1985

A prediction of student teaching satisfaction of the Iowa State teacher education graduates using a combination of selected variables

Mary Ann Williams
Iowa State University

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A PREDICTION OF STUDENT TEACHING SATISFACTION OF THE IOWA STATE TEACHER EDUCATION GRADUATES USING A COMBINATION OF SELECTED VARIABLES

Iowa State University PH.D. 1985

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A prediction of student teaching satisfaction of the Iowa State teacher education graduates using a combination of selected variables

by

Mary Ann Williams

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

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

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1985

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CHAPTER I - THE PROBLEM

Introduction

Every profession has a "clinical" stage of training where the individual must learn to exercise his or her skills on real people in real life situations (Hays, 1982). Student teaching provides a type of experience where the individual must have acquired a set of special skills, and then make application of those skills to people in situations demanding the expertise of the profession. However, student teaching does not occur in isolation. It is embedded in a whole context of other experiences which are difficult to characterize in a simple, unidimensional way (Hays, 1982).

Student teaching is said to be fraught with difficulties for many student teachers (Davis, 1977). Although the student teaching experience should not be easy, it should be stimulating, motivating, and satisfying for the individual experiencing it. In other words, the student teaching experience that does not satisfy the student's legitimate needs and expectations can be an important determinant for persons not entering the profession or forming attitudes about the profession (Hays, 1982).

A review of the literature on teacher education programs revealed that considerable research efforts have been made to understand the student teaching process (Campbell, Williams & Sutton, 1979), but few studies on student teachers' satisfaction with the training they receive (Hays, 1982). In view of the above findings, a broader knowledge base is needed in order to understand what factors in student teaching contribute to a professionally satisfying or dissatisfying student teaching experience. The design of this study was to provide two mathematical regression models that could be used in predicting future student teachers' overall satisfaction based on the student teaching experience, and students' satisfaction towards teaching as a career based on their student teaching experience. Hopefully, the information presented in this study will serve as a basis for improving and strengthening various areas of the Teacher Education Program at Iowa State University.

The next phase of this study will provide an overview of the Iowa State teacher education program.

The Nature of Iowa State Teacher Education Program

Iowa State University programs for teacher preparation and for the preparation of school personnel were accredited

by the National Council for Accreditation of Teacher Education in 1980. Programs in Elementary and Secondary Teaching, K-12, Art, Music, and Physical Education were approved at that particular time. This also included programs for Elementary and Secondary Principals, Media Specialists, Superintendents, Counselors, and School Psychologists. These programs were approved by the Iowa State Board of Public Instruction and the Department of Public Instruction (Iowa State University National Council for Accreditation of Teacher Education Institutional Report, November 1979).

In keeping with the mission of the university, the ultimate goal of Iowa State Teacher Education Program is "to have each student teacher establish his/her own teaching style and to reach a level of competency that will enable him/her to perform with knowledge and pride of profession within the public and private school classroom" (Iowa State University NCATE Institutional Report, November 1979, p. 2-27).

The philosophy and objectives of the program as related to the teacher education admission policies and procedures emphasize that an effective teacher needs broad personal and professional knowledge and understanding. Therefore, the Iowa State University Teacher Education Program strives to

provide each student with a sound general education as well as preparation in an area of specialization (Iowa State University NCATE Institutional Report, November 1979).

Admission to Iowa State Teacher Education Program

The criteria for admission into Iowa State Teacher Education Program consist of the following:

1. The student must be accepted by a selection committee for the program which he/she seeks to enter. Recommendations by the selection committees must be confirmed by the University Teacher Education Committee before admittance to the program is granted.
2. A minimum of 2.3 quality grade point average is required for full admission to the program and this minimum average must be maintained through graduation.
3. Students may apply for admission to teacher education after reaching sophomore standing. The students must apply as early as three semesters prior to the one they plan to student teach.

In addition, a student may be tentatively admitted to the program on the condition that specific requirements are met. All students are informed of these conditions in writing. Once these conditions are satisfactorily met, then

the student will be granted full admission. A student may be denied admission to the program if he or she fails to meet the minimum requirements. The student who is denied admission to the program may initiate an appeal if dissatisfied with the committee's decision. Students who are fully admitted to the program have met all the admission requirements and been approved by the College Teacher Education Committee and the University Teacher Education Committee (Iowa State University Teacher Education Admissions Policies and Procedures Brochure, 1982).

General academic preparation

According to the Iowa State University NCATE Institutional Report (November 1979, p. 2-2), the program aims "to stimulate a desire for learning and intellectual endeavor, develop understanding and appreciation for the physical and cultural world, encourage independent thinking and analysis, increase competence in all aspects of communication, and create an understanding of individuals as social, psychological and physical beings". All prospective secondary students are required to complete a program in general education which is integrated with their professional training and extends through the undergraduate curriculum. The general education requirement consists of a minimum of 42 semester hours outside the academic major or

minor. Students must earn at least 30 semester credits in an approved subject area in order to be certified for full-time teaching (Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers, 1981). All secondary education students are required to take the following sequence of professional courses:

- Education Psychology (3 credits)
- The School in American Life (3 credits)
- Instructional Media (1 credit)
- Multicultural Awareness and Non-sexism in the Classroom (2 credits)
- Principles and Issues of Secondary Education (3-4 credits)
- Student Teaching (8-16 credits)

The Student Teaching Program at Iowa State University

Student teaching at Iowa State University is a 'Full-Time Commitment' completed under the guidance of selected public school cooperating teachers (Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers, 1981). The general policy in the Teacher Education Program at Iowa State is to assign one student teacher with one public school cooperating teacher in any given student teaching period. As one of the professional course requirements, all students in the

program are required to student teach. The student teaching assignment may range from 8 to 16 weeks depending upon the major area. Students may receive 8 to 16 credits for student teaching (Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers, 1981).

In view of Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers (1981), there are six educational objectives that underline the student teaching experience:

1. "The student teacher should develop deeper insights and understandings of the mental, emotional, social, and physical development of children".
2. "The student teacher should learn how to select, organize, and present classroom work in a variety of ways".
3. "The student teacher should learn how to develop and maintain a healthful, democratic, workable environment in the classroom".
4. "The student teacher should become familiar with the total role of the teacher in and out of the classroom".
5. "The student teacher should learn how to collect, interpret, and use data in the evaluation of pupil and group growth".

6. "The student teacher should develop self-confidence to the point that he/she can do a creditable job of teaching" (Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers, 1981, p. 1-2).

All Iowa State student teachers are expected to adhere to the different policies and regulations established by the school to which they are assigned, including guidelines and policy regulations established by the university and the teacher education program (Iowa State University Teacher Education Guidelines for Secondary School Cooperating Teachers, 1981).

Evaluation of the Iowa State Teacher Education Program

Realizing that evaluation is a valuable component to any teacher education program, and required by those seeking accreditation by the National Council for Accreditation of Teacher Education, the evaluation of the Iowa State University Teacher Education Program was conducted by the Research Institute for Studies in Education (RISE). Therefore, in 1979, RISE began work to develop a comprehensive model for evaluating the Teacher Education Program at Iowa State University. This evaluation process

began with the compiling of profiles on students enrolled in the program, and the administering of "Teacher Education Program Questionnaires".

The "Teacher Education Program Questionnaires" are administered at different points in a students career. They are given to students, 1) enrolled in their first education course (Elementary Education/ Secondary Education 204), 2) formally admitted to the program, 3) at the time of their graduation from the program, and 4) one year following graduation.

As a part of the comprehensive model for evaluation, questionnaire data were collected from graduating teacher education students by the Research Institute for Studies in Education. The objectives for collecting data were: 1) to measure students' attitudes and opinions about the quality of the Teacher Education Program at Iowa State University (33 items), 2) to obtain information about job characteristics important to students (18 items), 3) to obtain information about students' occupational plans, and 4) to obtain a demographic profile on students (with respect to sex, martial status, family background and academic achievement).

The "Teacher Education Program Questionnaires" used in this study consisted of a total of twenty-three survey items

(see Appendix A) which described various demographic characteristics, occupational and program evaluation information, and student teaching characteristics. Within this study, only twenty-eight of the thirty-three teacher preparation items (see Question 12a, Appendix A) were used to measure the adequacy of the Teacher Education Program at Iowa State University. All eighteen job characteristics items (see Question 16, Appendix A) were used to measure students' opinions on factors that were most important when considering a job. Other selected survey items (see Questions 1, 2, 3, 5, 7, 8, 9, 13, 14, and 19, Appendix A) from the questionnaire were used in this study.

Statement of the Problem

According to Hays (1982), the student teaching experience has not been given the same degree of attention and emphasis that clinical training receives in other professions. As a result, little is known about what effect the student teaching experience is having on student teachers. In addition, the available research on teacher education programs has not shown that certain demographic characteristics such as sex and grade point average are related to satisfaction based on the student teaching experience, including program characteristics pertaining to

the length of student teaching, grade level student taught, opinions of students on whether the student teaching length should be longer or shorter, students' evaluation of their professional preparation, students' opinions on factors that are important in a job, and students' self-evaluation as a future teacher.

The above findings justify the need for research on the above areas. Therefore, within this study, selected independent variables were used to predict two dependent variables. The dependent variables are: 1) overall student teaching satisfaction of the Iowa State teacher education graduates (a combination of selected variables), and 2) the graduates' ratings of their satisfaction towards teaching as a career based on their student teaching experience (one of the four satisfaction variables). It was decided to include the career satisfaction as a separate dependent variable because it addresses the satisfaction with teaching as a career, and this is not as specific as the other three satisfaction items. The selected independent variables related to student characteristics and teacher preparation.

Purpose of the Study

To better understand the purpose of this study, an explanation follows regarding a statistical step taken on

program characteristics variables and factors that are important in a job. A factor analysis was carried out on two of the survey items (see Questions 12a and 16, Appendix A) where the teacher education graduates were asked to do the following: 1) to rate the adequacy of Iowa State Teacher Education Program in twenty-eight areas on a scale ranging from 'very adequate' to 'very inadequate', and 2) to rate the importance of eighteen job characteristics items on a scale ranging from 'very important' to 'very unimportant. The twenty-eight teacher preparation items resulted in five factors and the eighteen job characteristics items resulted in five factors. This statistical step was necessary in order to reduce the number of variables being studied. Results from the factor analyses are described below as independent variables.

The major purpose of this study was to use available survey data to examine the relationships of student characteristics and teacher preparation variables to student teaching satisfaction. For the purpose of this study, student teaching satisfaction was examined in two parts, 1) overall student teaching satisfaction using a combination of four satisfaction variables, and 2) the single item identified from the four separate analysis, "Based on your student teaching experience, what is your reaction to

teaching as a career"? The same five point satisfaction scale was used for all four items. The composite of the four items will be referred to as overall student teaching satisfaction (OSTS), and the single item will be referred to as satisfaction with teaching as a career (STC).

For both of these dependent satisfaction variables, the bivariate relationships will be presented and a combination of independent variables were used to predict overall student teaching satisfaction of the Iowa State teacher education graduates' and the graduates' ratings of their satisfaction towards teaching as a career based on their student teaching experience. The independent variables used in this study were: five teacher preparation factors (a-instruction, b-work relationships, c-tests, d-learning problems, e-multicultural techniques) and nine single items (a-preparing and using media, b-understanding and managing behavior problems in the classroom, c-content preparation in your area of specialization, d-professional ethics and legal obligations, e-psychology of learning and its application to teaching, f-assessing and implementing innovations, g-using community resources, h-influence of laws and policies related to schools, and i-using written communication effectively); five job characteristics factors (a-autonomy, b-service, c-working with people, d-special abilities, and

e-security) and two single items (a-opportunity to effect social change, and b-adventure); length of the student teaching ranging from 'eight weeks or less' to 'sixteen weeks'; students' opinions whether the student teaching length should be longer or shorter; grade levels student taught ('Preschool/Kindergarten', 'Elementary', 'Secondary', and 'K-12 level'); students' self-evaluation as future teacher ranging from 'excellent' to 'inadequate', and demographic characteristics including sex and admit grade point average to the teacher education program at the time of admission.

Hypotheses to be Tested

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

1. There is no significant difference in overall student teaching satisfaction and length of student teaching.
2. There is no significant difference in overall student teaching satisfaction and suggested change in student teaching length.
3. There is no significant difference in overall student teaching satisfaction and grade levels student taught.

4. There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and length of student teaching.
5. There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and suggested change in student teaching length.
6. There is no significant relationship between satisfaction with teaching as a career based on the student teaching experience and grade levels student taught.
7. There is no significant relationship between overall student teaching satisfaction and the combination of selected variables.
8. There is no significant relationship between satisfaction with teaching as a career based on the student teaching experience and the combination of selected variables.

Basic Assumptions

The assumptions that underline this study are:

1. The questions described in the "Teacher Education Program Questionnaire" are effective in measuring

satisfaction based on the student teaching experience (see Appendix A).

2. The questions in the "Teacher Education Program Questionnaire" do not represent all aspects by which satisfaction can be measured.
3. The instruments, procedures, and data collection methods used by the Research Institute for Studies in Education are reliable and valid.

Definition of Terms

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

1. Student teaching was used in the study to define "that portion of a student's program when he/she spends a specified amount of time in a real classroom, working with children under the general supervision of a classroom teacher and a supervisor from the college with which he/she is affiliated" (Shapiro, 1972, p.1).
2. Overall student teaching satisfaction for each student was measured on a satisfaction scale composed of four items, a) geographical location of the student school, b) cooperating teacher, c) university supervisor, and d) teaching as a

career. For each student, the four items were summed and divided by four to obtain an average response.

3. Satisfaction with teaching as a career based on the student teaching experience was measured by a single satisfaction item ranging from 'very satisfied' to 'very dissatisfied' with scoring ranging from '1' to '5'.

Delimitation of the Study

The scope of this study was limited to students who completed a "Teacher Education Program Questionnaire", and graduated from the Teacher Education Program at Iowa State during three academic terms, the Spring Semesters of 1982, 1983 and 1984. Because the spring semester has the largest number of graduates, it was decided to use the spring graduates only. Therefore, it is not to be assumed that the data analyzed were representative of all teacher education graduates at Iowa State.

For the purpose of this study, data were gathered from twelve questions on the returned "Teacher Education Program Questionnaires". In view of the twelve items, the respondents were specifically asked to do the following: 1) to indicate length student taught ranging from '8 weeks or

less' to '16 weeks' (see Question 1, Appendix A); 2) to indicate whether the student teaching length should be longer or shorter (see Question 2, Appendix A); 3) to indicate grade level student taught (see Question 3, Appendix A); 4) to rate four aspects of their student teaching experience on subscales ranging from 'very satisfied' to 'very dissatisfied' (see Question 5, Appendix A); 5) to indicate by checking 'yes', 'no', or 'undecided' if they would prepare to become teacher again if they had it to do over (see Question 7, Appendix A); 6) to self-evaluate their performance as a future teacher varying from 'excellent' to 'inadequate' (see Question 8, Appendix A); 7) to rate the quality of Iowa State Teacher Preparation Program on a scale of '0' to '10' (see Question 9, Appendix A); 8) to rate the adequacy of their professional education program in twenty-eight areas on a scale ranging from 'very adequate' to 'very inadequate' (see Question 12a, Appendix A); 9) to indicate future employment plans after graduation (see Question 13, Appendix A); 10) to indicate long-range career plans varying from 'teaching' to 'non-teaching' (see Question 14, Appendix A); 11) to rate the importance of various job characteristics on a scale ranging from 'very important' to 'very unimportant' (see Question 16, Appendix A), and 12) to indicate sex by checking 'female' or 'male' (see Question 19, Appendix A).

Additional demograhic information used in this study included admit grade point average to the program at the time of admission and college. This information was obtained from the College of Education Student Services Office at Iowa State University.

The results from this study can only be generalized to the teacher education graduates of the three Spring Semester terms of 1982, 1983 and 1984.

Organization of the Study

This study is composed of five chapters, a bibliography and appendices. Chapter I presents an overview of the study consisting of introduction, a description of Iowa State Teacher Education Program, statement of the problem, purpose of the study, hypotheses, basic assumptions, definition of terms, delimitation of the study, and summary.

Chapter II presents a review of pertinent literature. Part one contains "Methodological Approaches" by which satisfaction can be measured. Part two examines literature on the student teaching experience. Part three provides literature on satisfaction levels of student teachers. Part four presents information on student teacher morale.

Chapter III provides detailed information on the methods and procedures utilized in this study.

Chapter IV contains the findings in both tabular and narrative form. The findings are discussed relevant to the hypotheses presented in Chapter I.

Chapter V contains a summary of the problem, findings of the study, conclusions, and recommendations.

Summary

The major purpose of this study was to examine the relationships of student characteristics and teacher preparation variables to student teaching satisfaction. In order to accomplish this aim, student teaching satisfaction was examined in two parts, 1) overall student teaching satisfaction using a combination of four satisfaction variables, and 2) the single item identified from the four separate analysis, "Based on your student teaching experience, what is your reaction to teaching as a career"? For both the above dependent satisfaction variables, a combination of independent variables (student characteristics and teacher preparation variables) were used to predict overall student teaching satisfaction of the Iowa State teacher education graduates, and the graduates' ratings of their satisfaction towards teaching as a career based on the student teaching experience.

This study was limited to students who completed "Teacher Education Program Questionnaire" and graduated from Iowa State Teacher Education Program during three academic terms, the Spring Semesters of 1982, 1983 and 1984. The design of this study was to provide two regression models that could be used in predicting future student teachers' overall satisfaction based on the student teaching experience, and students' satisfaction towards teaching as a career based on their student teaching experience.

CHAPTER II - A REVIEW OF THE LITERATURE

Methodological Approaches

There are numerous studies on satisfaction but no one ever predicts satisfaction with the student teaching experience. Due to a lack of research on student teaching satisfaction, three "Methodological Approaches" in relation to previous research were developed in support of this study. In order to better predict satisfaction with the student teaching experience, it is necessary first to understand the different types of satisfaction measures. For the purpose of this study, the literature revealed three approaches by which satisfaction can be measured.

Multiple regression approach

According to Hays (1982), satisfaction can be measured by exploring the relationship between two or more variables using multivariate techniques. Further, he stated that the appropriate statistical technique will depend upon the general characteristics of the variables under investigation. He also suggested that possible measures could be obtained from questionnaires, interviews, or from past or present records.

He proposed eight basic factor categories that could be used to measure satisfaction with the student teaching experience:

1. Personal characteristics of student teacher, such as age, sex, background, etc.
2. Academic characteristics of the student teacher, such as SAT score, the grade point average in college, major field, etc.
3. Characteristics of this particular student teaching assignment, including subject, teaching level, class size, school characteristics, characteristics of the particular cooperating teacher, etc.
4. Characteristics of the particular student teaching program, including prerequisities, actual amount of supervision per student, conferences, etc.
5. The individual's prior expectations for his student teaching program.
6. The school administration's expectations of the student teachers and cooperating teachers.
7. University-established goals for the program.
8. Cooperating teacher perceptions of individual student performance.

In addition, it was suggested that a factor analysis could be carried out on the above categories if the list seems too extensive. His work also pointed out that

researchers should not limit themselves to the above categories.

Likert-type scales

According to Kyriacou and Sutcliffe (1977), satisfaction can be measured as respondent's self-ratings on "Likert-type scales" in response to items asking about a person's overall experiences. Purcell and Seiferth (1981) surveyed 153 student teachers on 40 problems which were recorded on a Likert scale. The 40 problems were divided into 4 subscales of 10 statements each and then were arranged on a random basis. The four categories or subtests included: 1) Student Discipline, 2) Adjustment to Work Activities and Relationships, 3) Resource and Materials Related Problems, and 4) Personal Adjustment. It was found that the student teachers experienced the most difficulty with the problems of subscale one (Student Discipline). The findings also report that the student teachers lack adequate preparation in subscales two (Adjustment to Work Activities and Relationships), and three (Resource and Materials-Related Problems).

Purdue Student Teacher Opinionnaire

Mahan and Smith (1977a) utilized the "Purdue Student Teacher Opinionnaire" (PSTO) in order to measure the student

teachers' attitudes concerning satisfaction with their student teaching experience. This particular study focused upon pre-service teacher reported satisfaction with a mature year-long cluster program and supervising teacher perceptions of that satisfaction. The "Purdue Student Teacher Opinionnaire" (PSTO) was administered to three different program groups from 1972-1975. The findings revealed that the student teachers experienced positive satisfaction with the rapport they had with their individual classroom teacher, university supervisor, and students for all three years. But rapport with the principal was consistently rated negatively for all three years by the student teachers. Satisfaction with housing, school facilities and teaching as a profession received very favorable ratings by the student teachers for all three years. Rapport with other teachers, professional preparation, and curriculum issues were consistently rated somewhat positively for all three years, with the exception of community support of education. The "Purdue Student Teacher Opinionnaire" (PSTO) is a one hundred item scale designed to measure student teacher morale and to provide meaningful factor scores relative to twelve different aspects of the student teaching experience. Following are the the twelve basic factor categories:

- Rapport with Supervising Teacher

- Rapport with principal
- Teaching as a profession
- Rapport with university supervisor
- Community support of education
- Student teacher load
- Rapport with students
- Rapport with other teachers
- Satisfaction with housing
- Professional preparation
- School facilities
- Curriculum issues

Their second study (1977b) explored differences in the opinions (pre-student teaching and post-student teaching) of seven groups of student teachers regarding satisfaction with their alternative student teaching experience. Opinions of the student teachers were measured both before and after student teaching with the "Purdue Student Teacher Opinionnaire" (PSTO). The findings revealed that the student teachers destined to the Indian, Latino, Multicultural, and Urban sites were less optimistic about the degree to which they would be satisfied with their student teaching experience than were Suburban and Non-Project student teachers. The Post-opinionnaire scores revealed a continued depressed rating by student teachers in

the Reservation, Latino, and Urban Projects. It was also reported that both the Non-Project Elementary and Secondary student teachers tended to reveal more optimistic expectations for satisfaction with student teaching and greater post-satisfaction than did the other projects groups.

According to the data, the Suburban, Urban and Secondary Non-Project student teachers experienced a significant decrease in satisfaction with the rapport they had with their principal. The Elementary Non-Project student teachers held positive views on both the Pre-and post-opinionnaires regarding rapport they had with their principal.

The data also indicated that overall the student teachers were satisfied with the rapport they had with their students (except the Suburban Project student teachers) and supervising teachers (with the exception of the Urban Project student teachers). For both the Reservation and Latino Project student teachers, rapport with the university supervisor was rated less positive.

Another interesting finding was that the student teachers' rated their professional preparation somewhat positive. Satisfaction regarding the school facilities and curriculum issues were rated negatively by the Reservation and Latino Project student teachers.

As stated earlier, the "Purdue Student Teacher Opinionnaire" (PSTO) was designed to provide twelve meaningful factor scores which measure student teacher morale.

Mahan and Lester (1974) studied the relationships between rankings of student teachers' effectiveness, and the student teachers' and supervising teachers' satisfaction with a year-long field program. In order to measure the degree of satisfaction with the student teaching experience, the "Purdue Student Teacher Opinionnaire" was administered to eighty-five student teachers, forty-six supervising teachers, and ten university personnel. The findings stated that both the student teachers' and supervising teachers' tended to perceive the student teaching experience satisfactorily. It was also revealed that the student teachers were significantly more critical of certain aspects of the school programs than supervising teachers, with respect to their rapport with supervising teachers. The findings also disclosed that the student teachers were significantly more positive than supervising teachers regarding teaching as a profession and their professional preparation.

In a study of the relationship between satisfaction and performance in student teaching (Shapiro & Shapiro, 1972),

it was found that those student teachers ranked at the top and bottom in performance both tended to be less satisfied with their student teaching experience. The current study utilized the "Purdue Student Opinionnaire" (PSTO) as the measure of satisfaction and related it to three different rankings of performance to determine if a similar trend exists.

Overview

The reported methodological approaches varied in describing measures of satisfaction. According to Mahan and Smith (1977a), the "Purdue Student Teacher Opinionnaire" (PSTO) could be used to predict student teachers' satisfaction in a cluster program. The twelve basic factor categories were recommended for the prediction model. This particular study followed the approach described by Hays (1982) in predicting satisfaction based on the student teaching experience of Iowa State teacher education graduates.

Student Teaching Experience

The student teaching process plays an important role in teacher education programs. Student teaching has been and is still considered one of the most traditional and vital curriculum components in the make-up of teacher education programs (Hays, 1982). One of the primary purposes of

teacher education programs is to provide student teachers with a variety of clinical and practical experiences prior to entering into the teaching professional (Shapiro & Shapiro, 1972). The question raised by Hays (1982) is "how satisfied are students with their student teaching experience"? Since the literature reports few studies on the student teaching experience, it is important to understand the goals of student teaching.

According to Shapiro and Shapiro (1972), student teaching has several purposes and goals. Among these is that it gives the student, 1) the opportunity to apply theoretical knowledge that he or she has acquired (Brown & Banich, 1962), and 2) it gives the students an opportunity to plan learning activities, which allows them to demonstrate their teaching ability in a real classroom setting (Merrill, 1967).

The next part of this study will examine personality factors used in measuring the student teaching experience.

Self-concept

A review of the literature on teacher education revealed that researchers are becoming increasingly more interested in personality traits, such as attitudinal changes and self-concept, as viable factors in measuring the student teaching experience. Holden (1969) found that the

student teaching experiences are related to changes in students' self-concepts toward student teaching. Queen (1969) and Campbell (1976) discovered that student teachers who had a positive self-concept also exhibited a high authoritarian personality during the student teaching experience. In a study specifically involving black student teachers enrolled in a student teaching program at a predominantly black institution, Quinn (1957) reported that black female student teachers exhibited a more positive self-concept toward teaching than did black male student teachers.

Attitudes

The question raised regarding attitudinal changes is whether the student teaching experience affects the 'attitudes' of student teachers. Jacobs (1968) sought to explore attitudinal changes of student teachers and found that some of the student teachers had a more rigid and formalized attitude towards pupils after the student teaching experience. Weinstock and Peccolo (1970) reported that by the end of the student teaching experience, some student teachers had exhibited negative attitudes towards children and teaching in general.

Callis (1950) and Day (1959) reported a downward shift in attitudes towards teaching of student teachers following

the student teaching experience. Most of the past research of McGee (1955) and Ryans (1960) on the student teaching experience has shown that attitudes are related to student teachers' performance.

Problem Areas Related to the Student Teaching Experience

The literature discloses several areas that impact upon the student teaching experience of student teachers. According to Campbell and Williamson (1973), the student teacher/cooperating teacher relationship was found to be one of the areas that presented the most difficulty and stress for student teachers. The authors stated that the chief categories of difficulty lay in a wide difference in expectation levels between the students and their cooperating teachers; difference in teaching methodology; insistence of cooperating teachers that classes be taught "exactly as I usually teach them..." (p.168), and the cooperating teachers' unwillingness to let the student teachers to take control of the class.

Davis (1977) agreed with the above findings when he stated that student teachers are bound within the framework of the teaching styles and philosophies of their cooperating teachers, their department head, their supervisor and their school administrators. His point was that student teachers

often have difficulty feeling like a teacher after 17 years of being a student.

Appleberry (1976) discovered that after completion of the student teaching experience, some student teachers felt that too much classroom responsibility had been given too soon. Other problems pertinent to teacher preparation were that the student teachers lack skills scheduling and planning lessons.

In a recent study entitled Student teachers' perceptions of the preparation for student teaching, Seiferth and Purcell (1980) wrote,

> "a commonly heard criticism by students of education courses is that the material covered is irrelevant to the actual problems encountered by teachers. Student teachers often report experiencing problems and frustrations in the classroom for which their academic training may have left them unprepared" (p. 14).

Chiu (1975) found that 80% of 3000 prospective students stated that discipline gave students their greatest concern or worry as they planned for their teaching position.

Rickman and Hollowell (1981) reported five possible causes why student teachers fail student teaching. The five ranking causes of failure include:

1. Problems with classroom management and discipline.
2. Inability to relate well with students.
3. Poor teaching methods.

4. Lack of commitment to the profession.
5. Personal characteristics.

Satisfaction Levels of Student Teachers

Fletcher and Dotson (1976) examined student satisfaction with their teacher education courses and student teaching experiences. Data revealed that the student teachers rated both instruction and courses lower after the student teaching experiences. They rated perception relating to their understanding of their professional areas and skills considerably higher.

Mayers (1973) explored student teaching effectiveness and satisfaction to the preferred and perceived role of the cooperating teacher. The data showed that a differences between teachers' preference or perception of the cooperating teacher's role, and the cooperating teachers' perception of their role, did not have an effect on how the student teachers were rated at the end of the teaching experience. The findings indicated that the preferred and perceived role of the cooperating teacher did not have any effect on the student teachers' performance nor on their satisfaction with the teaching experience.

Brottman and Soltz (1971) explored the relationships between student teachers' perceptions of their roles as

teachers, their needs and attitudes, their observed behavior in the classroom setting, and their students' perceptions of the classroom climate. The findings showed that there was a decrease in satisfaction in classroom climate during the student teaching experience. Data revealed that there was no relationship between student teachers' perceptions of role, personality needs, attitudes toward children, and classroom climate measures.

Morale

Little has been done to assess patterns of morale among student teachers during the student teaching experience (Chissom & Stanford, 1979). Student teaching programs should be concerned about the morale of student teachers. According to Chissom and Stanford (1979), high morale on the part of the student teacher can contribute to a successful student teaching experience, and low morale can lead to an unsuccessful experience. The ability to identify changes in morale has been documented through several past research studies (Anderson, 1953; Bentley & Price, 1970; Blumberg & Weber, 1968).

Morris, Chissom, Seaman and Tooke (1980) believe that,

> "morale is an important factor in any working situation, and most educators would agree that high morale on the part of teachers leads to high morale in students, and thereby creates a more productive learning environment" (p. 34).

The above authors were concerned with identifying morale patterns among four groups of student teachers. Their work measured the morale of two hundred ninety student teachers. The student teachers were subdivided into four categories: 1) Kindergarten/Elementary majors, 2) Elementary majors, 3) Secondary Education majors, and 4) Secondary Non-Education majors. Both the Elementary and Secondary Education majors student taught for 14 weeks, and the Kindergarten/Elementary majors and Secondary Non-Education majors student taught for a full semester. A discriminant analysis was performed on the groups. The findings revealed that the morale profiles among the four groups (Kindergarten/Elementary, Elementary, Secondary Education majors and Secondary Non-Education majors) were similar with the exception of the Kindergarten/Elementary group, which showed a relatively large decrease in morale during week eight.

Overall, the student teachers' morale was at a relatively high level throughout the semester, with an increase at the end for all four groups. It was also disclosed that the level of morale was not consistently or highly related to the number of problems identified by the student teachers.

Similarly, Chissom and Stanford (1979, p. 3) defined morale as two types,

1. High morale is "characterized by enthusiasm, confidence, a sense of accomplishment, self-satisfaction with progress toward objectives, positive attitudes towards self, students and supervisors, and a feeling of 'I really like (enjoy) what I'm doing"!
2. Low morale is "characterized by a lack or absence of these feelings or attitudes as various student teaching tasks are performed".

Their work was concerned with identifying patterns of morale among student teachers over a fourteen week student teaching experience. One hundred twenty-three student teachers participated in the study. Of this total, there were 44 Early Childhood majors, 34 Elementary majors, and 45 Secondary majors. A discriminate analysis, using the scores for the fourteen weeks to discriminate among the groups was performed to determine whether or not group profiles were different.

Results from the analysis indicated that high and low morale patterns varied between the groups of student teacher

depending on their projected grade level specification. The data revealed that the Elementary group morale decreased during week seven, and the Early Childhood and Secondary groups showed a slight increase in morale during week seven.

CHAPTER III - METHODOLOGY

This chapter describes the method of data collection, instrument, sample, and treatment of the data. It concludes with a description of the statistical analysis used.

Survey Procedures

The research methodology for this study incorporated the use of survey research, defined by Borg and Gall (1979, p. 282), "...a method of collecting information...to explore relationships between different variables". The "Teacher Education Program Questionnaire" was the method used for collecting data (see Appendix A). Teacher education graduates of the three academic terms, the Spring Semester of 1982, 1983, and 1984, were mailed "Teacher Education Program Questionnaires", along with a cover letter (see Appendix B) and asked to provide various demographic, occupational, and program evaluation information relevant to Iowa State University Teacher Education Program. The mailing of the questionnaires and data collection was done by researchers in the Research Institute for Studies in Education at Iowa State. The initial questionnaire was followed up by a post card and a second questionnaire. A check-off procedure was used in order to determine those graduates who had returned questionnaires and those who had

not. If the graduates did not respond to the final mailing, it was assumed that the questionnaire would not be returned.

Instrumentation

The Research Institute for Studies in Education (RISE) was formed in 1974 to serve the research interests and needs of faculty and students in the College of Education (Iowa State University NCATE Institutional Report, November 1979). In 1979, RISE began work to develop a comprehensive model for evaluating the Teacher Education Program at Iowa State University. As an initial step in the comprehensive evaluation effort, RISE began compiling profiles on students in the program. This evaluation process began with the administering of "Teacher Education Program Questionnaires".

The instrument used in the evaluation of the Teacher Education Program effectiveness at Iowa State University was a research effort designed by Drs. Virgil Lagomarcino, Richard Warren, Harold Dilts, and Ann Thompson, with the assistance of Marilyn H. Blaustein and other faculty members. The "Teacher Education Program Questionnaire" consisted of twenty-three items designed to measure the teacher education graduates attitudes and opinions about the quality of the Teacher Education Program at Iowa State University. This particular questionnaire was administered

to students at the time of their graduation from the program. The twenty-three items in the questionnaire described various demographic, occupational and program evaluation information. For the purpose of this study, twelve questions were used from the "Teacher education Program Questionnaires" (see Questions 1, 2, 3, 5, 7, 8, 9, 12a, 13, 14, 16, and 19, Appendix A).

Through its many services and activities, RISE serves as an integral part of all college research activities. One important phase of RISE research is that the data collected from the "Teacher Education Program Questionnaires" are used to develop profile reports on the teacher education graduates. These profile reports are done annually and are available to the public for review.

Selection and Characteristics of the Sample

The samples were drawn from a larger study conducted by the Iowa State Research Institute for Studies in Education. A total of 741 teacher education graduates were selected to participate in this study. This study of teacher education graduates involves all students who graduated and completed a "Teacher Education Program Questionnaire" during three academic terms, Spring of 1982 (36%), 1983 (33%) and 1984 (31%). Since the Spring Semester has the largest number of

graduates and to avoid semester graduated as a confounding variable, it was decided to use the three most recent years. Of the 741 graduates, five hundred and ninety-two were females (80%) and one hundred and forty-seven were males (20%). Two of the cases were not specified in terms of male or female.

In terms of academic colleges graduated from, three hundred and eighty-eight graduated (53%) from the College of Education, one hundred and sixty-six graduated (23%) from the College of Home Economics, and ninety-nine graduated (13%) from the College of Science and Humanities. Sixty students graduated (8%) from the College of Agriculture and twenty six graduated (4%) from the college of Design. Two of the cases were not specified in terms of academic college. The results can be seen in Table 1.

At the time of admission to teacher education, seventy-five percent of the graduates had a cumulative grade point average of 2.51 or above when admitted to the program, while twenty-five percent had a cumulative grade point average of 2.31 or below. Grade point averages for graduates at the time they are admitted to teacher education are provided in Table 2.

Other student teaching characteristic that describe the sample include: 1) grade levels student taught, 2) length

TABLE 1. Demographic Characteristics of the Teacher Education Graduates

CHARACTERISTIC/GROUPING		NUMBER	RELATIVE (PCT)	ADJUSTED (PCT)
SEMESTER GRADUATED				
Spring, 1982		268	36.2	36.2
Spring, 1983		244	32.9	32.9
Spring, 1984		229	30.9	30.9
	TOTAL	741	100.0	100.0
SEX				
Female		592	79.9	80.1
Male		147	19.8	19.9
Not Specified		2	0.3	****
	TOTAL	741	100.0	100.0
COLLEGE				
Education		388	52.4	52.5
Home Economics		166	22.4	22.5
Sciences and Humanities		99	13.4	13.4
Agriculture		60	8.1	8.1
Design		26	3.5	3.5
Not Specified		2	0.3	****
	TOTAL	741	100.0	100.0

TABLE 2. Cumulative Grade Point Average at Time of Admission

GRADE POINT AVERAGE	NUMBER	RELATIVE (PCT)	ADJUSTED (PCT)
3.76-4.00	35	4.7	4.7
3.51-3.75	38	5.1	5.1
3.26-3.50	95	12.8	12.9
3.01-3.25	106	14.3	14.3
2.76-3.00	138	18.6	18.7
2.51-2.75	145	19.6	19.6
2.31-2.50	157	21.2	21.2
2.00-2.30	25	3.4	3.4
Not Specified	2	0.3	****
TOTAL	741	100.0	100.0

of student teaching, and 3) students' opinions regarding the student teaching length.

In terms of teaching levels, three hundred and eight graduates student taught at the Secondary level (42%) and two hundred and seventy-two graduates student taught at Elementary level (37%). Eighty-two of the graduates student taught at the Preschool/Kindergarten level (11%) and seventy-five of the graduates student taught at K-12 level (10%). One of the cases was not specified in terms of teaching level student taught.

Most of the graduates student taught for 16 weeks (52%) or 8 weeks or less (38%). The majority of the graduates (80%) felt that the length of their student teaching was "about right"; eleven percent indicated that the experience should have been longer, and nine percent thought that the experience should have been shorter. See Table 3.

Treatment of the Data

Data used in this study were taken from three SPSSx system files (SXTED834, SXGRAD83, and SXSEMCB3) created by RISE researchers. A data set was created from the three files and contained only those variables used in this study (see Questions 1, 2, 3, 5, 7, 8, 9, 12a, 13, 14, 16, and 19, Appendix A), including the additional information obtained from the College of Education Student Services Office at Iowa State University (admit grade point average to teacher education at the time of admission and college). An SPSSx system file is "a self-documented file containing data and descriptive information" (Nie et al., 1983, p. 65).

The responses from the twelve questions were coded by researchers in the Research Institute for Studies in Education. A coding scheme was devised from the "Teacher Education Program Questionnaire" by RISE researchers. The responses were coded numerically and the data keypunched at

TABLE 3. Student Teaching Characteristics

CHARACTERISTIC/GROUPING	NUMBER	RELATIVE (PCT)	ADJUSTED (PCT)
TEACHING LEVEL			
Preschool/Kindergarten	82	11.1	11.1
Elementary	272	36.7	36.8
Secondary	308	41.6	41.6
K-12	75	10.1	10.1
Other	3	0.4	0.4
Not Specified	1	0.1	****
TOTAL	741	100.0	100.0
LENGTH OF STUDENT TEACHING			
8 weeks or less	283	38.2	38.3
12 weeks	43	5.8	5.8
16 weeks	386	52.1	52.3
Other	26	3.5	3.5
Not Specified	3	0.4	****
TOTAL	741	100.0	100.0
CHANGE IN STUDENT TEACHING LENGTH			
Longer	84	11.3	11.4
Shorter	64	8.6	8.7
About right	589	79.5	79.9
Not specified	4	0.5	****
TOTAL	741	100.0	100.0

Key Entry and Unit Record (Computer Center) at Iowa State University. Any errors found in coding were corrected by RISE researchers and re-typed through the Wylbur Terminal.

Method of Analysis

The data were analyzed using the Statistical Package for Social Science (Nie et al., 1983). There were two steps in the data analysis, 1) preliminary, and 2) hypotheses testing. The preliminary analysis included frequency counts, percentages, factor analysis, reliability, and Pearson product moment correlation. In step two, one way analysis of variance was used to test the following hypotheses:

Hypothesis 1: There is no significant difference in overall student teaching satisfaction and length of student teaching.

Hypothesis 2: There is no significant difference in overall student teaching satisfaction and suggested change in student teaching length.

Hypothesis 3: There is no significant difference in overall student teaching satisfaction and grade levels student taught.

Hypothesis 4: There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and length of student teaching.

Hypothesis 5: There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and suggested change in student teaching length.

Hypothesis 6: There is no significant relationship between satisfaction with teaching as a career based on the student teaching experience and grade levels student taught.

Regression analysis was used to test the remaining hypotheses:

Hypothesis 7: There is no significant relationship between overall student teaching satisfaction and the combination of selected variables.

Hypothesis 8: There is no significant relationship between satisfaction with teaching as a career based on the student teaching experience and the combination of selected variables.

A single asterisk (*) was used in the tables to denote significant differences at the .05 level, and the double asterisk (**) were used to denote significant differences at the .01 level.

CHAPTER IV-RESULTS AND DISCUSSION

The findings and statistical analyses are presented in this chapter. Data used in this study were subjected to a number of statistical procedures: factor analysis, reliability, Pearson correlation, oneway analysis of variance and multiple regression. The results from above statistical procedures will be discussed in sections.

Factor Analyses

Teacher preparation

A factor analysis was carried out on twenty-eight teacher preparation items and another one on the eighteen job characteristics items. Both factor analyses used the extraction technique of PA2 and varimax rotation from the SPSSx package. The twenty-eight teacher preparation items converged into six factors (1. instruction, 2. work relationships, 3. tests, 4. learning problems, and 5. multicultural learning). However, the two items which loaded on factor six were treated as single items because only one item had loading over .50.

In addition, nine single items not on a factor were: 1) preparing and using media, 2) understanding and managing behavior problems in the classroom, 3) content preparation in your area of specialization, 4) professional ethics and

legal obligations, 5) psychology of learning and its application to teaching, 6) assessing and implementing innovations, 7) using community resources, 8) influence of laws and policies related to schools, and 9) using written communication effectively.

The factor pattern matrix on the teacher preparation items is presented in Table 4. As a result of the analysis, factors were formed by including those items loading .50 or greater, or items with loadings between .40 and .50 if they seemed similar in content with other items and load uniquely on the factor. The factor categories indicate that some common characteristics are shared by items in the respective group. Results can be seen in Table 5.

Job characteristics

The analysis on the eighteen job characteristics items extracted five factors (1. autonomy, 2. service, 3. working with people, 4. special abilities, and 5. security). The factor pattern matrix on the job characteristics items is shown in Table 6. From the analysis, the single items were: 1) opportunity to effect social change and 2) adventure. Again, factors were formed by including those items loading .50 or greater, or items with loadings between .40 and .50 if they seemed similar in content with other items and load uniquely on the factor. The factor categories indicate that

TABLE 4. Factor Analysis Results on Teacher Preparation Items

ITEM NO.	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
TEACHER PREPARATION						
TB22	.65[a]	.27	.17	.01	.10	.09
TB1	.57[a]	-.02	.21	.13	.09	.17
TB3	.56[a]	.15	.11	.25	.18	-.06
TB19	.56[a]	.15	.14	-.04	.20	.03
TB20	.56[a]	.16	.18	.16	.07	.05
TB18	.54[a]	.25	.33	.17	.24	-.09
TB23	.53[a]	.28	.21	.03	.19	.05
TB30	.49[a]	.06	.28	.14	.02	.37
TB21	.49[a]	.28	.20	.38	.15	.01
TB29	.39[a]	.28	-.00	.08	.31	.20
TB14	.37[a]	.06	.36	.04	.07	.09
TB4	.35[a]	.24	.16	.25	.12	.08
TB2	.19[a]	.02	.11	-.04	.17	.11
TB26	.25	.76[a]	.10	.14	.12	.06
TB25	.15	.70[a]	.11	.22	.12	.06
TB24	.19	.59[a]	.15	-.05	.17	.25
TB27	.44	.45[a]	.16	.13	.16	.12
TB17	.26	.20	.66[a]	.13	.25	.02
TB12	.31	.03	.61[a]	.16	-.05	.14
TB13	.17	.13	.53[a]	.21	.03	.16
TB16	.25	.21	.41[a]	.08	.35	.04
TB11	.11	.10	.18	.77[a]	.12	.07
TB10	.13	.11	.13	.76[a]	.15	-.00
TB32	.13	.07	.04	.14	.59[a]	.11
TB28	.20	.23	.10	.18	.58[a]	.04
TB33	.36	.23	.10	.09	.36[a]	.14
TB31	.10	.22	.15	.05	.18	.77[a]
TB15	.09	.32	.33	.01	.18	.36[a]

[a]Items loading on factors.

TABLE 5. Factor Categories on Teacher Preparation Items

MAJOR CATEGORIES	ITEM NO.	ITEM STATEMENTS
FACTOR 1		
Instruction	TB1	Planning units of instruction and individual lessons.
	TB3	Maintaining students interest.
	TB18	Relating activities to interest and abilities of students.
	TB19	Locating and using materials and resources in your speciality.
	TB20	Evaluating your own instruction.
	TB21	Individualizing instruction.
	TB22	Selecting and organizing materials.
	TB23	Using a variety of instruction techniques.
	TB30	Techniques of curriculum construction.
FACTOR 2		
Work relationships	TB24	Understanding teachers' roles in relation to administrators, supervisors and counselors.
	TB25	Working with parents.
	TB26	Working with other teachers.

TABLE 5 (Continued)

MAJOR CATEGORIES	ITEM NO.	ITEM STATEMENTS
FACTOR 3		
Tests	TB12	Developing tests.
	TB13	Interpreting and using standardized tests.
	TB17	Evaluating and reporting student work and achievement.
FACTOR 4		
Learning problems	TB10	Methods of working with children with learning problems.
	TB11	Assessing learning problems.
FACTOR 5		
Multicultural learning	TB28	Appreciating and understanding individual and intergroup differences in values and lifestyles.
	TB32	Techniques of infusing multicultural learning.
SINGLE ITEMS	TB2	Preparing and using media.
	TB4	Understanding and managing behavior problems in the classroom.
	TB14	Content preparation in your area of specialization.
	TB15	Professional ethics and legal obligations.

TABLE 5 (Continued)

MAJOR CATEGORIES	ITEM NO.	ITEM STATEMENTS
	TB16	Psychology of learning and its application to teaching.
	TB27	Assessing and implementing innovations.
	TB29	Using community resources.
	TB31	Influence of laws and policies related to schools.
	TB33	Using written communication effectively.

TABLE 6. Factor Analysis Results on Job Characteristics Items

ITEM NO.	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
JOB CHARACTERISTICS					
TD5	.74[a]	.04	.01	.09	.10
TD4	.59[a]	.02	-.11	-.01	.29
TD8	.58[a]	.13	-.07	.02	.24
TD9	.50[a]	.34	.22	-.00	.15
TD17	.44[a]	.26	.08	-.05	.10
TD7	.43[a]	.09	.07	.16	.06
TD6	.32[a]	.09	.29	.26	.12
TD15	.12	.65[a]	.25	.12	.17
TD18	.06	.63[a]	.15	.22	.00
TD14	.18	.48[a]	.14	.23	.20
TD16	.29	.44[a]	.11	.20	.08
TD11	.23	.28[a]	.22	.15	.08
TD10	-.03	.19	.78[a]	.09	.13
TD3	.01	.26	.51[a]	.11	.05
TD1	.02	.20	.09	.72[a]	.03
TD2	.08	.24	.12	.60[a]	.10
TD13	.27	.16	.06	.07	.67[a]
TD12	.22	.11	.11	.05	.52[a]

[a]Items loading on factors

some common characteristics are shared by items in the respective group. Results can be seen in Table 7.

Reliability Analyses

Cronbach's alpha technique was employed to estimate reliability on the teacher preparation and job characteristics items. The five scales derived from the factor analysis on the teacher preparation items, and the five scales derived from the factor analysis on the job characteristics items were analyzed for internal consistency reliability using the Reliabilities Program SPSSx. The Cronbach Alpha reliabilities were obtained for each scale.

Teacher preparation

Reliability estimates were computed for the five teacher preparation factors. As can be seen in Table 8, the estimates ranged from .64 for factor 5: multicultural learning to .86 for factor 1: instruction. It was decided to use all the factors in the statistical analysis. However, it would be desirable to have a higher reliability for factor 5.

Job characteristics

Table 9 presents the results of reliability estimates for the job characteristics items. The estimates ranged

TABLE 7. Factor Categories on Job Characteristics Items

MAJOR CATEGORIES	ITEM NO.	ITEM STATEMENTS
FACTOR 1		
Autonomy	TD4	Opportunity to earn a good deal of money.
	TD5	Social status and prestige.
	TD7	Relative freedom from supervision by others.
	TD8	Opportunity for advancement.
	TD9	Opportunity to exercise leadership.
	TD17	Control over what others do.
FACTOR 2		
Service	TD14	Variety in the work.
	TD15	Responsibility.
	TD16	Control over what I do.
	TD18	Challenge.
FACTOR 3		
Working with people	TD3	Opportunity to work with people rather than things.
	TD10	Opportunity to help and serve others.
FACTOR 4		
Special abilities	TD1	Opportunity to be creative and original.

TABLE 7 (Continued)

MAJOR CATEGORIES	ITEM NO.	ITEM STATEMENTS
	TD2	Opportunity to use special abilities or aptitudes.
FACTOR 5		
Security	TD12	Opportunity for a relatively stable and secure future.
	TD13	Fringe benefits (health care, retirement benefits).
SINGLE ITEMS	TD6	Opportunity to effect social change.
	TD11	Adventure.

TABLE 8. Reliability Information on Teacher Preparation Factors

FACTORS	NUMBER OF ITEMS	MEAN	STANDARD DEVIATION	AVERAGE CORRELATION	ALPHA
TEACHER PREPARATION					
Factor 1 Instruction	9	34.44	5.52	.40	.86
Factor 2 Work relationships	3	10.27	2.31	.53	.77
Factor 3 Tests	3	10.51	2.38	.49	.74
Factor 4 Learning Problems	2	6.11	1.89	.68	.81
Factor 5 Multicultural learning	2	7.90	1.60	.47	.64

TABLE 9. Reliability Information on Job Characteristics Factors

FACTORS	NUMBER OF ITEMS	MEAN	STANDARD DEVIATION	AVERAGE CORRELATION	ALPHA
JOB CHARACTERISTICS					
Factor 1 Autonomy	6	21.91	3.21	.32	.74
Factor 2 Service	4	18.19	1.78	.42	.75
Factor 3 Working with people	2	9.36	.98	.47	.64
Factor 4 Special abilities	2	9.14	.98	.49	.66
Factor 5 Security	2	8.22	1.34	.46	.63

from .63 for factor 5: security to .75 for factor 2: service. Again, it was decided to use all factors in the statistical analysis, although one was only .63.

Reliability estimate for the overall student teaching satisfaction scale was .47. For this particular scale, it would be desirable to have a higher reliability since it is used in the study as one of the dependent satisfaction variables.

Correlation Analyses

Pearson product moment correlation procedure was used to estimate the bivariate relationships between the dependent satisfaction variables and predictor variables. The correlation coefficients between the dependent and independent variables can be seen in Table 10.

Dependent variable: Overall student teaching satisfaction

The highest significant correlation coefficient between the dependent variable, overall student teaching satisfaction and any one predictor variables was .29 (Job characteristics factor 3: working with people), and the lowest correlation coefficient was -.02 (admit grade point average to teacher education at the time of admission).

Overall student teaching satisfaction (dependent variable) significantly correlated with all five teacher

TABLE 10. Pearson Correlation Coefficients on Predictor Variables

VARIABLES	OVERALL SATISFACTION	SATISFACTION WITH TEACHING
TEACHER PREPARATION		
Instruction (Factor 1)	.24**	.21**
Working relationships. (Factor 2)	.21**	.16**
Tests (Factor 3)	.12**	.06*
Learning problems. (Factor 4)	.18**	.21**
Multicultural learning. (Factor 5)	.13**	.20**
JOB CHARACTERISTICS		
Autonomy (Factor 1)	-.10**	-.12**
Service (Factor 2)	.16**	.18**
Working with people. (Factor 3)	.29**	.37**
Special abilities. (Factor 4)	.15**	.18**

**.01 level of significance.
*.05 level of significance.

TABLE 10 (Continued)

VARIABLES	OVERALL SATISFACTION	SATISFACTION WITH TEACHING
Security (Factor 5)	.06	.04
ITEMS		
Length of student teaching (8 weeks or less=1/more than 8 weeks=0)	-.18**	-.32**
Change in student teaching length (longer=1/about right=0)	-.06	-.04
Change in student teaching length (shorter=1/about right=0)	-.17**	-.12**
Grade levels student taught (Preschool-kindergarten=1/ K-12 level=0)	.07*	.09**
Grade levels student taught (Elementary=1/K-12=0)	.15**	.31**
Grade levels student taught (Secondary=1/K-12=0)	.09**	-.01
Opportunity to effect social change.	.07**	.14**
Adventure.	.03	.09*

TABLE 10 (Continued)

VARIABLES	OVERALL SATISFACTION	SATISFACTION WITH TEACHING
Using community resources.	.07*	.11**
Content preparation in your area of specialization.	.22**	.09**
Understanding and managing behavior problems in the classroom.	.22**	.17**
Preparing and using media.	.05	.05
Assessing and implementing innovations.	.19**	.14**
Psychology of learning and its application to teaching.	.15**	.11**
Using written communication effectively.	.12**	.10**
Professional ethics and legal obligations.	.06*	.00
Influence of laws and policies related to schools.	.03	.01
Self-evaluation as future teacher.	.24**	.35**

TABLE 10 (Continued)

VARIABLES	OVERALL SATISFACTION	SATISFACTION WITH TEACHING
Sex	.06*	.17**
Admit grade point average to teacher education at the time of admission.	-.02	.06

preparation factors (1. instruction, 2. work relationships, 3. tests, 4. learning problems, and 5. multicultural learning), and seven single teacher preparation items (1. using community resources, 2. content preparation in your area of specialization, 3. understanding and managing behavior problems in the classroom, 4. assessing and implementing innovations, 5. psychology of learning and its application to teaching, 6. using written communication effectively, and 7. professional ethics and legal obligations), four of the five job characteristics factors (1. autonomy, 2. service, 3. working with people, and 4. special abilities), and a single job characteristic item: opportunity to effect social change, length of student teaching, change in student teaching length, grade levels student taught, self-evaluation as a future teacher, and sex.

Dependent variable: Satisfaction with teaching as a career

The highest significant correlation coefficient between the dependent variable, satisfaction with teaching as a career and any one predictor variable was .37 (job characteristics factor 3: working with people) and the lowest correlation coefficient was .00 (teacher preparation single item: professional ethics and legal obligations).

The dependent variable, satisfaction with teaching as a career significantly correlated with all five teacher preparation factors (1. instruction, 2. work relationships, 3. tests, 4. learning problems, and 5. multicultural learning), and six single teacher preparation items (1. using community resources, 2. content preparation in your area of specialization, 3. understanding and managing behavior problems in the classroom, 4. assessing and implementing innovations, 5. psychology of learning and its application to teaching, and 6. using written communication effectively), four of the five job characteristics factors (1. autonomy, 2. service, 3. working with people, and 4. special abilities), and two single job characteristics items (1. opportunity to effect social change, and 2. adventure), length of student teaching, change in student teaching length, grade levels student taught, self-evaluation as a future teacher and sex.

In addition, Pearson correlation procedure was used to estimate the bivariate relationships between the dependent satisfaction variables and the rating of quality of the Iowa State Teacher Preparation Program. As can be seen in Table 11, the analysis revealed a significant relationship between overall student teaching satisfaction and the rating of quality of the Iowa State Teacher Preparation Program (.28),

TABLE 11. Pearson Correlation Coefficients on Satisfaction Indicators and Quality of Teacher Preparation Program

	1	2	3	4	5	6
Overall student teaching satisfaction.	---					
Geographical location of school.	.64**	---				
Cooperating teacher.	.62**	.15**	---			
University-supervisor.	.64**	.14**	.23**	---		
Satisfaction with teaching as career.	.61**	.15**	.33**	.18**	---	
Quality of teacher preparation program.	.28**	.17**	.14**	.22**	.19**	---

**.01 level of significance.

and a significant relationship between satisfaction with teaching as a career and rating of quality of the Iowa State Teacher Preparation Program (.19).

Oneway Analyses of Variance

A single classification analysis of variance procedure was used to test hypotheses (1, 2, and 3) related to overall student teaching satisfaction and hypotheses (4, 5, and 6) related to satisfaction with teaching as a career based on the student teaching experience. An additional analysis using Scheffé Multiple Range Test was employed to determine where the difference in means, as indicated by the ANOVA, occurred.

Testing of Hypothesis 1

> Hypothesis 1: There is no significant difference in student teaching satisfaction and length of student teaching.

Length of student teaching

This hypothesis (1) was rejected at the .01 level of significance. Based on the evidence presented in Table 12, overall student teaching satisfaction differed significantly among the four categories of student teaching length. The Scheffé Multiple Range Test for differences in means indicated that satisfaction levels for both students who

TABLE 12. Overall Student Teaching Satisfaction with Length of Student Teaching

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
8 weeks or less	283	4.19	.66	8.76**	.000
12 weeks	43	4.42	.55		
16 weeks	386	4.41	.57		
Other	26	4.54	.43		

**.01 level of significance.

student taught more than 16 weeks (Mean=4.54) and students who student taught 16 weeks (Mean=4.41) were different than the satisfaction levels for students who student taught 8 weeks or less (Mean=4.19).

Testing of Hypothesis 2

Hypothesis 2: There is no significant difference in overall student teaching satisfaction and suggested change in student teaching length.

Change in student teaching length

The hypothesis (2) was rejected at the .01 level of significance. As can be seen in Table 13, there were significant differences in overall student teaching satisfaction among the suggested categories of changes in student teaching length. Analysis from the Scheffé Multiple Range Test revealed that satisfaction levels for those students who indicated that the student teaching length was about right (Mean=4.39) were different than the satisfaction levels for those students who suggested that the student teaching length should be shorter (Mean=4.00).

TABLE 13. Overall Student Teaching Satisfaction with Change of Student Teaching Length

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Longer	84	4.24	.69	13.14**	.000
Shorter	64	4.00	.82		
About right	589	4.39	.56		

**.01 level of significance.

Testing of Hypothesis 3

Hypothesis 3: There is no significant difference in overall student teaching satisfaction and grade levels student taught.

Grade levels student taught

Based on the analysis, hypothesis 3 was rejected at the .01 level of significance. According to the results presented in Table 14, there were significant differences in overall student teaching satisfaction among the four grade levels student taught. As indicated by the Scheffe Multiple Range Test, satisfaction levels for those students who student taught at K-12 grade levels (Mean=4.49), students who student taught at Preschool/Kindergarten level (Mean=4.46), and students who student taught at the Elementary level (Mean=4.45) were different than the satisfaction levels for those students who student taught at the secondary level (Mean=4.16).

TABLE 14. Overall Student Teaching Satisfaction with Grade Levels Student Taught

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Preschool/ Kindergarten	82	4.46	.51	15.27**	.000
Elementary	272	4.45	.55		
Secondary	308	4.16	.67		
K-12	75	4.49	.49		

**.01 level of significance.

Testing of Hypothesis 4

Hypothesis 4: There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and length of student teaching.

Length of student teaching

This hypothesis (4) was rejected at the .01 level of significance. There were significant differences in satisfaction with teaching as a career based on the student teaching experience among the four categories of student teaching length. The results can be seen in Table 15.

TABLE 15. Satisfaction with Teaching as a Career with Length of Student Teaching

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
8 weeks or less	279	3.98	.94	30.09**	.000
12 weeks	43	4.21	.89		
16 weeks	382	4.58	.67		
Other	25	4.52	.92		

**.01 level of significance.

Results from the Scheffé Multiple Range Test revealed that the ratings of satisfaction with teaching as a career based on the student teaching experience for those students who student taught 16 weeks (Mean=4.58) and students who student taught more than 16 weeks (Mean=4.52) were different than the ratings of satisfaction with teaching as a career based on the student teaching experience for those students who student taught 8 weeks or less (Mean=3.98). It was also indicated by the Scheffé Multiple Range Test that the ratings of satisfaction with teaching as a career based on the student teaching experience for those students who

student taught 16 weeks (Mean=4.58) were different than the ratings of satisfaction with teaching as a career based on the student teaching experience for students who student taught 12 weeks (Mean=4.21).

Testing of Hypothesis 5

> Hypothesis 5: There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and suggested change in student teaching length.

Change in student teaching length

On basis of the analysis, this hypothesis (5) was rejected at the .01 level of significance. As can be seen in Table 16, there were significant differences in satisfaction with teaching as a career based on the student teaching experience among the suggested categories of changes in student teaching length. The results from the Scheffé Multiple Range Test revealed that the ratings of satisfaction with teaching as a career based on the student teaching experience for those students who indicated that the student teaching length was about right (Mean=4.38) were different than the ratings of satisfaction with teaching as a career based on the student teaching experience for those students who suggested that the student teaching length should be shorter (Mean=4.00).

TABLE 16. Satisfaction with Teaching as a Career with Change of Student Teaching Length

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Longer	82	4.23	.88	6.29**	.002
Shorter	64	4.00	.94		
About right	583	4.38	.83		

**.01 level of significance.

Testing of Hypothesis 6

Hypothesis 6: There is no significant difference between satisfaction with teaching as a career based on the student teaching experience and grade levels student taught.

Grade levels student taught

The hypothesis (6) was rejected at the .01 level of significance. In view of Table 17, there were significant differences in satisfaction with teaching as a career based on the student teaching experience among the grade levels student taught. According to the Scheffé Multiple Range Test, the ratings of satisfaction with teaching as a career

TABLE 17. Satisfaction with Teaching as a Career with Grade Levels Student Taught

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Preschool/ Kindergarten	79	4.54	.66	39.78**	.000
Elementary	271	4.67	.63		
Secondary	304	3.97	.95		
K-12	74	4.31	.79		

**.01 level of significance.

based on the student teaching experience for those students who student taught at the Elementary level (Mean=4.67), students who student taught at the Preschool/Kindergarten level (Mean=4.54), and students who student taught at the K-12 grade levels (Mean=4.31) were different than the ratings of satisfaction with teaching as a career based on the student teaching experience for students who student taught at the Secondary level (Mean=3.97). Other findings revealed from the Scheffé Multiple Range Test that the ratings of satisfaction with teaching as a career based on

the student teaching experience for those students who student taught at the Elementary level (Mean=4.67) were different than the ratings of satisfaction with teaching as a career based on the student teaching experience for students who student taught at the K-12 grade levels (Mean=4.31).

Additional Analyses

Additional analyses examining the bivariate relationships between the dependent satisfaction variables and the following variables are presented. These relationships were not stated in formal hypotheses. However, it was felt that these analyses would provide additional insights about satisfaction.

Dependent variable: Overall student teaching satisfaction

To be teacher again On the basis of the results presented in Table 18, there were significant differences in overall student teaching satisfaction among the categories to be teacher again. According to the Scheffé Multiple Range Test findings, satisfaction levels for those students who indicated 'yes' (Mean=4.47) that they would prepare to be teacher again if they had it to do over, and those students who indicated 'no' (Mean=3.80) that they would not

TABLE 18. Overall Student Teaching Satisfaction with to be Teacher Again

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Yes	480	4.47	.54	47.60**	.000
Undecided	188	4.20	.58		
No	69	3.80	.79		

**.01 level of significance.

prepare to be teacher again if they had it to do over were different than satisfaction levels for those students who were 'undecided' (Mean=4.20). The Scheffé Multiple Range Test for differences in means revealed that satisfaction levels for students who indicated 'yes' (Mean=4.47) that they would prepare to be teacher again if they had it to do over were different than satisfaction levels for students who indicated 'no' (Mean=3.80).

Future employment plans As can be seen in Table 19, there were significant differences in overall student teaching satisfaction among the categories of employment

TABLE 19. Overall Student Teaching Satisfaction with Future Employment Plans

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Obtained Teaching Position	31	4.39	.68	16.86**	.000
Seeking teaching position	521	4.42	.55		
Seeking non-teaching position	65	3.83	.72		
Graduate study	32	4.39	.43		
Other	78	4.17	.68		

**.01 level of significance.

plans. Results from the Scheffé Multiple Range Test revealed that satisfaction levels for those students who plan to seek teaching positions (Mean=4.42), students who plan to attend graduate school (Mean=4.39), students who had already obtained teaching positions (Mean=4.39), and students who had other future employment plans (Mean=4.17) were different than satisfaction levels for those students who plan to seek non-teaching positions (Mean=3.38). Also,

analysis from the Scheffé Multiple Range Test indicated that satisfaction levels for those students who plan to seek teaching positions (Mean=4.42) were different than satisfaction levels for those students who had other future employment plans (Mean=4.17).

Long range career plans According to Table 20, there were significant differences in overall student teaching satisfaction among the four categories of long range career plans. On the basis of the Scheffé Multiple Range Test results, satisfaction levels for those students whose long range career plans involved teaching (Mean=4.45), students who had other long range career plans (Mean=4.31), and those students whose long range career plans involved employment in education other than teaching (Mean=4.26) were different than satisfaction levels for those students whose long range career plans involved employment outside the field of education (Mean=3.89). The results from the Scheffé Multiple Range Test also indicated that satisfaction levels for those students whose long range career plans involved teaching (Mean=4.45) were different than satisfaction levels for those students whose long range career plans involved employment in education other than teaching (Mean=4.26).

TABLE 20. Overall Student Teaching Satisfaction with Long Range Career Plans

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Teaching	479	4.45	.55	27.63**	.000
Employment in education other than teaching	91	4.26	.65		
Employment outside education	107	3.89	.63		
Other	48	4.31	.65		

**.01 level of significance.

College Based on the evidence presented in Table 21, there were significant differences in overall student teaching satisfaction among the five academic colleges. The analysis from the Scheffé Multiple Range Test revealed that satisfaction levels for those students enrolled in the College of Education (Mean=4.43) were different than satisfaction levels for students enrolled in the College of Agriculture (Mean=4.12). Also, results from the Scheffé

TABLE 21. Overall Student Teaching Satisfaction with College

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Agriculture	60	4.12	.60	8.26**	.000
Design	26	4.37	.60		
Education	388	4.43	.55		
Home Economics	166	4.16	.69		
Sciences and Humanities	99	4.40	.58		

**.01 level of significance.

Multiple Range Test indicated that satisfaction levels for students enrolled in the College of Education (Mean=4.43) and students enrolled in the College of Sciences and Humanities (Mean=4.40) were different than satisfaction levels for those students enrolled in the College of Home Economics (Mean=4.16).

Dependent variable: Satisfaction with teaching as a career

To be teacher again According to Table 22, there were significant differences in satisfaction with teaching as a career based on the student teaching experience. On basis of the Scheffé Multiple Range Test results, those students that indicated 'yes' (Mean=4.63) that they would prepare to be teacher again if they had it to do over and students who indicated 'no' (Mean=3.29) that they would not prepare to be teacher again if they had it to do over rated satisfaction with teaching as a career based on the student teaching experience differently than those students who indicated 'undecided' (Mean=3.95). Also, the Scheffé Multiple Range Test results revealed that those students who indicated 'yes' (Mean=4.63) that they would prepare to be teacher again if they had it to do over rated satisfaction with teaching as a career based on the student teaching experience differently than students who indicated 'no' (Mean=3.29).

TABLE 22. Satisfaction with Teaching as a Career with to be Teacher Again

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Yes	474	4.63	.63	136.94**	.000
Undecided	186	3.95	.82		
No	69	3.29	1.03		

**.01 level of significance.

Future employment plans The results from the Scheffé Multiple Range Test revealed that there were significant differences in satisfaction with teaching as a career based on the student teaching experience among the categories of future employment plans. Results from the Scheffé Multiple Range Test are presented in Table 23. An examination of the analysis from the Scheffé Multiple Range Test revealed that those students who had already obtained teaching positions (Mean=4.65), students who plan to seek teaching positions (Mean=4.56), and students who had other future employment plans (Mean=3.90) rated satisfaction with

TABLE 23. Satisfaction with Teaching as a Career with Future Employment Plans

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Obtained Teaching Position	31	4.65	.71	67.15**	.000
Seeking teaching Position	514	4.56	.65		
Seeking non-teaching position	64	3.19	1.04		
Graduate study	31	3.68	.70		
Other	78	3.90	.89		

**.01 level of significance.

teaching as a career based on the student teaching experience differently than those students who plan to seek non-teaching positions (Mean=3.19). Other findings from the Scheffé Multiple Range Test revealed that those students who had already obtained teaching positions (Mean=4.65) and students who plan to seek teaching positions (Mean=4.56) rated satisfaction with teaching as a career based on the student teaching experience differently than those students

who plan to attend graduate school (Mean=3.68). The Scheffé Multiple Range Test results indicated that those students who had already obtained teaching positions (Mean=4.65) and students who plan to seek teaching positions (Mean=4.56) rated satisfaction with teaching as a career based on the student teaching experience differently than those students who had other future employment plans (Mean=3.90).

Long range career plans Based on Table 24, there were significant differences in satisfaction with teaching as a career based on the student teaching experience among the categories of long range career plans. The results from the Scheffé Multiple Range Test for differences in means indicated that those students whose long range career plans involved teaching (Mean=4.62), students whose long range career plans involved employment in education other than teaching (Mean=4.11) and students who had other long range career plans (Mean=3.83) rated satisfaction with teaching as a career based on the student teaching experience differently than those students whose long range career plans involved employment outside the field of education (Mean=3.40). Also the findings from the Scheffé Test indicated that those students whose long range career plans involved teaching (Mean=4.62) rated satisfaction with teaching as a career based on the student teaching

TABLE 24. Satisfaction with Teaching as a Career with Long Range Career Plans

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Teaching	473	4.62	.60	95.25**	.000
Employment in education other than teaching	89	4.11	.92		
Employment outside education	106	3.40	.90		
Other	48	3.83	.95		

**.01 level of significance.

experience differently than students who had other long range career plans (Mean=3.83). The results from the Scheffé Test disclosed that those students whose long range career plans involved teaching (Mean=4.62) rated satisfaction with teaching as a career based on the student teaching experience differently than those students whose long range career plans involved employment in education other than teaching (Mean=4.11).

College As can be seen in Table 25, there were significant differences in satisfaction with teaching as a career based on the student teaching experience among the five academic colleges. Results from the Scheffé Multiple Range Test indicated that those students enrolled in the College of Education (Mean=4.53), students in the College of Home Economics (Mean=4.19) and those students enrolled in the College of Sciences and Humanities (Mean=4.16) rated satisfaction with teaching as a career based on the student teaching experience differently than those students in the College of Agriculture (Mean=3.71). Other findings from the Scheffé Multiple Range Test revealed that those students enrolled in the College of Education (Mean=4.53) rated satisfaction with teaching as a career based on the student teaching experience differently than those students enrolled in the College of Sciences and Humanities (Mean=4.16). It was also disclosed from the Scheffé Test that those students enrolled in the College of Education (Mean=4.53) rated satisfaction with teaching as a career based on the student teaching experience differently than those students enrolled in the College of Home Economics (Mean=4.19).

TABLE 25. Satisfaction with Teaching as a Career with College

VARIABLES	NUMBER	MEAN	STANDARD DEVIATION	F VALUE	F PROB
Agriculture	59	3.71	.93	16.12**	.000
Design	25	4.24	.88		
Education	387	4.53	.74		
Home Economics	161	4.19	.91		
Sciences and Humanities	98	4.16	.89		

**.01 level of significance.

Multiple Regression Analyses

Multiple regression using stepwise procedure in SPSSx was used to test hypotheses 7 and 8. Prior to using the regression procedure, length of student teaching, change in student teaching length, and grade levels student taught were coded as dummy variables. For length of student teaching, DUMBA (coded 1) denoted 8 weeks or less, for change in the student teaching length, DUMBB (coded 1)

denoted longer and DUMBC (coded 1) denoted shorter, and for grade levels student taught, DUMBD (coded 1) denoted Preschool/Kindergarten, DUMBE (coded 1) denoted Elementary and DUMBF (coded 1) denoted Secondary. The numerical codes assigned to the three categorical groups were '1' equal membership and '0' otherwise.

Testing of Hypothesis 7

Hypothesis 7: There is no significant relationship between overall student teaching satisfaction and the combination of selected variables. The combination of selected variables include: five teacher preparation factors (a-instruction, b-work relationships, c-tests, d-learning problems, e-multicultural techniques) and nine single items (a-preparing and using media, b-understanding and managing behavior problems in the classroom, c-content preparation in your area of specialization, d-professional ethics and legal obligations, e-psychology of learning and its application to teaching, f-assessing and implementing innovations, g-using community resources, h-influence of laws and policies related to schools, and i-using written communication effectively); five job characteristics factors (a-autonomy, b-service, c-working with people, d-special abilities, and e-security) and two single items (a-opportunity to effect social change, and b-adventure); length of the student teaching ranging from 'eight weeks or less' to 'sixteen weeks'; students' opinions whether the student teaching length should be longer or shorter; grade levels student taught ('Preschool/Kindergarten', 'Elementary', 'Secondary', and 'K-12 level'); students' self-evaluation as future teacher ranging from 'excellent' to 'inadequate', and demographic characteristics including sex and admit grade point average to the teacher education program at the of time admission.

On the basis of the analysis, the hypothesis (7) was rejected at the .01 level of significance. This study reports that the overall analysis yield a multivariate F of 20.33. The R-Square after the .05 level of significance for inclusion in the equation is reached, indicated that twenty-six percent of the variance in overall student teaching satisfaction was explained by the combination of selected variables or predictor variables. The analysis revealed that working with people was the best predictor of overall student teaching satisfaction, accounting for 10 percent of the variance. Self-evaluation as a future teacher, content preparation in your area of specialization, length of student teaching, change in student teaching length, understanding and managing behavior problems in the classroom, autonomy, security, work relationships, and using community resources accounted for an additional 16 percent of the variance.

After the above mentioned variables had been considered, the remaining variables did not make a significant contribution to the prediction of overall student teaching satisfaction.

An examination of the significant unstandardized regression coefficients from the multiple regression equation revealed that length of student teaching was

negatively related to overall student teaching satisfaction. The analysis also disclosed that change in student teaching length, autonomy, and using community resources were negatively related to overall student teaching satisfaction. Results from the regression analysis can be seen in Table 26.

The findings reported from the multiple regression analysis were consistent with the findings from the Pearson correlation with the exception of two predictor variables. According to the analysis from the Pearson correlation, there was no significant relationship between overall student teaching satisfaction and the job characteristic factor: security. This was inconsistent with the findings from the regression analysis which indicated a significant positive relationship between overall student teaching satisfaction and the job characteristic factor: security. Also, the analysis from the Pearson correlation indicated a significant positive relationship between overall student teaching satisfaction and the single teacher preparation item: using community resources. However, this was inconsistent with the findings from the regression analysis which revealed a negative relationship between overall student teaching satisfaction and the single teacher preparation item: using community resources.

TABLE 26. Regression Analysis of Overall Student Teaching Satisfaction

PREDICTOR VARIABLES	MULTIPLE R	R SQUARE	REGRESSION COEFFICIENTS[a]
Working with people.	.32	.10	.29
Self-evaluation as future teacher.	.38	.15	.14
Content preparation in your area of specialization.	.42	.17	.09
Length of student teaching (8 weeks or less=1/more than 8 weeks=0)	.45	.20	-.22
Change in student teaching length (shorter=1/ about right=0)	.48	.23	-.33
Understanding and managing behavior problems in the classroom.	.49	.24	.05
Autonomy	.49	.24	-.14
Security	.50	.25	.09
Work relationships.	.51	.26	.09
Using community resources.	.51	.26	- .06
Constant	1.98		
F-VALUE	20.33**		
DF	10, 571		

**.01 level of significance.
[a]Unstandardized regression coefficients from final equation.

It was possible that the job characteristic factor, security and the single teacher preparation item, using community resources were working indirectly through other variables (working with people, length of student teaching, change in student teaching length, content preparation in your area of specialization, understanding and managing behavior problems in the classroom, self- evaluation as a future teacher, etc.).

Testing of Hypothesis 8

Hypothesis 8: There is no significant relationship between satisfaction with teaching as a career based on the student teaching experience and the combination of selected variables. These selected variables include: five teacher preparation factors (a-instruction, b-work relationships, c-tests, d-learning problems, e-multicultural techniques) and nine single items (a-preparing and using media, b-understanding and managing behavior problems in the classroom, c-content preparation in your area of specialization, d-professional ethics and legal obligations, e-psychology of learning and its application to teaching, f-assessing and implementing innovations, g-using community resources, h-influence of laws and policies related to schools, and i-using written communication effectively); five job characteristics factors (a-autonomy, b-service, c-working with people, d-special abilities, and e-security) and two single items (a-opportunity to effect social change, and b-adventure); length of the student teaching ranging from 'eight weeks or less' to 'sixteen weeks'; students' opinions whether the student teaching length should be longer or shorter; grade levels student taught ('Preschool/Kindergarten', 'Elementary', 'Secondary', and 'K-12 level'); students' self-evaluation as future teacher ranging from 'excellent' to 'inadequate', and demographic

characteristics including sex and admit grade point average to the teacher education program at the of time admission.

Based on the regression analysis, this hypothesis (8) was rejected at the .01 level of significance. The overall analysis yield a multivariate F of 36.67. The R-Square reported after the .05 level of significance for inclusion in the equation is reached, revealed that thirty-seven percent of the variance in satisfaction with teaching as a career based on the student teaching experience was explained by the combination of selected variables or predictor variables.

The analysis indicated that self-evaluation as a future teacher was the best predictor of satisfaction with teaching as a career based on the student teaching experience. This variable alone accounted for 16 percent of the variance. Other significant predictors were working with people, length of student teaching, change in student teaching length, autonomy, admit grade point average to teacher education at the time of admission, multicultural learning, grade levels student taught, and understanding and managing behavior problems in the classroom accounted for an additional 21 percent of the variance.

After the above mentioned variables had been considered, the remaining variables did not make a

significant contribution to the prediction of satisfaction with teaching as a career based on the student teaching experience.

Examining the significant unstandardized regression coefficients from the regression equation indicated that length of student teaching, change in student teaching length, autonomy and grade levels student taught were negatively related to satisfaction with teaching as a career based on the student teaching experience. Results from the regression analysis are presented in Table 27.

The findings from the Pearson correlation appeared to be consistent with the findings from the regression analysis with the exception of two predictor variables. Based on the analysis from the Pearson correlation, there was no relationship between satisfaction with teaching as a career based on the student teaching experience and admit grade point average to teacher education at the time of admission. However, this was inconsistent with the findings from the regression analysis which revealed a significant positive relationship between satisfaction with teaching as a career based on the student teaching experience and admit grade point average to teacher education at the time of admission. Also, the analysis from the Pearson correlation indicated that there was no significant relationship between

TABLE 27. Regression Analysis of Satisfaction with Teaching as a Career

PREDICTOR VARIABLES	MULTIPLE R	R SQUARE	REGRESSION COEFFICIENTS[a]
Self-evaluation as future teacher.	.39	.16	.38
Working with people.	.50	.25	.53
Length of student teaching (8 weeks or less=1/more than 8 weeks=0)	.55	.30	-.44
Change in student teaching length (Shorter=1/ about right=0)	.57	.32	-.45
Autonomy	.58	.34	-.19
Admit grade point average to teacher education at the time of admission.	.59	.35	.05
Multicultural learning.	.59	.35	.08
Grade Levels student taught (Secondary=1/ K-12=0)	.60	.36	-.27
Understanding and managing behavior problems in the classroom.	.60	.37	.06
Constant	.34		
F-Value	36.67**		
DF	9, 572		

**.01 level of significance.
[a]Unstandardized regression coefficients from final equation.

satisfaction with teaching as a career based on the student teaching experience and grade levels student taught. Again, this was inconsistent with the findings from the multiple regression analysis which revealed a negative relationship between satisfaction with teaching as a career based on the student teaching experience and grade levels student taught.

An explanation is that it was possible that admit grade point average to teacher education at the time of admission and grade levels student taught were acting indirectly through other variables (self-evaluation as future teacher, working with people, length of student teaching, autonomy, multicultural learning, understanding and managing behavior problems in the classroom, etc.).

CHAPTER V-SUMMARY, CONCLUSION, RECOMMENDATIONS

Major Findings

This chapter summarizes the findings, discusses conclusions, and present recommendations for further research. Chapters I and III delineated this study.

Purpose

The major purpose of this study was to use available survey data to examine the relationships of student characteristics and teacher preparation variables to student teaching satisfaction. To accomplish this purpose, student teaching satisfaction was examined in two parts, 1) overall student teaching satisfaction using a combination of four satisfaction variables, and 2) the single item identified from the four separate analysis "Based on your student teaching experience, what is your reaction to teaching as a career"? For both of these dependent satisfaction variables, a combination of independent variables (student characteristics and teacher preparation variables) were used to predict overall student teaching satisfaction of the Iowa State teacher education graduates, and the graduates' ratings of their satisfaction towards teaching as a career based on the student teaching experience.

Dependent variable: Overall student teaching satisfaction

Analysis of the data revealed that working with people, self-evaluation as future teacher, content preparation in your area of specialization, length of student teaching (8 weeks or less=1/more than 8 weeks=0), change in student teaching length (shorter=1/about right=0), understanding and managing behavior problems in the classroom, autonomy, security, work relationships, and using community resources significantly contributed to the prediction of overall student teaching satisfaction. Together these variables explained 26 percent of the variance.

The best prediction equation as indicated in Table 24 was: Overall student teaching satisfaction=1.98 + .29 (working with people) + .14 (self-evaluation as future teacher) + .09 (content preparation in your area of specialization) - .22 (length of student teaching) - .33 (change in student teaching length) + .05 (understanding and managing behavior problems in the classroom - .14 (autonomy) + .09 (security) + .09 (work relationships) - .06 (using community resources).

As indicated by the significant unstandardized regression coefficients from the multiple regression equation, length of student teaching (8 weeks or less=1/more than 8 weeks=0), change in student teaching length

(shorter=1/about right=0), autonomy and using community resources were negatively related to overall student teaching satisfaction. Noted in the correlation analyses, using community resources was related to overall student teaching satisfaction in a positive direction. Also, from the correlation analysis, there was no significant relationship between overall student teaching satisfaction and the job characteristic factor, security. This was inconsistent with the regression findings. It was possible that the effects were going through the other variables (working with people, length of student teaching, change in student teaching length, content preparation in your area of specialization, understanding and managing behavior problems in the classroom, self-evaluation as a future teacher, etc.).

Dependent variable: Satisfaction with teaching as a career

The results from the multiple regression analysis indicated that self-evaluation as a future teacher, working with people, length of student teaching (8 weeks or less=1/more than 8 weeks=0), change in student teaching length (shorter=1/about right=0), autonomy, admit grade point average to teacher education at the time of admission, multicultural learning, grade levels student taught (secondary=1/K-12=0), and understanding and managing

behavior problems in the classroom significantly contributed to the prediction of satisfaction with teaching as a career based on the student teaching experience. All together, these variables explained 37 percent of the variance.

From the data summarized in Table 25, the best prediction equation was: Satisfaction with teaching as a career=.34 + .38 (self-evaluation as future teacher) + .53 (working with people) - .44 (length of student teaching) - .45 (change in student teaching length) - .19 (autonomy) + .05 (admit grade point average to teacher education at the time of admission) + .08 (multicultural learning) - .27 (grade levels student taught) + .06 (understanding and managing behavior problems).

In terms of the significant unstandardized regression coefficients from the multiple regression equation, length of student teaching (8 weeks or less=1/more than 8 weeks=0), change in student teaching length (shorter=1/about right=0), autonomy and grade levels student taught (secondary=1/K-12=0) were negatively related to satisfaction with teaching as a career based on the student teaching experience. Both the findings from the regression and correlation analyses appeared to be consistent with the exception of two predictor variables: 1) admit grade point average to teacher education at the time of admission, and

2) grade levels student student taught (secondary=1/K-12=0). According to the correlation analyses, there were no significant relationships between satisfaction with teaching as a career based on the student teaching experience and the two predictor variables. Once again, it was possible that the effects were going through other variables (self-evaluation as future teacher, working with people, length of student teaching, autonomy, multicultural learning, understanding and managing behaviors problems in the classroom, etc.).

Oneway analyses of variance

Results from the analyses of variance using the Scheffe Multiple Range Test revealed significant differences in both overall student teaching satisfaction and satisfaction with teaching as a career based on the student teaching experience among the following independent variables: 1) length of student teaching (8 weeks or less, 12 weeks, 16 weeks and other), 2) suggested changes in student teaching length (longer, shorter, and about right), and grade levels student taught (Preschool/Kindergarten, Elementary, Secondary and K-12 levels).

Conclusion

The results from this study suggest that generalizations should be made with caution. An examination of the regression of overall student teaching satisfaction on student characteristics and teacher preparation variables revealed that only 26 percent of variance was explained. Even though the variables entering the model were significant, the amount of explained variation (26%) was somewhat low, when considering the importance of student teaching in teacher education programs. In fact, one may consider eliminating the last variables from the overall student teaching satisfaction model (understanding and managing behavior problems in the classroom, autonomy, security, work relationships, and using community resources), considering the small contribution (3 percent) they made to the prediction of overall student teaching satisfaction as a total group. That is, understanding and managing behavior problems in the classroom and autonomy together accounted for an increase of only 1 percent in the variance, security accounted for only a 1 percent increase, and work relationships and using community resources together accounted for only a 1 percent increase.

The evidence suggests that working with people and self-evaluation as a future teacher are the two important

characteristics regardless of whether you are studying overall student teaching satisfaction (OSTS) or satisfaction with teaching as a career (STC) based on the student teaching experience. Specifically, these two variables accounted for 15 percent of the total variation in overall student teaching satisfaction, and 25 percent of the total variation in satisfaction with teaching as a career based on the student teaching experience.

When regressing satisfaction with teaching as a career based on the student teaching experience on the same student characteristics and teacher preparation variables, the variables in the overall student teaching satisfaction model appeared to be somewhat consistent with the variables in the satisfaction with teaching as a career model. However, a greater percent (37%) of the total variation was accounted for. Again, one may consider eliminating variables from the satisfaction with teaching as a career model. Since four variables (admit grade point average to teacher education at the time of admission, multicultural learning, grade levels student taught, and understanding and managing behavior problems in the classroom) combined accounted for only an additional 3 percent of the variance. Specifically, admit grade point average to teacher education at the time of admission, multicultural learning together accounted for

only a 1 percent increase, while grade levels student taught and understanding and managing behavior problems in the classroom accounted for only 1 percent each.

Recommendations for Further Research

Based on the overall findings, the following recommendations for further research are made:

1. A different combination of student characteristics variables are recommended for better prediction of overall student teaching satisfaction, and satisfaction with teaching as a career based on the student teaching experience. These suggested variables are: 1) age, 2) sex, 3) marital status, 4) academic college, 5) background (i.e., placed lived longest, community population and parents' occupations), 6) age when decided to become a teacher, etc.
2. A different combination of teacher preparation variables (such as prerequisities, field experience prior to student teaching, quality of instructor, computer experience, etc.) are recommended for better prediction of overall student teaching satisfaction, and satisfaction with teaching as a career based on the student teaching experience.

3. A different combination of student teaching characteristics variables are recommended for better prediction of overall student teaching satisfaction, and satisfaction with teaching as a career based on the student teaching experience. The suggested variables are: 1) reconciliations of expectations of supervisor, cooperating teacher and student teacher, school facilities (i.e., class size, access to resources, services, etc.), actual amount of supervision per student teacher, cooperating teachers' perception of student teacher performance, conference with cooperating teacher and university supervisor, university goals for student teaching experience, etc.
4. This study should be replicated using a different sample, including teacher education graduates at Iowa State University and other regional universities with teacher education programs. It is very important that the data show variability in all the different variables being studied.
5. It is recommended that a study of this nature be done on a national level using universities with teacher education programs, utilizing appropriate multivariate techniques.

6. As more becomes known about areas of student teaching satisfaction, a different method that allows for the use of a literature-based model of regression is recommended. This could also reduce the cost of analysis.
7. The sample used in this study was predominantly female. In future studies, it is recommended that a model of overall student teaching satisfaction and a model of satisfaction with teaching as a career based on the student teaching experience be developed based on sex.

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ACKNOWLEDGEMENTS

Research requires the assistance and encouragement of many individuals. The contribution of this study was made possible by many individuals. I must first acknowledge Dr. Larry Ebbers (major advisor) and committee members (Drs. Mary Huba, Richard Warren, Dan Robinson, Clifford Smith and Stanley Ahmann) for their academic advice, support, patience and guidance throughout every stage of this dissertation.

A special thanks to Mr. Charles Ramsey (graduate advisor) for his innumerable suggestions that proved valuable in shaping my overall career plans. I am extremely grateful for his support.

I am especially indebted to my mother for the immeasurable support, patience, guidance, understanding and most of all, love during the three years at Iowa State.

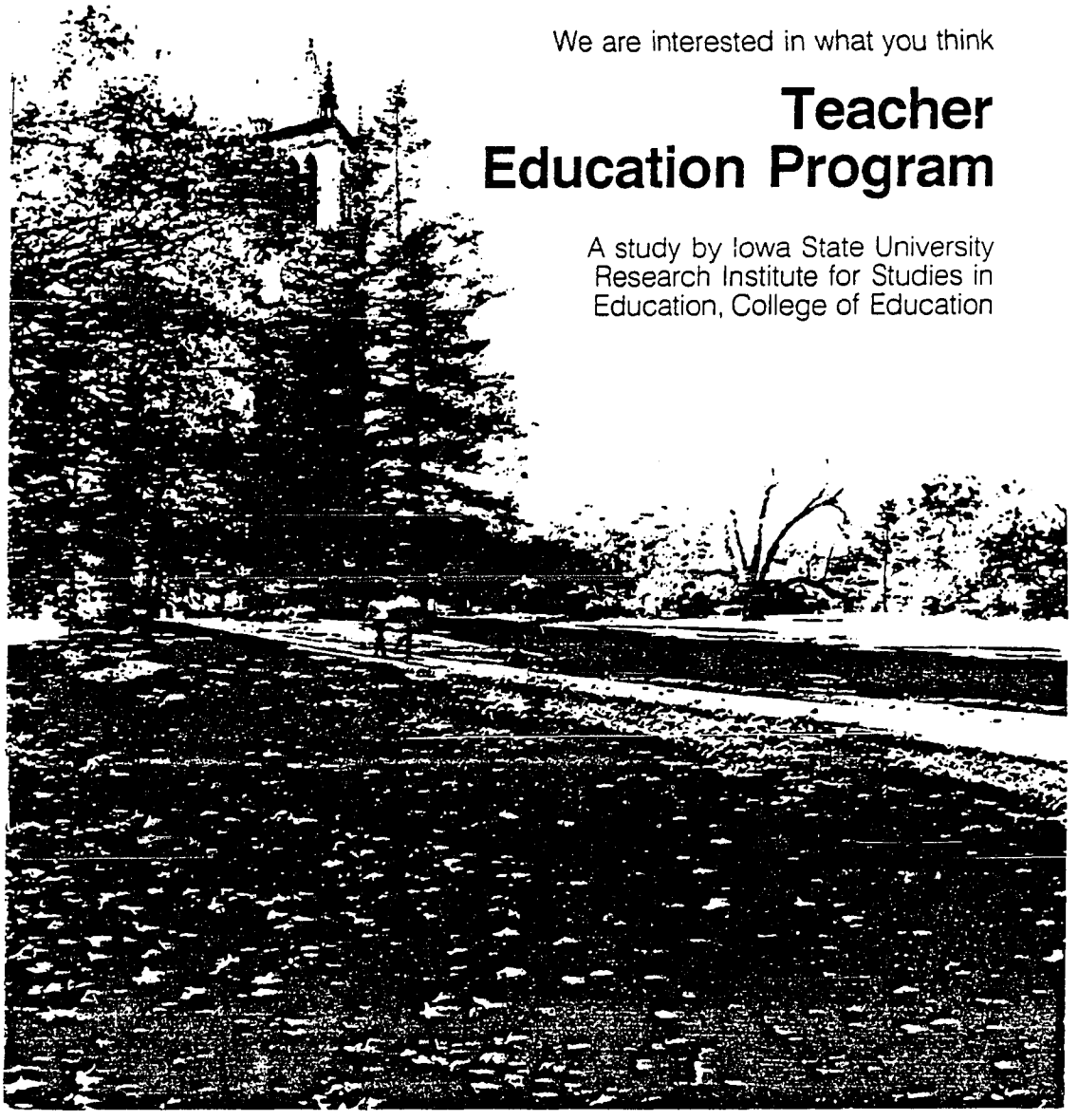
In addition, I am grateful to Dr. George Jackson (Director of Minority Student Affairs) for his continous encouragement throughout my degree program. I would like to also acknowledge the members of RISE for their input and assistance in the development of this study. Therefore, I shall always cherish the research experience obtained from RISE.

I would also like to thank Libby Bilyeu for expanding her work schedule to assist me in formatting various parts of my dissertation.

A special thanks to many friends and relatives who shared a listening ear and made me a part of their prayers when the going was rough. I would also like to express special thanks and appreciation to Kazi Ahmed for providing me with moral support and assistance during the final stage of my dissertation writing.

Above all, I praise God for leading me every step of the way.

APPENDIX A: TEACHER EDUCATION PROGRAM QUESTIONNAIRE



We are interested in what you think

Teacher Education Program

A study by Iowa State University Research Institute for Studies in Education, College of Education

FIRST, we would like information about your teacher preparation program.

1. How long did you student teach? (check one).

___ 8 weeks or less

___ 12 weeks

___ 16 weeks

___ Other (Please specify ---> _____).

2. Based on the length of your student teaching experience, should student teaching have been longer or shorter?

How many weeks?

___ Longer ---> _____

___ Shorter ---> _____

___ About right

3. At what level did you student teach?

___ Preschool/Kindergarten

___ Elementary

___ Secondary

___ K-12

4. In what teaching area(s) of specialization do you expect to get teaching approval?

(a) Preschool/Kindergarten Level
___ Preschool/Kindergarten ___ Other (Specify _____)

(b) Elementary Level
___ Elementary ___ Other (Specify _____)

(c) K-12 Level
___ Art ___ Health ___ Music ___ P.E.

(d) Secondary Level

___ Agriculture	___ Health	___ Physical Science
___ Art	___ Home Economics	___ Physics
___ Biology	___ Industrial Arts	___ Psychology
___ Chemistry	___ Journalism	___ Safety Education
___ Earth Science	___ Mathematics	___ Social Science
___ English	___ Music	___ Speech
___ Foreign Language	___ Physical Education	___ Other (Specify _____)
___ General Science		

If you checked more than one, what is your major area? _____

5. Using the rating scale below indicate how satisfied you were with aspects of your student teaching experience.

Very Satisfied. . . . 5
Satisfied 4
Neutral 3
Dissatisfied. 2
Very Dissatisfied . . 1

Please circle your response

a. Getting your choice of geographical location for your student teaching assignment. 5 4 3 2 1

b. Your cooperating teacher. 5 4 3 2 1

c. Your university supervisor. 5 4 3 2 1

d. Based on your student teaching experience, what is your reaction to teaching as a career for you? 5 4 3 2 1

6. At what age did you decide to become a teacher? _____ years old.

7. If you had it to do over again, would you prepare to become a teacher?

___ Yes

___ No

___ Undecided

8. Do you feel you will be ...

___ ... an excellent teacher?

___ ... a better than average teacher?

___ ... an average teacher?

___ ... a below average teacher?

___ ... an inadequate teacher?

9. How would you rate on a scale of 0 to 10 the quality of the Teacher Preparation Program at Iowa State University? (Please circle the appropriate number.)

Very Poor 0 1 2 3 4 5 6 7 8 9 10 Very High

10. In what ways did the program provide the most valuable professional preparation for you?

(1) _____

(2) _____

(3) _____

11. In what ways should the program have offered more preparation?

(1) _____

(2) _____

(3) _____

4.

12a. Please indicate how adequate your professional education preparation program was in the following areas. Use the following response categories.

Very Adequate . . . 5
Adequate. 4
Neutral 3
Inadequate. 2
Very Inadequate . . 1
Not Applicable. . . N

Please circle your response

1)	Planning units of instruction and individual lessons.	5	4	3	2	1	N
2)	Preparing and using media.	5	4	3	2	1	N
3)	Maintaining student interest	5	4	3	2	1	N
4)	Understanding and managing behavior problems in the classroom.	5	4	3	2	1	N
5)	Teaching basic skills.	5	4	3	2	1	N
6)	Consultation skills in interacting with other professionals.	5	4	3	2	1	N
7)	Developing student-student relationships . . .	5	4	3	2	1	N
8)	Referring students for special assistance. . .	5	4	3	2	1	N
9)	Skills for mainstreaming handicapped students.	5	4	3	2	1	N
10)	Methods of working with children with learning problems	5	4	3	2	1	N
11)	Assessing learning problems.	5	4	3	2	1	N
12)	Developing tests	5	4	3	2	1	N
13)	Interpreting and using standardized tests. . .	5	4	3	2	1	N
14)	Content preparation in your area of specialization	5	4	3	2	1	N
15)	Professional ethics and legal obligations. . .	5	4	3	2	1	N
16)	Psychology of learning and its application to teaching.	5	4	3	2	1	N
17)	Evaluating and reporting student work and achievement	5	4	3	2	1	N
18)	Relating activities to interests and abilities of students	5	4	3	2	1	N
19)	Locating and using materials and resources in your specialty area	5	4	3	2	1	N

5.

Very Adequate . . . 5
Adequate. 4
Neutral 3
Inadequate. 2
Very Inadequate . . 1
Not Applicable. . . N

Please circle your response

20)	Evaluating your own instruction	5	4	3	2	1	N
21)	Individualizing instruction.	5	4	3	2	1	N
22)	Selecting and organizing materials	5	4	3	2	1	N
23)	Using a variety of instructional techniques. .	5	4	3	2	1	N
24)	Understanding teachers' roles in relation to administrators, supervisors and counselors . .	5	4	3	2	1	N
25)	Working with parents	5	4	3	2	1	N
26)	Working with other teachers.	5	4	3	2	1	N
27)	Assessing and implementing innovations	5	4	3	2	1	N
28)	Appreciating and understanding individual and intergroup differences in values and lifestyles	5	4	3	2	1	N
29)	Using community resources.	5	4	3	2	1	N
30)	Techniques of curriculum construction.	5	4	3	2	1	N
31)	Influence of laws and policies related to schools	5	4	3	2	1	N
32)	Techniques of infusing multicultural learning	5	4	3	2	1	N
33)	Using written communication effectively.	5	4	3	2	1	N

12b. In rank order (1 highest rank) please list from the above items the corresponding numbers for the three areas of preparation with highest adequacy.

	1	2	3
Adequacy of Preparation	___	___	___

13. What are your employment plans for the 1983/84 school year?

___ Have obtained a teaching position for 1983/84 school year.

___ Currently seeking or plan to seek a teaching position.

___ Currently seeking or plan to seek a non-teaching position.

___ Graduate study (Please specify area ---> _____).

___ Other (Please specify ---> _____).

14. What is your long-range career plan? (Please check the most appropriate response. Check only one.)

___ Teaching ---> skip to Q. 16

___ Employment in education other than teaching ---> skip to Q. 16

Please specify ---> _____

___ Employment outside the field of education ---> please answer Q. 15

Please specify ---> _____

_____

___ Other ---> please answer Q. 15

Please specify ---> _____

_____

15. (Non-teaching) Why do you plan not to enter the field of education? Check as many as apply.

___ Lack of teaching positions available.

___ Greater career opportunities in nonacademic jobs.

___ Higher salaries and benefits in nonacademic jobs.

___ Marriage/family obligations.

___ Had not planned to enter education.

___ Decided not to work in education because of experiences in student teaching.

___ Other (Please specify ---> _____).

16. (All respondents) How important is it that a job provide you with the following characteristics? Please circle one number for each characteristic. Use the following response categories.

Very Important . . . 5
Important. 4
Neutral. 3
Unimportant. 2
Very Unimportant . . 1

		Please circle your response				
a.	Opportunity to be creative and original. . .	5	4	3	2	1
b.	Opportunity to use special abilities or aptitudes.	5	4	3	2	1
c.	Opportunity to work with people rather than things.	5	4	3	2	1
d.	Opportunity to earn a good deal of money . .	5	4	3	2	1
e.	Social status and prestige	5	4	3	2	1
f.	Opportunity to effect social change.	5	4	3	2	1
g.	Relative freedom from supervision by others.	5	4	3	2	1
h.	Opportunity for advancement.	5	4	3	2	1
i.	Opportunity to exercise leadership	5	4	3	2	1
j.	Opportunity to help and serve others	5	4	3	2	1
k.	Adventure.	5	4	3	2	1
l.	Opportunity for a relatively stable and secure future.	5	4	3	2	1
m.	Fringe benefits (health care, retirement benefits).	5	4	3	2	1
n.	Variety in the work.	5	4	3	2	1
o.	Responsibility	5	4	3	2	1
p.	Control over what I do	5	4	3	2	1
q.	Control over what others do.	5	4	3	2	1
r.	Challenge.	5	4	3	2	1

17a. During your academic program at Iowa State University, have you done any work with computers or had training with applications of computers to teaching?

___ No ---> go to Q. 18

___ Yes ---> please answer parts b through d

b. If yes, please check all experiences that apply.

___ 1. Introductory lecture(s)/demonstrations on computers and educational applications

___ 2. Viewing available Computer Assisted Instruction (CAI) materials

___ 3. Selecting and evaluating Computer Assisted Instruction (CAI) materials

___ 4. Using computers to manage instruction (grades, attendance, etc.)

___ 5. Entire course(s) in educational computing or computer science

___ 6. Word processing

___ 7. Computer programming

___ 8. Using microcomputers (Apples, Pets, etc.)

___ 9. Using minicomputers (VAX)

___ 10. Using mainframe computers through terminal and batch processing

___ 11. Other (Please specify ---> _____)

Please specify courses in which you have had the experiences checked above.

_____

_____

c. Please list courses (if any) where a portion of the course content was taught using Computer Assisted Instruction (CAI) _____

_____.

d. Please estimate time spent on in classroom computer activities while at ISU.

_____ hours (total number)

Please estimate time spent on outside classroom computer activities (including work assignments and preparation) while at ISU.

_____ hours (total number)

NOW we would like to ask you some general questions about yourself and your family.

18. Up to the present, where have you spent the majority of your life?
___ ... on a farm?
___ ... in a non-farm country home?
___ ... in a town with population less than 2,500?
___ ... in a town with population between 2,500 and 5,000?
___ ... in a town with population between 5,000 and 10,000?
___ ... in a town with a population between 10,000 and 25,000?
___ ... in a town with population between 25,000 and 50,000?
___ ... in a city with population between 50,000 and 100,000?
___ ... in a city with population over 100,000?

19. Sex
___ Female
___ Male

20. Marital status
___ Single
___ Married, no children
___ Married, one or more children
___ Other

21. What was your father's occupation most of the time while you were living at home? Please be specific.

_____

22. What was your mother's occupation most of the time while you were living at home? Please be specific.

_____

23. Please think about the best elementary or secondary teacher you know or have known. What were the characteristics that made that teacher outstanding?

(1)_____

(2)_____

(3)_____

The College of Education and the Research Institute for Studies in Education appreciate the time you have taken to complete this questionnaire.

Postage for the questionnaire is prepaid, so all you need do is staple or tape it and drop it in a mailbox.

APPENDIX B: LETTER SENT TO TEACHER EDUCATION GRADUATES

Iowa State University of Science and Technology Ames, Iowa 50011

Research Institute for Studies in Education
College of Education
The Quadrangle
Telephone 515-294-7009

April 9, 1984

Dear Teacher Education Graduate:

Congratulations on completing your program in teacher preparation at Iowa State University!

We hope that your teaching and learning experiences in the program have been rewarding and have provided the basis for continuing professional and personal development. We appreciate your participation in the program and the contributions you have made through coursework and other activities to the total program.

We need your opinions and observations to assist in improving present programs and developing new programs. Your voluntary participation in evaluating the programs at Iowa State University in terms of quality, effectiveness and adequacy is requested. You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes and data analysis. Your name will not be placed on the questionnaire. The information provided will be analyzed in terms of group summarizations.

Return postage on the questionnaire has been prepaid, so you need only to drop the completed questionnaire in a mailbox.

If you have questions about this study, please contact the Office of Research Institute for Studies in Education or call 515-294-7009.

Thank you for your assistance in completing the questionnaire which provides us with your insights about program strengths and weaknesses.

We wish you success in all your future activities.

Sincerely,

Virgil S. Lagomarcino
Dean

Richard D. Warren
Director
Research Institute for Studies in Education

Enclosure
RDW/pjd

Iowa State University of Science and Technology Ames, Iowa 50011

Research Institute for Studies in Education
College of Education
The Quadrangle
Telephone 515-294-7009

May 7, 1984

Dear Teacher Education Graduate:

We know that you are very busy getting ready for graduation, but we do need your help!

You recently received a questionnaire from us on evaluating teacher preparation programs at Iowa State University. To date, we have not received your completed questionnaire. If you have mailed it recently, we want you to know that your participation is appreciated.

If you have not mailed your questionnaire, we would ask you to complete the enclosed questionnaire and drop it in a mailbox.

We have had a very good completion record and return rate on the questionnaire and would like very much to have your responses to include in our tabulations.

Thank you for your voluntary participation in the study.

Sincerely,

Virgil S. Lagomarcino
Dean

Richard D. Warren
Director
Research Institute for Studies in Education

Enclosure
RDW/pjd