and its usefulness relates to the job market.
- Program not geared to "training and development", too "land grant cooperative education oriented.

Suggestions

- More application of skills.
- Greater variety of courses for those who already have a masters.
- More faculty needed.

● Increase the number of courses for summer session.

Counselor Education

Strengths

● Individual encouragement and guidance by most
professors.

● Broad theoretical base.

● Small class size.

● Good teaching counseling techniques.

● Extension staff in Cedar Rapids.

Weaknesses

● Lack of preparation for certificates (e.g., no
human relation).

● Too theoretical.

● Lack of practical information and experience in
counseling.

● Lack of classroom guidance emphasis.

Suggestions

● Better coordination of practicum, more sites for
practicum.

● Greater variety of course selection beyond
required.

● More exposure to other professionals in field.

● Bring in national reputation person.

● Additional attention to obtaining certification.

● Get professor back into a school situation where

students are going to work.

Curriculum and Instructional media

Strength

- Availability of facilities.

Weakness

- Weak curriculum.

Suggestion

- More staff for computer section.

Education

Strengths

- Practical application.

- Relevance of subject.

- Small class size.

- Availability of professors, advisors.

- Many courses offered off-campus.

Weaknesses

- Overloaded professors, advisors.

- Too many presentations by students.

- Some of the initial courses were out-dated and the materials was the same for years.

Suggestions

- Update some courses.

- Make registration easier for out-of-town students.

- Focus on career development.

Education Administration

Strengths

- Small class size.

- Relevance of coursework.

- Relationship between students and professor/major professor.

- Practical, applicable materials.

- Variety of outside coursework.

Weaknesses

- Not enough practicing.

- Not enough orientation of students to section major.

- Not enough finance courses.

- Too much bookwork--not enough meaningful application.

- Lack of women faculty members and role models.

Suggestions

- Actively seek women/minority candidates for vacant faculty positions.

- Hire full-time instructor for finance, facilities courses.

- Offer more variety of courses.

- Reduce obvious conflict between the different departments.

- Encourage student input and suggestions in all

course evaluations.

Elementary Education

Strengths

- Evening classes offered.

- Availability of all professors.

- Courses content.

Weaknesses

- Not enough field experiences (e.g., school visitations).

- Too much theory, not enough applicability of coursework in field experiences.

- Courses not well organized (repetitive).

- Outdated materials.

Suggestions

- Incorporate a direct field experiences into courses.

- Update the materials.

- Organize courses offerings.

Higher Education

Strengths

- Faculty/student relationship.

- Relevance of courses.

- Knowledgable faculty.

- Assistant to off-campus students.

- Small class size.

- Availability of related assistantship.

- Diverse background of faculty.

- Flexibility of program.

- Marketable program.

- Practical application of classes and practicums.

Weaknesses

- Overloaded professors and advisors.

- Not enough career development assistance to students.

- Lack of minority faculty.

- Need more emphasis on national and international scene.

- No women faculty.

- Lack of campus/university orientation.

- Need more seminars and workshops.

Suggestions

- Orientation program for new graduate students.

- More instructors.

- More diversity in faculty (women, blacks).

- More field experience.

- More Higher Education courses offered through TELENET.

Historical, Philosophical and Comparative Studies in Education

Strengths

- Caring, learned professors.
- Seriousness of program.
- Small class size.

Weaknesses

- Not a wide variety of courses offered.
- Few Ph.D. candidates.
- The M.S. is an excellent general program but needs the Ph.D. to provide for career opportunities in the field.
- Need more instructors available.

Suggestion

- Allow flexibility on designing degree program.

Learning Disabilities (L.D.)

Strengths

- Accessibility of classes (i.e., night, off-campus).
- Quality of instructors (knowledgeable, helpful, encouraging).
- Assistantship program.
- Relevance of courses.
- Class size.

Weaknesses

- Inadequate practicum.

- Some instructors not as up-to-date on changes in L.D.

- Not enough choices of courses for students who already had the background courses in undergraduate program.

- Too much emphasis on student presentation and therefore, too little teaching by professors.

- Lack of secondary level information in teaching L.D.

Suggestions

- Add lab school.

- More outside speakers on campus.

- Need more professors who have had more actual teaching experience in the field of L.D.

- Make the courses applicable to classroom.

Research and Evaluation

Strengths

- Program flexibility.

- Small class size.

- Good faculty.

- Courses offered at a good time of day.

Weaknesses

- Need more courses on practical evaluation design
  for school finance.
- Lack of courses on advanced measurement.

Suggestions

- Offering more courses in measurement, research
  methodology and applications of evaluation models.
- More emphasis on teaching.
- More emphasis in consultative skills.
- More courses in institutional research.

Discussion of Findings

Composition of factors

Four factors, one couplet, and a general composite of
graduates' satisfaction were extracted from questions
related to section major, two factors and one couplet from
questions related to Department, and one factor and one
couplet from questions related to overall satisfaction with
the Department or a total of eleven factors. Subah (1986),
using a revised questionnaire of this study to evaluate the
Department of Professional Studies Program by enrolled
graduate students, obtained five factors and two couplets
from questions related to Section, two factors from
questions related to the Department, and two factors from
questions related to the overall department or a total of

eleven factors. Moreover, the structures of the factors
from both studies were similar.

Influence of demographic variables on graduates

Age, sex, occupation, year of graduation, area of
specialization, thesis/creative component requirement and
highest degree were demographic variables examined to see if
there was an influence on degree of satisfaction. In this
study, it was hypothesized that there was no difference
between degree of satisfaction of alumni and age, sex,
occupation, year of graduation, area of specialization,
highest degree at ISU, and thesis/creative component
requirement.

It was found that there were significant differences
among five variables; sex, highest degree at ISU, area of
specialization, thesis/creative component requirement,
present employment and degree of satisfaction of alumni.
Thus, the hypothesis was rejected for these variables and
accepted for age and year of graduation.

The following sections contain the discussions of the
significant differences under each variable.

Sex   Males were found to have higher satisfaction
than females on graduate program quality in section, course
structure in section, communication-sensitivity-enrichment
within section, major professor, curriculum and student
evaluation, program of study committee and procedures, and

enrichment activity and career development.

This finding is consistent with the study by Subah
(1986). Subah found that male graduate students were more
satisfied with the quality of graduate program, quality of
courses, relationship with major professor, enrichment
activities, sensitivity to students. Subah (1986) concluded
that "the optimal condition for satisfaction may differ by
sex" (p. 109). Moreover, from an earlier study by Hearn
(1978) it was found that females were more attuned than
males to faculty and student interaction and also aspects of
academic social climate in their satisfaction. Lately,
Hearn (1985) also found female students satisfaction
criteria were more strongly affected than male students by
certain aspects of faculty contact. From earlier studies,
it can be said that sex may have an influence over the
degree of satisfaction of the alumni.

Highest degree at ISU   In this study, it was found
that alumni who held a Ph.D. were more satisfied than M.S.
alumni with program quality in section, course structure in
section, communication-sensitivity-enrichment within
section, major professor, curriculum and student evaluation
and program of study committee. The factors for which
alumni who had a Ph.D. were more satisfied with were the
same for male over female except enrichment activities and
career development. Furthermore, the Ph.D. alumni contained

a larger percentage of males (males 57.8%, females 42.2%) but the M.S. alumni had a higher percentage of females (females 72.1%, males 27.9% see, Table 24). Therefore, it maybe said that the distribution of sex in the categories of highest degree at ISU contributes to the degree of satisfaction of alumni.

TABLE 24. Distribution of highest degree at ISU by sex

Highest Degree	Female No.	%	Male No.	%	Total No.	%
M.Ed.	20	69.0	9	31.0	29	8.0
M.S.	181	72.1	70	27.9	251	69.1
Ph.D.	35	42.2	48	57.8	83	22.9
Total	236	65.0	127	35.0	363	100.0
Chi-square = 24.80			Significance = 0.00			

Area of specialization   Educational Administration was found to have the highest mean score of satisfaction on the graduate program quality in section, course structure in section and curriculum and student evaluation. Higher Education was second. This finding may be partially explained as the Educational Administration consisted of more males than females (see Table 25).

This finding is not consistent with Subah (1986) who found that Educational Administration was the highest mean

score and Higher Education was the lowest mean score for quality of graduate program in the section major. Braskamp et al. (1979) found that factors scores did not substantially differ across the different fields of study.

Thesis/creative component requirement   It was found that alumni who wrote a thesis/dissertation were more satisfied than one who wrote a creative component with the graduate program quality in section, communication-sensitivity-enrichment within section, major professor, curriculum and student evaluation and program of study committee and procedure. It is noticeable that all factors above are similar to the factors that male alumni were more satisfied than females were. It is interesting when attention is paid to the distribution of sex in these categories. The thesis/dissertation writing category is composed of a higher percentage of male (male 52.9%) but the creative component writing category is composed of higher percentage of female alumni (female 73.7%, see Table 26). Besides the distribution of sex, there is another possible interpretation of this finding. Alumni who wrote thesis or dissertations had a chance to utilize what they had learned from their program and what they had gotten from the enrichment activities provided by their major section. In writing a thesis and/or a dissertation, alumni spent a lot of time communicating to and consulting with their program

TABLE 25. Distribution of area of specialization by sex

Area of specialization	Female		Male		Total	
	No.	%	No.	%	No.	%
Education	6	75.0	2	25.0	8	2.2
Adult & Extension Education	15	62.5	9	37.5	24	6.6
Curriculum & Instructional Education	16	51.1	12	42.9	28	7.7
Educational Administration	25	34.7	46	63.9	72	19.7
Elementary Education	17	89.5	2	10.5	19	5.2
Counselor Education	41	74.5	14	25.5	55	15.0
Higher Education	57	64.0	32	36.0	89	24.3
Historical, Philosophical and Comparative Education	3	60.0	2	40.0	5	1.4
Learning Disabilities	54	93.1	4	6.9	58	15.8
Research and Evaluation	3	37.5	5	62.5	8	2.2
Total	237	64.8	128	35.0	366	100.0

Chi- square = 62.78   Significance = 0.0

of study committee, especially their major professor. In general, when writing a creative component less help is needed and less time from a program of study committee. Therefore, it is believed that the more chances one has to deal with, to communicate to, and to consult with their program of study committee, the higher level of satisfaction they tend to have.

TABLE 26. Distribution of thesis/creative component requirement by sex

Requirement	Female		Male		Total	
	No.	%	No.	%	No.	%
Thesis/ Dissertation	57	47.1	64	52.9	121	33.2
Creative Component	179	73.7	64	26.3	234	66.6
Other	1	100.0	0	0.0	1	0.3
Chi-square = 25.56			Significance = 0.0			

Occupation   Alumni working at 2-year and community colleges were found to have highest mean score of satisfaction on the graduate program quality in section, course structure in section, communication-sensitivity-enrichment within section, curriculum and student evaluation. This finding means that alumni working at 2-year and community colleges are satisfied with the above

factors than any employment categories.

In interpretation of these findings, one should note that the significant differences in degree and area of specialization are related to differences in sex.

CHAPTER 5.   SUMMARY AND RECOMMENDATION

Summary

The purpose of this study was to identify the degree of satisfaction of alumni with the graduate degree program regarding curriculum, procedures and staffing in the department of Professional Studies. The 1980-1985 alumni of the department of Professional Studies responded to a modification of the questionnaire used by Braskamp, Wise, and Hengstler (1979).

The questionnaire consisted of two parts; (1) background and demographic information (2) a list of statements concerning the elements (i.e., course structure, content, instructions) of graduate program. Part two consisted of three sections; (1) statements related to the section major (2) statements related to the Professional Studies department outside the major and (3) statements related to the overall department. Respondents were asked to assign a number on a scale from zero to five, indicating the degree of satisfaction with the graduate program at ISU. Number five indicated that the respondents were highly satisfied with that statement, one indicated highly dissatisfied, three indicated undecided, and zero indicated not applicable. Six open-ended items were given for listing strengths, weaknesses, and suggestions to the program.

The population of this study was the alumni of the
Professional Studies department from 1980-1985. Four
hundred and ninety of the questionnaires were mailed to the
alumni. Of the 374 questionnaires returned, 366
questionnaires were useable. This was a 75 percent response
rate.

The data from the questionnaires were analyzed by
frequencies, percentages, means, factor analysis,
correlations, and reliabilities. T-test and analysis of
variance: single classification were used to determine the
influence of the independent variables upon the factors.
The multiple ranges test: Scheffé was used to identify the
differences within the group of variables.

Twenty-five items related to the section major formed
four factors, one couplet, and one general composite,
namely; (1) graduate program quality in section, (2) course
structure in section, (3) communication-sensitivity-
enrichment within section, (4) major professor, (5) section
admissions, and (6) curriculum and student evaluation. Nine
items related to the department formed two factors and one
couplet, namely; (1) course structure and materials in
department, (2) graduate program quality in department, and
(3) communication in department. Five items related to the
overall department formed one factor and one couplet,
namely; (1) program of study committee and procedures and

(2) enrichment activities and career development.

The reliability of factors and couplet related to the section major ranged from .75 to .92 and .70 to .79 for those related to the department and .63 to .75 for those related to the overall department. As a whole, the reliability ranged from .63 to .92.

The characteristics of the respondents were: 49.2% of the 366 respondents were 31-40 years of age, 65.0% were female, had no other graduate degree before entering their program at ISU (79.2%), had M.S. as the highest degree at ISU (68.6%), had no other degree graduate after ISU graduation (97.8%), graduated from Higher Education section (24.3%), completed the creative component to meet the requirement of degree (66.4%), completed the majority of course work on campus (91.3%). were not on assistantship (68.3%), did not receive certification while working on ISU degree (51.4%), and were employed by local school districts (43.7%).

In this study, it was hypothesized that there were no significant differences between degree of satisfaction of alumni and age, sex, occupation, year of graduation, area of specialization, highest degree at ISU, thesis/creative component requirement. It was found that there were significant differences between degree of satisfaction and sex, highest degree at ISU, area of specialization,

thesis/creative component requirement, occupation.
Therefore, the hypothesis was rejected for these variables
and accepted for age and year of graduation.

The significant differences found were as follows:

- Sex: males had a higher satisfaction than females
  on (1) graduate program quality in section (2)
  course structure in section (3) communication-
  sensitivity-enrichment within section (4) major
  professor (5) curriculum and student evaluation (6)
  program of study committee and procedures and (7)
  enrichment activity and career development.

- Highest degree at ISU: Ph.D. alumni were more
  satisfied than M.S. alumni with (1) graduate
  program quality in section (2) course structure in
  section (3) communication-sensitivity-enrichment
  within section (4) major professor (5) curriculum
  and student evaluation and (6) program of study
  committee and procedures.

- Area of specialization: Educational Administration
  students were found to have higher satisfaction
  than other sections on (1) graduate program quality
  in section (2) course structure in section and (3)
  curriculum and student evaluation.

- Thesis/creative component requirement: alumni who
  wrote a thesis or dissertation had higher

satisfaction on (1) graduate program quality in section (2) communication-sensitivity-enrichment within section (3) major professor (4) curriculum and student evaluation and (5) program of study committee and procedures.

• Employment: alumni employed by 2-year and community colleges had higher satisfaction on (1) graduate program quality in section (2) course structure in section (3) communication-sensitivity-enrichment within section and (4) curriculum and student evaluation.

The 10 highest satisfaction statements

1. Size of class in section.

2. Relationship between students and their major professors.

3. Availability of major professor to student.

4. Overall treatment as a student in section.

5. Opportunity to communicate with faculty and students in section.

6. Length of time required to complete the program in section.

7. Admission procedures in section.

8. Admission standards in section.

9. Procedures used for registration (overall).

10. The extent to which students regarded their graduate program as worthwhile in section.

The 10 lowest satisfaction statements

1. The quality of career development assistance in the department.

2. The quality of career development assistance in the section.

3. Departmental attention to providing students with credentials for obtaining employment after graduation.

4. The availability of enrichment activities in the department offered in addition to regular classes.

5. The availability of enrichment activities offered by section in addition to regular classes.

6. Orientation of students to section.

7. Usefulness of the program of study committee.

8. Contact with faculty outside the classroom in the department.

9. The variety of course offerings taking in the department but outside section.

10. The extent to which a sound theoretical framework was developed for the additional courses taken in the department.

Recommendations

Recommendations for the Department of Professional Studies

1. Orientation of students to the section major should be made available to new students at the beginning of each semester.

2. Enrichment activities in addition to regular classes such as seminars, colloquia, or social events should be offered more often by the section majors.

3. Various kinds of career development assistance should be made available to students.

4. Departmental attention to providing students with credentials for obtaining employment after graduation should be emphasized and increased.

5. Develop more course offerings in additional areas by every section. This would provide opportunity for both student inside and outside the section to have more choice in courses to meet their needs.

6. Faculty should strive to assist students in gaining more satisfaction with a creative component experience.

7. Personal needs of female students need to be addressed by faculty in order to satisfy their

needs in a graduate experience especially at the Masters level.

Recommendations for further research

1. The follow-up study should be conducted in the next five years to investigate any improvement of each section major and of the department as a whole.

2. To have in-depth information for each section major, each section should conduct a study on their particular program. An in-depth study on particular program could provide a clear direction for program improvement.

3.. There is one question used in this study that respondents hesitated to answer (What is the name and an address of your employer ?). The respondents preferred to be anonymous so they could give honest comments. Therefore, it is recommended that this question be eliminated in future studies.

REFERENCES

Alkin, M. C. (1969). Evaluation theory development. Evaluation Comment, 2(1), 2-7.

Boyle, P. G. (1981). Planning better programs. New York: McGraw-Hill.

Braskamp, L. A., Wise, S. L., & Hengstler, D. D. (1979). Student satisfaction as a measure of departmental quality. Journal of Educational Psychology, 74(4), 494-498.

Centra, J. A. (1974). The relationship between student and alumni ratings of teachers. Educational and Psychological Measurement, 34(2), 321-326.

Centra, J. A. (1976). The influence of different directions on student ratings of instruction. Journal of Educational Measurement, 13(4), 277-282.

Centra, J. A. (1977). The how and why of evaluating teaching. New Directions for Higher Education, 5(1), 93-106.

Clark, M. J. (1977). Program review practices of university departments. Princeton, NJ: Educational Testing Service.

Clark, M. J. (1983). Academic program evaluation. New Directions for Institutional Research, 37, 27-37.

Clark, M. J., Hartnett, R. T., & Baird, L. L. (1976). Assessing dimensions of quality in doctoral education. Princeton, NJ: Educational Testing Service.

Cooley, W. W. & Lohnes, P. R. (1976). Evaluation research in education. New York: Irvington.

Cronbach, L. J., Ambron, S. R., Donbush, S. M., Hess, R. D., Hornnik, R. C., Phillips, D. C., Walker, D. F., & Weiner, S. S. (1980). Toward reform of program evaluation. San Francisco: Jossey-Bass.

Dressel, P. L. (1978). Handbook of academic evaluation: Assessing institutional effectiveness, student progress, and professional performance for decision making in higher education. San Francisco: Jossey-Bass.

Druckers, A. J. & Remmers, H. H. (1951). Do alumni and students differ in their attitudes towards instructors? Journal of Educational Psychology, 42(3), 129-143.

Gephart, W. T. (1981). Watercolor Painting. In N. L. Smith (Ed.), Metaphors for evaluation. Bevery Hills: Sage Publications.

Hearn, J. C. (1978). Major choices and other vocational-related factors in the lives of college students: A longitudinal study. Unpublished doctoral dissertation, Stanford University, Palo Alto, California.

Hearn, J. C. (1985). Determinants for college students' overall evaluations of their academic programs. Research in Higher Education, 23(4), 413-437.

House, E. R. (1983). Assumption underlying evaluation models. In G. F. Madaus, M. S. Scriven, & D. L. Stufflebeam, Evaluation models: Viewpoints on educational and human service evaluation. Boston: Martinus Nijhoff Publishing.

Iowa State University. (1982). Governance of the department of professional studies. Professional Studies Department, Iowa State University, Ames, Iowa. Unpublished manuscript.

Kells, H. K. (1983). Self-study process: A guide for post-secondary institutions. New York: Macmillan.

Marsh, H. W., Fleiner, H., & Thomas, C. S. (1975). Validity and usefulness of student evaluations of instructional quality. Journal of Educational Psychology, 67(6), 833-839.

McAlduff, J. L. (1975). An evaluative study of how alumni and students in the department of Health Education at Teachers College, Columbia University, view their programs. Unpublished doctoral dissertation, Columbia University. (University Microfilms International No. 7515758).

Nie, H. N., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. (1983). SPSSX: Statistic package for social sciences. Chicago, IL: McGraw-Hill, Inc.

Noel, J. L. & Parsons, J. (1973). Doctoral graduates evaluate the relevance of departmental learning objectives to their professional responsibilities. Adult Education, 14 (1), 43-54.

Pace, C. R. & Friedlander, J. (1978). Approaches to evaluation: Model and perspectives. In G. R. Hanson (Ed.), Evaluating program effectiveness. San Francisco, CA: Jossey-Bass.

Patton, M. Q. (1978). Utilization--focused evaluation. Bevery Hills, CA: Sage Publications.

Patton, M. Q. (1982). Practical evaluation. Beverly Hills: Sage Publications.

Randall, R. S. (1969). An operational application of the CIPP model of evaluation. Educational Technology, 9 (7), 40-44.

Russo, J. R., Brown, D. G., & Rothweiler, J. G. (1977). A model for internal review. College and University, 52(3), 288-298.

Stake, R. E. (1976). Evaluating educational programs: The need and the response. Washington, D.C.: OECD Publication Center.

Startup, R. (1972). Student satisfaction with academic services. Educational Research, 14, 135-140.

Stauffer, T. M. (Ed.). (1981). Quality Higher Education's principal challenge. Washington, D.C.: American Council on Education.

Stufflebeam, D. L. (1969). Evaluation as enlightenment for decision making. In A. B. Walcott (Ed.), Improving educational assessment and an inventory of measures of affective behavior. Washington, D.C.: Association for Supervision and Curriculum Development.

Stufflebeam, D. L. (1973). An introduction to the PDK book. In B. Worthen & J. R. Sanders (Eds.), Educational Evaluation: Theory and practice. Worthing, OH; Charles A. Jones.

Stufflebeam, D. L. (1983). The CIPP model for program
    evaluation. In G. F. Madaus, M. S. Scriven, & D. L.
    Stufflebeam, Evaluation models: Viewpoints on
    educational and human services evaluation. Boston:
    Martinus Nijhoff Publishing.

Stufflebeam, D. L., Foley, W. J., Gephart, W. J., Guba, E.
    G., Hammond, R. L., Merriman, O. O., & Provas, M. M.
    (1971). Educational evaluation and decision making in
    education. Itasca, IL: Peacock.

Subah, K. D. (1986). Evaluation of Professional Studies
    Program by students. Unpublished doctoral dissertation,
    Iowa State University, Ames, Iowa.

Thorndike, R. L. & Hagen, E. (1969). Measurement and
    evaluation in Psychology and education. New York:
    Wiley.

Tyler, R. W. (1949). Basic principles of curriculum and
    instruction. Chicago: University of Chicago Press.

Webster, D. S. (1981). Methods of assessing quality:
    Advantages and disadvantages. Change, 13(7), 20-24.

Wise, S. L., Hengstler, D. D., & Braskamp, L. A. (1981).
    Alumni ratings as an indicator of departmental quality.
    Journal of Educational Psychology, 73(1), 71-77.

APPENDIX A. QUESTIONNAIRE

IOWA STATE
UNIVERSITY

Dear Alum:

The Department of Professional Studies would like your help in evaluating the graduate programs in the department. You have been selected to participate in this evaluation because you earned your M.S. and/or Ph.D. some time during the period of 1981-85.
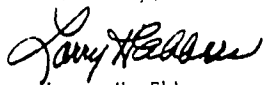
The questionnaire will take you less than 30 minutes to complete and we hope that you take time to help us with this effort. We will use the results of this study to provide input into program revisions.

The objectives set forth for this study are:
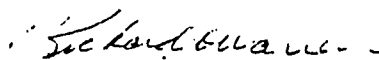
1. To identify your degree of satisfaction with your program of study.

2. To examine basic personal data to identify graduates from the various sections and their eventual employment.

3. To make recommendations for the improvement of the program.

Thank you for participating in the study. Please return your questionnaire in the enclosed stamped envelope. If you would like a summary of the study, you may indicate that on your form or write a separate letter. If the Department can more effectively serve you in your work, please advise us.

Sincerely,

Larry H. Ebbers
Professor and Chair
Professional Studies

Richard D. Warren
Director
Research Institute for Studies
in Education

Enclosures

College of Education

Professional Studies Department

Part I

General Information

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

Example: What is your marital status?
            a. Single
            b. Married

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

2. What is your sex?
    a. Female
    b. Male

3. Before completing a graduate degree in the Professional Studies De-
    partment, did you complete a graduate degree at another institution?
    a. M.Ed.
    b. M.S.
    c. Ph.D.
    d. Ed.D.
    e. Other degree _____
                         specify
    f. No other graduate degree

4. When did you receive your last graduate degree from ISU in the
    Professional Studies Department?
    a. 1980
    b. 1981
    c. 1982
    d. 1983
    e. 1984
    f. 1985

5. What is the highest graduate degree you have completed while in the
    Professional Studies Department at ISU?
    a. M.Ed.
    b. M.S.
    c. Ph.D.

2

6. Since completing a graduate degree in the Professional Studies De-
    partment at ISU, have you completed a degree at another institution?
    If so, what degree?
    a. M.Ed.
    b. M.S.
    c. Ph.D.
    d. Ed.D.
    e. Other degree _____
                            specify
    f. No other graduate degree

7. What was your area of specialization within the Professional Studies
    Department of the College of Education in your last graduate degree
    at ISU?
    a. Education
    b. Adult and Extension Education
    c. Curriculum and Instructional Media
    d. Educational Administration
    e. Elementary Education
    f. Counselor Education
    g. Higher Education
    h. History, Philosophy and Comparative Education
    i. Learning Disabilities
    j. Research and Evaluation
    k. Other (name) _____

8. To meet the requirements for the last graduate degree you earned at
    ISU while majoring in the Professional Studies Department, which of
    the following was completed?
    a. Thesis or dissertation
    b. Creative Component
    c. Other (identify) _____

9. Where was the majority (over 50%) of the ISU course work for your
    last degree completed?
    a. On campus
    b. Off campus

10. Were you on a graduate assistantship?
    a. Yes, teaching assistantship
    b. Yes, research assistantship
    c. No assistantship

11. Did you receive certification (i.e., superintendent, principal, guidance
    counselor, instructional media specialist, and learning disability
    specialist) while working on your last graduate degree at ISU in
    Professional Studies?
    a. Yes
    b. No

j

12. How would you classify your employment?
    a. Federal Government
    b. State Government
    c. Industry/Business
    d. 4-year college
    e. 2-year/community college
    f. Local school district
    g. Self-employed
    h. Other (specify) _____

13. What is the title of your present position? _____

14. What is the name and and address of your employer?

    _____   _____
           Name   Address

15. In your present job to what extent do you utilize the skills and
    competencies gained from the last graduate degree you received at ISU?
    a. A great deal
    b. Somewhat
    c. Very little
    d. Not at all

16. To what extent would you recommend your area of specialization in
    Professional Studies at ISU to other students?
    a. A great deal
    b. Somewhat
    c. Very little
    d. Not at all

17. To which ethnic/racial group do you belong? (International alumni
    circle a only.)
    a. International alumni
    b. White/caucasian
    c. Asian American
    d. Hispanic American
    e. Black/Afro-American
    f. Native Indian American
    g. Other (please specify) _____

4

Part II

Directions: The purpose of this section of the questionnaire is to provide
a way for you to evaluate the professional studies program
you earned while you received a graduate degree. Respond
to each statement in terms of your satisfaction with the
graduate program at ISU by listing one number in front of
each question. Use the following scale:

Scale:	5	4	3	2	1	0
	Highly satisfied	Satisfied	Undecided	Dissatis-fied	Highly dissatis-fied	Not applicable

Section I: Questions related to your section (i.e., adult education),
curriculum and instructional media, higher education, etc.).
If you were in learning disabilities, please respond to
that area as a section.

_____18. Admissions standards in your section.

_____19. Admissions procedures in your section.

_____20. Orientation of students to the section.

_____21. The extent to which you were challenged by the course work in
your section.

_____22. The extent to which your section provided a well-integrated
set of courses.

_____23. The variety of different course offerings in your section.

_____24. The amount of structure (required courses) in the graduate
program of your section.

_____25. The relevance of the course work in your section toward a
job in that area.

_____26. Size of classes in your section.

_____27. Opportunity to communicate with faculty and students within the
classroom, regarding student needs, concerns and suggestions
in your section.

_____28. The overall quality of instruction in your section.

_____29. Instructors' sensitivity to people of different racial and
ethnic backgrounds.

_____30. Instructors' ability to teach in your section.

5

Scale:

5	4	3	2	1	0
Highly satisfied	Satisfied	Undecided	Dissatis-fied	Highly dissatis-fied	Not applicable

_____ 31. The extent to which a sound theoretical framework was developed in your section.

_____ 32. The usefulness of the texts and other instructional materials in helping you to learn the course work in your section.

_____ 33. Evaluation procedures used in the course work in your section (i.e., percent of grade based on tests, papers, discussion, etc.).

_____ 34. The availability of enrichment activities offered by your section in addition to regular classes (i.e., seminars, colloquia, social events, etc.).

_____ 35. The balance between attention to writing (i.e., dissertation, thesis, or creative component) and course work in your section.

_____ 36. Contact with faculty outside the classroom in your section.

_____ 37. The quality of career development assistance in your section.

_____ 38. The quality of academic advising from your advisor.

_____ 39. Availability of major professor to student.

_____ 40. Relationship between you and your major professor.

_____ 41. Length of time required to complete the program in your section.

_____ 42. The extent to which you regarded your graduate program as worthwhile in your section.

_____ 43. Overall satisfaction with your graduate program in your section.

_____ 44. Overall treatment as a student in your section.

_____ 45. The quality of the students in your area of specialization.

46. What were the strengths of your section?
   a.
   b.
   c.

47. What were the weaknesses of your section?
   a.
   b.
   c.

6

Scale:	5	4	3	2	1	0
	Highly satisfied	Satisfied	Undecided	Dissatis-fied	Highly dissatis-fied	Not applicable

Section II: Questions related to other courses taken in the Professional Studies Department which were a part of your program of study.

_____ 48. The extent to which you were challenged by the course work.

_____ 49. The extent to which the courses provided you with a well-integrated program.

_____ 50. The number of courses required outside the section.

_____ 51. The variety of course offerings taken in the department but outside your section.

_____ 52. The extent to which a sound theoretical framework was developed for the additional courses taken in the department.

_____ 53. Size of classes outside your section but in the department.

_____ 54. Instructors' ability to teach in courses outside your section but in the department.

_____ 55. The overall quality of instruction in additional courses taken in professional studies.

_____ 56. The usefulness of the texts and other instructional materials in helping you to learn the course work in your section.

_____ 57. Evaluation procedures used in the course work in the courses outside your section (i.e., percent of grade based on tests, papers, discussion, etc.).

_____ 58. Opportunity to communicate with faculty and students within the classroom regarding student needs, concerns, and suggestions in the department but outside your section.

_____ 59. Contact with faculty outside the classroom in the department.

60. What were the strengths of the courses taken outside your section but in the Professional Studies Department?
a.
b.
c.

61. What were the weaknesses of the courses taken outside your section but in the Professional Studies Department?
a.
b.
c.

7

Scale:	5	4	3	2	1	0
	Highly satisfied	Satisfied	Undecided	Dissatis-fied	Highly dissatis-fied	Not applicable

Section III: Overall questions about the Professional Studies Department.

_____ ... Procedures used for registration.

_____ ... Availability of courses in the summer school.

_____ ... The availability of enrichment activities in the department offered in addition to regular classes (seminars, colloquia, social events, etc.).

_____ n5. The quality of career development assistance.

_____ ... Usefulness of the program of study committee.

_____ ... Appropriateness of the size of the program of study committee.

_____ ... The departmental support staff (secretaries, etc.) who deal directly with students.

_____ ... Support services available from R.I.S.E.

_____ ... Support services available from I.R.C.

_____ ... Support services available from Microcomputer Laboratory.

_____ .. Financial support available within the department.

_____ .. Overall satisfaction with preliminary writtens as a learning experience (Ph.D. only).

_____ ... Overall satisfaction with preliminary orals as a learning experience (Ph.D. only).

_____ .. Overall satisfaction with the way in which the final oral examination was conducted.

_____ .. Departmental attention to providing students with credentials for obtaining employment after graduation.

.. How did the department fail to meet expectations you had when you entered.' (write in)
a.
b.
c.

.. What changes would you suggest for the department in courses, curriculum, procedures, or staffing of the overall program? (write in)
a.
b.
c.

IOWA STATE
UNIVERSITY

November 20, 1985
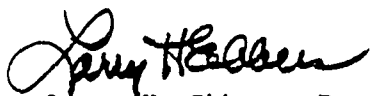
Dear Alum:

A short time ago you received a questionnaire from us asking you to evaluate the Professional Studies Department at Iowa State University. If you have already returned the questionnaire, please disregard this letter.
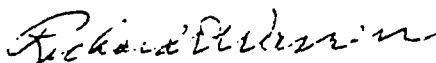
It is extremely important that we include your reaction in this study. After the questionnaires are returned it is hoped that recommendations for improvement of the department can be implemented. Unless we secure a large percentage of returns, it will be difficult to determine how reliable and valid the study is.

We look forward to your cooperation. If by chance you do not have the questionnaire, please drop us a card and we will send you a copy.

Sincerely,

Larry H. Ebbers, Professor and Chair
Professional Studies Department

Richard D. Warren, Distinguished
Professor and Director, RISE

IOWA STATE
UNIVERSITY

We don't mean to bug you ...

but time is passing.

Dear Professional Studies Graduate:

Approximately one month ago you were sent a questionnaire to have you evaluate your graduate program at Iowa State University, in the College of Education. We are writing to remind you to fill yours out if you have not already done so. There is no need to identify yourself as we are only interested in your response and your degree of satisfaction with your graduate program at I.S.U.
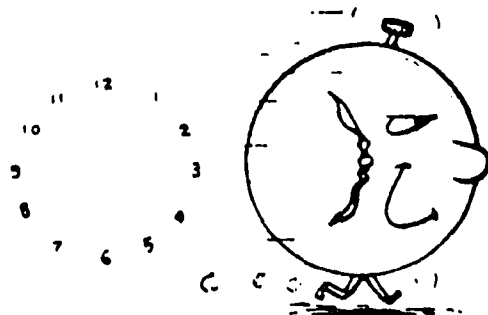
Your input is important in order to make this study worthwhile. The more input we obtain, the more worthwhile our evaluation of the graduate program will be. We would appreciate your completing the questionnaire at your earliest convenience and returning it to us.

If you have not received your questionnaire please call 515-294-1234 or 515-294-6444. Dr. Beavers will send you another questionnaire as she is conducting the study. Again, thank you for your cooperation.

Sincerely,

Larry H. Ebbers
Professor and Chair
Professional Studies

Richard D. Warren
Director
Research Institute for Studies
in Education

APPENDIX B.   TABLES

TABLE 27.   Intercorrelation of items: factor 1-graduate
            program quality in section

Item	28	30	43	42	21
28					
30	.84				
43	.70	.68			
42	.65	.67	.86		
21	.65	.65	.62	.68	

TABLE 28.   Intercorrelation of items: factor 2-course
            structure in section

Item	22	23	25	24
22				
23	.66			
25	.64	.53		
24	.49	.48	.46	

TABLE 29. Intercorrelation of items: factor 3-communication, sensitivity and enrichment within section

Item	37	36	27	29	20	34	35
37							
36	.48						
27	.47	.49					
29	.37	.36	.39				
20	.50	.30	.42	.27			
34	.42	.30	.37	.28	.42		
35	.40	.31	.34	.29	.36	.36	

TABLE 30. Intercorrelation of items: factor 4-major professor

Item	40	39	38
40			
39	.70		
38	.79	.72	

TABLE 31. Intercorrelation of items: couplet 5-section admission

Item	18	19
18		
19	.67	

TABLE 32. Intercorrelation of items: general composite
6-curriculum and student evaluation

Item	31	32	33	44
31				
32	.51			
33	.41	.46		
44	.42	.40	41	

TABLE 33. Intercorrelation of items: factor 7-course
structure and materials in department

Item	51	50	52	56
51				
50	.43			
52	.47	.35		
56	.31	.29	.35·	

TABLE 34. Intercorrelation of items: factor 8-graduate
program quality in department

Item	48	55	54
48			
55	.48		
54	.47	.67	

TABLE 35. Intercorrelation of items: couplet
9-communication in department

Item	58	59
58		
59	.65	

TABLE 36. Intercorrelation of items: factor 10-program of
study committee and procedures

Item	66	67	75
66			
67	.57		
75	.39	.30	

TABLE 37. Intercorrelation of items: couplet 11-enrichment
activities and career development

Item	64	65
64		
65	.46	

TABLE 38. Correlation of factors[1]

Factor	1	2	3	4	5	6	7	8	9	10	11
1	1.00										
2	.70	1.00									
3	.56	.47	1.00								
4	.51	.34	.50	1.00							
5	.32	.32	.26	.22	1.00						
6	.77	.62	.63	.51	.38	1.00					
7	.31	.43	.30	.20	.28	.41	1.00				
8	.36	.27	.23	.16	.28	.31	.45	1.00			
9	.17	.18	.43	.18	.12	.27	.30	.30	1.00		
10	.40	.33	.41	.45	.31	.43	.36	.29	.90	1.00	
11	.37	.42	.71	.29	.21	.45	.28	.15	.31	.34	1.00

[1]All significant at .10.

118